

A Fragmented Masterpiece

Recovering the Biography of the Hilton of Cadboll Pictish Cross-Slab

Heather F James, Isabel Henderson, Sally M Foster and Siân Jones

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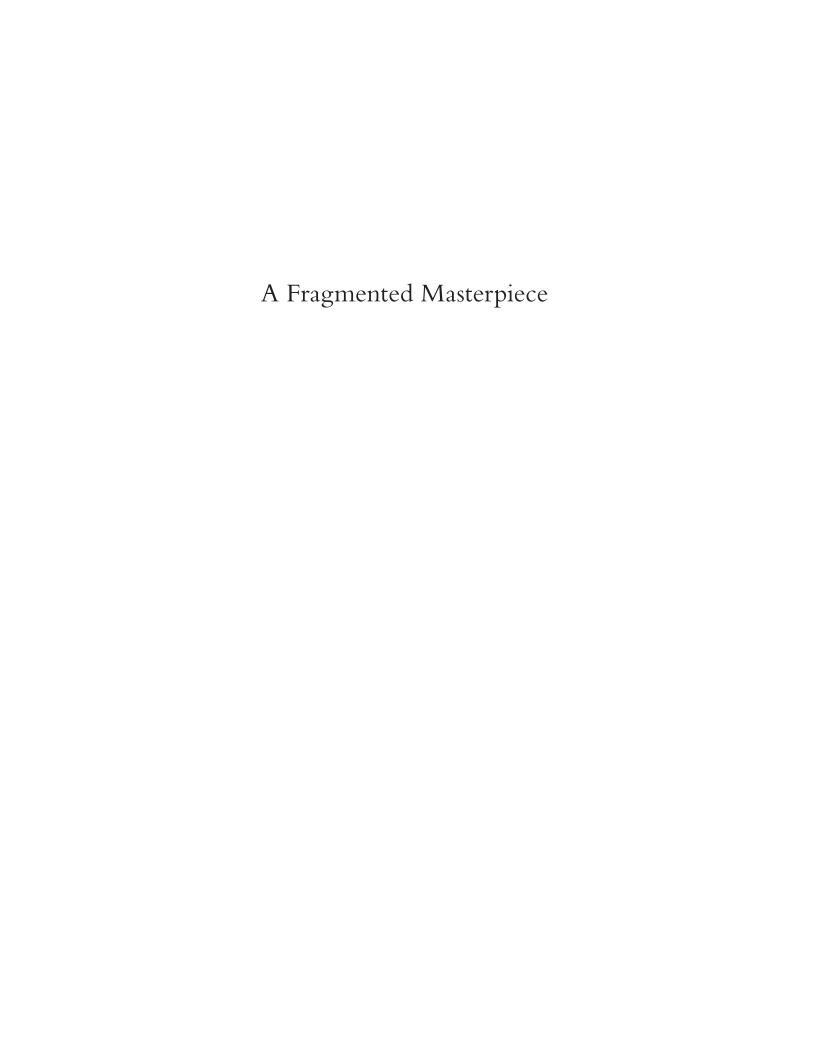
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A Fragmented Masterpiece: recovering the biography of the Hilton of Cadboll Pictish cross-slab



Heather F James, Isabel Henderson, Sally M Foster and Siân Jones

Catalogue and reconstruction by Isabel Henderson, Meggen Gondek, Douglas Morton and Ian G Scott

With contributions by

Amanda Brend, David V Clarke, Adrian Cox, Richard Fawcett, Meggen Gondek, Allan Hall, Derek Hall, Andy Heald, Peter Hill, Stuart Jeffrey, Maria Kostoglou, Jo McKenzie, Neil McLean, Jennifer Miller, Suzanne Miller, Douglas Morton, Robin Murdoch, Iona Murray, Susan Ramsay, Julie Roberts, David Sanderson, Ian G Scott, Catherine Smith, Eland Stuart and George Thomson

FRONT COVER IMAGE Hilton of Cadboll cross-slab: the front of the mid-portion BACK COVER IMAGES

Hilton of Cadboll cross-slab *in situ* in the National Museum of Scotland, Edinburgh (courtesy of Kevin Hicks) View of the Hilton of Cadboll chapel site from the north-east

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Contents

List	of illus	trations	13
List	of table	es es	XV
Ackı	iowled	gements	xvi
Sum	mary		xix
1	THE	E PROJECT	1
	Davi	d V Clarke and Sally M Foster	
	1.1	Introduction	1
	1.2	Hilton of Cadboll chapel site and its early history	5
	1.3	Recent archaeological interest in the chapel site	5
	1.4	The modern heritage politics of Hilton of Cadboll	8
	1.5	Related research: a community study	10
	1.6	Bringing the project to fruition	10
2	'TH	E WORK OF A GENUINE ARTIST': THE ART-HISTORICAL SIGNIFICANCE OF THE	
		VERSE OF THE HILTON OF CADBOLL CROSS-SLAB FROM THE MID-19TH CENTURY	
	ТО	1998	13
	Isabe	l Henderson	
	2.1	'The obelisk at Hilton'	13
	2.2	'now at Invergordon'	15
	2.3	'now safely preserved in the National Museum at Edinburgh'	18
3	THE	E AR CHAEOLOGICAL INVESTIGATIONS	27
	Heat	her F James	
	3.1	Introduction	27
	3.2	The excavations	31
	3.3	Methodology	37
	3.4	Chronology and stratigraphy	40
	3.5	Phase descriptions	41
	3.6	Discussion	63
	3.7	Conclusions	72
4	THE	E CATALOGUING OF THE HILTON OF CADBOLL CROSS-SLAB	75
	Isabe	l Henderson	
	4.1	Terminology	75
	4.2	Introduction	75
	4.3	The catalogue entries	77

	4.4	Conclusion	80
	4.5	Catalogue	80
		4.5.1 Face A	80
		4.5.2 Face B	110
		4.5.3 Face C	111
		4.5.4 Face D	123
		4.5.5 Face E	124
5		E ART-HISTORICAL CONTEXT OF THE HILTON OF CADBOLL CROSS-SLAB	127
	Isabe	l Henderson	
	5.1	Introduction	127
	5.2	The whole monument	127
		5.2.1 The sculptor's brief to the quarrymen	127
		5.2.2 Planning for the lay-out of the front and the back	129
		5.2.3 Style of carving	132
	5.3	Reading the message of the Hilton of Cadboll cross-face	133
		5.3.1 The cross-base	133
		5.3.2 The cross-shaft	143
		5.3.3 The cross-head	144
		5.3.4 The background of the cross	151
		5.3.4.1 The background of the cross: the local and national Pictish context of the animal	
		ornament	151
		5.3.4.2 The Insular context of the animal ornament	157
		5.3.4.3 The figurative art of the background of the cross in the mid-portion	168
		5.3.5 The message of the original face A	173
		5.3.6 An impression of what the original face A might have looked like when complete	174
	5.4	Text becomes commentary: reappraising the Hilton of Cadboll reverse face	174
		5.4.1 The spiral panel	175
		5.4.2 The symbols panel	177
		5.4.3 The hunting scene	178
		5.4.4 The three-sided frame filled with vine-scroll	189
	5.5	Summary and conclusions: placing the Hilton of Cadboll cross-slab in its local, national and	
		Insular art-historical context	200
6	REC	COVERING THE BIOGRAPHY OF THE HILTON OF CADBOLL CROSS-SLAB	205
	Sally	M Foster and Siân Jones	
	6.1	Introduction	205
	6.2	Early medieval Hilton of Cadboll: 'birth' of the monument	206
	0.2	6.2.1 The bigger picture: the church in Pictland	207
		6.2.2 The role of cross-slabs in Pictland	207
		6.2.3 The Tarbat peninsula: the immediate context for Hilton of Cadboll	208
			209
		6.2.4 Hilton of Cadboll in early medieval times6.2.5 Creating the Hilton of Cadboll monument	210
		6.2.6 Hilton of Cadboll to the 12th century	210
	6.3	Later medieval Hilton of Cadboll: active later reverence	212
	0.3		213
		6.3.1 Active reverence 6.3.2 Ecclesiastical and settlement context	213
	6 1		
	6.4	An Act of Reformation? Defacement and re-use in the 16th and 17th centuries A 'typeskable ruin': now ways of society and engaging with the Hilton of Cadball slab in the	217
	6.5	A 'remarkable ruin': new ways of seeing and engaging with the Hilton of Cadboll slab in the	223
		modern era	443

	6.6 6.7 6.8	Appropriation and displacement: landscape, people and monument 'Tangible expression of the national soul': Hilton of Cadboll as national patrimony Marginalisation and regeneration, reconstruction and discovery: the Hilton of Cadboll cross-slab	232 238
		and the seaboard villages	251
	6.9	Hilton of Cadboll and the symbolic construction of communities: local and national tensions	257
	6.10	Conclusions	266
7	ART	EFACT AND ENVIRONMENTAL STUDIES	285
	7.1	Analysis of the fragments Amanda Brend, Meggen Gondek, Allan Hall, Isabel Henderson,	
		Heather James, Stuart Jeffrey, Douglas Morton and Ian G Scott	285
	7.2	The cross-slab and fragments	289
		7.2.1 The petrology Suzanne Miller	289
		7.2.2 Toolmarks: technical assessment of the lower portion, the upper portion and the fragments <i>Peter Hill</i>	295
		7.2.3 Fragment distribution analysis Stuart Jeffrey	306
		7.2.4 Fragmentation of the cross-slab Douglas Morton	309
		7.2.5 The application of database-driven methodologies to the reconstruction of the monument	
		Douglas Morton	318
		7.2.6 The epigraphy of the inscription on the Hilton of Cadboll cross-slab George Thomson	322
	7.3	Dating and soil	326
		7.3.1 Soil thin section analysis and interpretation Jo McKenzie	326
		7.3.2 Luminescence dating of sediments David Sanderson and Iona Murray	339
	7.4	7.3.3 Radiocarbon dates Scottish Universities Research and Reactor Centre	357
	7.4	The ecofacts 7.4.1. Archaech story: Javaifor Miller and Swara Paragraph	357 357
		7.4.1 Archaeobotany Jennifer Miller and Susan Ramsay 7.4.2 Faunal remains Catherine Smith	359
		7.4.2 Faunai femains Camerme Smin 7.4.3 Human remains Julie Roberts	362
	7.5	The finds	365
	7.5	7.5.1 The fragment of a medieval relief cross <i>Isabel Henderson</i>	365
		7.5.2 An unshaped stone with an incised linear cross <i>Isabel Henderson</i>	366
		7.5.3 The architectural fragment <i>Richard Fawcett</i>	367
		7.5.4 Selected carved fragments that are not from the cross-slab Douglas Morton	367
		7.5.5 Ironworking Maria Kostoglou	369
		7.5.6 The pottery Derek W Hall	373
		7.5.7 Non-sculptured finds Adrian Cox	375
		7.5.8 Lithics Eland Stuart	379
		7.5.9 Glass Robin Murdoch	379
	7.6	Summary of the 1921 newspaper sources Siân Jones	379
8	CON	ICLUSIONS	385
	Heatl	ner F James	
App	endices		
		n of Cadboll archaeological assessment and project design 1998 Martin Carver	391
		cised horse's head at Jessie Port, Hilton of Cadboll, Ross and Cromarty George and	0,1
_		nel Henderson	399
Glos	sary		401
	iograph _]	,	403
Inde:	x		413

List of illustrations

1.1	The Hilton of Cadboll cross-slab on display with the Paolozzi figures in the National Museum	of
	Scotland, Edinburgh	xxiv
1.2	Location of Hilton of Cadboll	2
1.3	Location of Hilton of Cadboll chapel site	3
1.4	View of the chapel site from the north-east	3
1.5	Hachure survey of the upstanding remains at Hilton of Cadboll	4
1.6	Extract from the first edition OS map	6
1.7	University of York's summary of features	7
2.1	The Hilton of Cadboll cross-slab	12
3.1	Summary of excavated features	30
3.2	Kirkdale plan 2001	34
3.3	GUARD composite site plan	36
3.4	The Setting 2 slab (052) in place, with the chapel mound in the background	37
3.5	Main section line A–B	38
3.6	Photomontage of upper edge of lower portion, face C	39
3.7	Phase 1 plan	42
3.8	Pecked face of one of the tumbled sandstones	43
3.9	Slab (052) of first setting in situ	44
3.10	Plan of collar-stones (052) and (032)	45
3.11	Slab (052) of first setting	46
3.12	Reconstruction of Setting 1	47
3.13	Phase 2 plan	48
3.14	Setting 2 from the east	50
3.15	Setting 2 from the west	51
3.16	Phase 3 plan	54
3.17	Elevation of the chapel wall	56
3.18	Skeletons 3 and 4	57
3.19	Phase 4 plan	58
3.20	The pit (012) to the west of Setting 2	59
3.21	View of the whole trench with the clay-bonded wall	62
3.22	Sequence reconstruction	66
3.23	Canna cross	67
4.1	Hilton of Cadboll cross-slab: face A	in pocket
4.2	Hilton of Cadboll cross-slab: face C	in pocket
4.3	Hilton of Cadboll cross-slab, partial reconstruction of the upper, middle and lower portions	78-9
4.4	Hilton of Cadboll cross-slab faces A and B, lower and mid-portions	83
4.5	Fragments with key pattern	98
4.6	Fragments with key pattern	99
4.7	Fragments with spiral pattern	100
4.8	Fragments with spiral pattern	101
49	Fragments with interlace	102

4.10	Fragments with interlace	103
4.11	Fragments with plant ornament	104
4.12	Fragments with plant ornament	105
4.13	Fragments with animal ornament	106
4.14	Fragments with animal ornament	107
4.15	Examples of fragments of figurative carving	108
4.16	Possible fragments of figurative carving on the upper portion of the original face A	109
4.17	Hilton of Cadboll cross-slab faces C and D, lower and mid-portions	113
4.18	Hilton of Cadboll cross-slab face C with numbered vine-scroll	118
4.19	Face C animals: Allen's rubbings	120
4.20	Hilton of Cadboll cross-slab face E	125
5.1	Hilton of Cadboll: the reverse of the lower portion as excavated	128
5.2	Nigg, Ross and Cromarty: the lay-out of the reverse of the cross-slab before restoration	130
5.3	Hilton of Cadboll: the front of the lower portion as excavated	134
5.4	Kirriemuir no 2, Angus: the front of the cross-slab showing the damaged stepped base	135
5.5	(a) Rosemarkie, Ross and Cromarty: slab incised with 'Golgotha' stepped base, set on a stylised hilloc	ck
	from which flow the rivers of Paradise; (b) St Cuthbert's Coffin: the internal incised board	136
5.6	Rosemarkie, Ross and Cromarty, cross-slab: the lower half of the reverse showing an equal-armed	
	cross with stepped terminals	137
5.7	Edderton, Ross and Cromarty: the front face of the cross-slab showing the stepped base	137
5.8	The Book of Kells, Dublin, Trinity College MS 58 f.34r, the Christi autem initial	138
5.9	The Book of Kells, Dublin, Trinity College MS 58, f.7v, the Virgin and Child with angels	138
5.10	The Book of Kells, Dublin, Trinity College MS 58, f.27v, cruciform stepped shape	139
5.11	Ivory book cover, fifth century, showing a jewelled cross standing on Golgotha Hill	140
5.12	Dunfallandy, Perthshire: the front of the cross-slab with raised bosses on the cross head	142
5.13	Meigle 2, Perthshire: the front of the cross-slab	143
5.14	Hilton of Cadboll, Ross and Cromarty: conjoined fragments of animal ornament on the cross-shaft	144
5.15	(a) Hilton of Cadboll, Ross and Cromarty: fragment .269; (b) Beckley area, Oxfordshire: sword	
	pommel; (c) St Ninian's Isle treasure, Shetland: scabbard chape	145-6
5.16	Fowlis Wester no 2, Perthshire: the front of the cross-slab showing projecting transverse arms	147
5.17	Aberlemno no 3, Angus: the front of the cross-slab	149
5.18	St Andrews Sarcophagus, Fife: the complete end panel, stone 2	150
5.19	Meigle no 2, Perthshire: the front of the cross-slab	150
5.20	Hilton of Cadboll: the front face of the lower portion: (a) detail of animals to the left of the cross-bas	se,
	(b) detail of animals to the right of the cross-base	152
5.21	Shandwick, Ross and Cromarty: the front of the cross-slab	153
5.22	Shandwick, Ross and Cromarty: detail of the reverse of the cross-slab	154
5.23	Portmahomack, Tarbat, Ross and Cromarty: fragment of the top of the front of a cross-slab	155
5.24	Nigg, Ross and Cromarty: drawing of the animal ornament on the cross-head	156
5.25	Nigg, Ross and Cromarty: the front of the cross-slab	157
5.26	The St Andrews Sarcophagus, Fife: (a) 'deer-heads' corner-slab, stone 4, (b) 'lions'-manes corner-slab	
	stone 5	158
5.27	The St Andrews Sarcophagus, Fife: (a) corner-slab stone 6, (b) corner-slab edge, stone 5	159
5.28	The Gandersheim Casket, Brunswick: detail of the back showing a seven-spiral roundel	160
5.29	The Kildalton Cross, Islay, Argyll: detail of the central boss on the eastern face	161
5.30	The Rothbury Cross, Northumberland: the fragment showing the 'Hell' scene on the base of the	
	cross-shaft	162
5.31	The Gandersheim Casket, Brunswick: (a) right-hand end with foliate scrolls inhabited by winged	-02
	creatures, (b) left-hand end with foliate scrolls inhabited by bipeds	163
5.32	South Kyme, Lincolnshire: fragments of relief-sculptured panels	164
	, ,	'

5.33	Hilton of Cadboll: the front of the lower portion with additions belonging to the mid-portion	165
5.34	The Corbie Psalter, Amiens, Bibliotheque Municipale, MS 18, f.109r, initial to Psalm 126	166
5.35	Hilton of Cadboll: (a) the mid-portion of the front face under reconstruction, (b) the group of	
	three truncated figures, (c) the truncated figure with an embroidered tunic flanked by animals	169
5.36	The Grandval Bible, London, British Library, Add MS 10 546, f.5v, the frontispiece to Genesis	172
5.37	Ivory of the Last Judgement, London, Victoria & Albert Museum	173
5.38	Hilton of Cadboll: the reverse of the upper portion and lower portion of the cross-slab, with the cross	
	at the centre of the spiral panel	175
5.39	Glenferness, by Nairn: the front of the cross-slab	176
5.40	Asby Winderwath Common, Cumbria: bronze plaque showing an encircled equal-armed cross	
	supported by the growing point of an inhabited vine-scroll	177
5.41	Portmahomack, Tarbat no 1: the Pictish symbols on the narrow edge of the slab fragment which has	
	part of an inhabited vine-scroll border on its surviving broad face	178
5.42	Burghead, Moray: fragment of a shrine panel showing a stag being brought down by hounds	179
5.43	Kirriemuir no 2, Angus: the reverse of the cross-slab	179
5.44	Meigle no 2, Perthshire: the reverse of the cross-slab	180
5.45	Edderton, Ross and Cromarty: the reverse of the cross-slab	181
5.46	Aberlemno no 3, Angus: the reverse of the cross-slab	182
5.47	Meigle no 1 Perthshire: the reverse of the cross-slab	184
5.48	The Ruthwell Cross, Dumfries: the north side showing the Flight into or out of Egypt	185
5.49	St Andrews Sarcophagus, Fife: the surviving long side panel, stone 1, detail showing the lion hunt	186
5.50	Penny of Cynethryth, wife of Offa of Mercia (757–96)	187
5.51	Portmahomack, Tarbat: fragment of a slab with part of an inhabited vine-scroll border	190
5.52	Hilton of Cadboll: the reverse of the cross-slab. Interpretative draft analysis of the creatures inhabiting	
	the vine-scroll	192
5.53	The St Petersburg Bede, f.3v, initial B	193
5.54	The Ormside Bowl, The Yorkshire Museum	193
5.55	The Book of Kells, Dublin, Trinity College MS 58, f.285r showing the decorated text of the	
	beginning of Luke 24 in an inhabited vine-scroll frame	195
5.56	The Church of St Mary and St Hardulph, Breedon-on-the-Hill, Leicestershire: inhabited scroll	1,0
0.00	block belonging to the broad frieze	196
5.57	The Church of St Mary and St Hardulph, Breedon-on-the-Hill, Leicestershire: section of the broad	
0.07	frieze showing hounds on either side of a foliate growing point	197
5.58	St Leonard's Place 2, York: front face of part of a cross-shaft showing a section of inhabited	1,,
0.00	vine-scroll	197
5.59	The Church of St Peter, Croft on Tees, Northern Yorkshire: the front face of part of a shaft with one	1,,
0.07	complete panel of animal ornament and part of an inhabited vine-scroll	198
5.60	The Church of St Peter, Croft on Tees, Northern Yorkshire: the reverse of part of a shaft showing a	1/(
3.00	panel of inhabited vine-scroll	198
5.61	The Ruthwell Cross, Dumfries: detail of the lower section of the west side showing a bird with an	1/(
5.01	extended body ending with a fish-tail	199
	Catchaca body chang with a fish-tail	1//
6.1	Duff inscription and coat of arms	216
6.2	The Reverend Charles Cordiner's drawing of the Hilton of Cadboll cross-slab	224
6.3	Charles Carter Petley's drawing of the Hilton of Cadboll cross-slab in 1811/1812	225
6.4	Charles Carter Petley's detail of one of the large pair of discs in the upper panel	226
6.5	A Gibb's drawing of the Hilton of Cadboll cross-slab for John Stuart	227
6.6	The Frontispiece from Cordiner 1780	229
6.7	Invergordon Castle and gardens as recorded on the 1st Edition Ordnance Survey map for Rosskeen	
J.,	Parish	234
	= ***=***	

6.8	An early postcard showing the upper portion of the Hilton of Cadboll cross-slab on display in the	
	American Gardens at Invergordon Castle	235
6.9	The reconstruction adjacent to Hilton of Cadboll chapel	253
6.10	Barry Grove engaged in phase 2 of the reconstruction project, August 2005	254
6.11	Unveiling the cross-slab at the opening ceremony, September 2005	255
7.1	Thin section of the Hilton of Cadboll cross-slab upper portion	290
7.2	Outcrop locality of suggested lithic source for the Hilton of Cadboll cross-slab	291
7.3	Thin section of the suggested source rock	292
7.4	Outcrop sandstone showing non-natural (?tool) marks	292
7.5	General view of the front of the lower portion, showing the uncarved panels	295
7.6	The left-hand panel, showing deep pecks	296
7.7	The right-hand panel, showing uneven working and variable lines	296
7.8	Background to carving, right-hand side, showing heavier than usual working	297
7.9	The back of the lower portion	298
7.10	False line on the horizontal fillet	299
7.11	Face D	300
7.12	Rectangular notch caused by tool used for reworking the face	303
7.13	The roughly worked slab	304
7.14	Fragment distribution all contexts	307
7.15	Density plot of all fragments	308
7.16	Fragment distribution context (007)	310
7.17	Distribution of fragments by weight	310
7.18	Fragment distribution animal	311
7.19	Fragment distribution human	311
7.20	Fragment distribution interlace	312
7.21	Fragment distribution key	312
7.22	Fragment distribution plant	313
7.23	Fragment distribution spiral	313
7.24	Fragment distribution vine-scroll	314
7.25	Fragment distribution class IA	314
7.26	Schematic section through the Hilton cross-slab face A	318
7.27	The distribution and numbers of fragments of band in each grid square	318
7.28	Joining band fragments	319
7.29	Joining band fragments	319
7.30	Hilton verso. Inscribed lettering on banner in shield	322
7.31	Hilton verso. Marks between words resembling point separators	323
7.32	Hilton verso. Capital K from left side of shield	323
7.33	Classical roman capitals showing the variation in stroke width	323
7.34	Formal roman capitals from headstone inscription, Haddington 1697	324
7.35	Letters from Hilton inscription	324
7.36	Hilton verso. Two forms of capital R used in the same inscription	324
7.37	Hilton verso. Two forms of capital A from main inscription and shield	325
7.38	Hilton verso. The capital letter Y formed of two strokes	325
7.39	Hilton verso. Archaic form of the numeral 6	325
7.40	Hilton verso. Ligature VF	326
7.41	Morphology slides	340
7.42	Morphology slides	341
7.43	Morphology slides	342
7.44	Morphology slides	343
7.45	Morphology slides	344

7.46	Single aliquot dose distributions	354
7.47	Medieval relief cross	366
7.48	An unshaped stone with an incised linear cross	366
7.49	Architectural fragment with mason's mark	367
7.50	The medieval pottery	375
7.51	Copper alloy, iron and bone artefacts	376
7.52	Stone objects	378
8.1	The Hilton of Cadboll cross-slab on display in the National Museum of Scotland, Edinburgh	386
8.2	The front face of the middle and lower portions of the cross-slab	387
8.3	Heather James and Colin Muir discuss the discovery during excavation of the lower portion of the	
	cross-slab	389
Apper	ndix 2.1 Carving of a horse's head at Jessie Port, Hilton of Cadboll	399

List of tables

3.1	Chronology and phasing of the site	32
3.2	Hilton of Cadboll, possible scenarios	65
6.1	Table of population and fishing statistics for Hilton of Cadboll and the seaboard villages as a group	237
6.2	Table of known petitions of protest from Scottish bodies	240
6.3	Key individual participants in the return of the upper portion of the upper portion of the cross-slab	
	to Scotland	248
7.1	Total number of fragments per class	288
7.2	Number of toolmarks per class	317
7.3	Profile 1	335
7.4	Profile 2	336
7.5	Archaeological feature summary	337
7.6	Sampling details for Profile 1	347
7.7	Sampling details for Profile 2	347
7.8	Sampling details for the four OSL tube samples	348
7.9	On-site gamma dosimetry readings	348
7.10	Equivalent dose estimates from profiling samples	350
7.11	Activity and equivalent concentrations of K, U and Th	351
7.12	Dose rates determined by HRGS, TSBC and field gamma measurements	352
7.13	Annual dose rates	352
7.14	Summary of SAR results	353
7.15	Single aliquot results	355
7.16	Final age estimates	355
7.17	Radiocarbon dates	358
7.18	Faunal remains	359
7.19	Species present in sieved samples	361
7.20	Human remains: age at death	362
7.21	Disarticulated human bone	365
7.22	Keyword usage, class 4a	368
7.23	Other stone fragments with features	369
7.24	Iron finds	370
7.25	Pottery catalogue	374
7.26	Non-sculptured finds	377
7.27	Catalogue of lithics	380
7.28	Glass shards	381

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Summary

The cross-slab from Hilton of Cadboll in Ross and Cromarty is one of the best-known and most beautiful early medieval sculptures in Britain. It is displayed in the National Museums of Scotland in Chambers Street, Edinburgh, and the medieval chapel site from which it came is cared for by Historic Scotland (NGR NH 8731 7687). The original Pictish carving is preserved on one side, including ornate Pictish symbols, a hunting scene that includes a female rider and a panel of spiral ornament, the whole enclosed within a border of animal-inhabited vine-scroll. The other face, on which it was assumed there would have been a Christian cross, was chipped off and replaced by a memorial inscription bearing the date 1676. Excavations close to the chapel in 1998 yielded carved fragments from the missing cross-face, and further excavation in 2001 revealed not only more carved fragments but also the lower portion of the slab still in a setting in the ground. This lower portion is exceptionally well preserved and carved on both sides. There is a gap between the lower portion and the upper portion, but parts of this missing midportion have been recognised among the fragments. This important discovery led to a multi-disciplinary project involving art history, archaeology, scientific analysis, ethnography and cultural history.

The archaeological excavations revealed that the cross-slab had been broken twice early in its life, the first time when the tenon broke and the second time when the upper portion fell, leaving the lower portion (the new tenon) in the ground. Its original location was probably close to where it was re-erected in the mid-12th century, and it is likely that there was a Pictish church here, accompanied by burials and in some way linked to the Pictish monastery at Portmahomack. The medieval context for the second setting of the crossslab, possibly slightly pre-dating the construction of a medieval chapel and children's graveyard, has showed the continued importance of the site to medieval society and the desire to express veneration and respect for this Christian monument. Despite the small area of the graveyard that has been examined, it can be seen that its use changed after the Reformation to include the adult population. The surrounding deposits are not rich with artefacts but are consistent with a site

that was in the vicinity of medieval and post-medieval settlement.

The excavations yielded 11,252 fragments of stone, of which 7497 belong to the cross-slab, and of these 3370 fragments bear traces of carving. The digital database of all the carved fragments may be consulted online from the Arts and Humanities Data Service, University of York (http://ahds.ac.uk/). Detailed studies concern the cross-slab itself (geology, toolmarks, the way in which it became fragmented, the epigraphy of the inscription), scientific dating, environmental evidence and other artefacts discovered during the excavations, including part of a medieval relief cross and a stone with a simple incised cross. A potential source for the Middle Old Red Sandstone of the cross-slab is the foreshore at nearby Jessie Port.

The Hilton of Cadboll slab is now seen to have been profoundly Christian, drawing on venerable Early Christian imagery to convey its message of Salvation. The uniquely architectural, embossed stepped base preserved on the front of the lower portion, confirms Pictish sculptors' knowledge of the representation of the jewelled cross erected at Golgotha in the fifth century. Elements of this imagery are found elsewhere in Ross-shire, on the Shandwick cross, on a cross-slab at Rosemarkie and on the Edderton cross-slab. The reconstruction of the mid-portion showed that a crosshead of a distinctly Pictish design was set at the centre of the spiral panel on the reverse of the slab. This glorified cross can be compared to the vision of the cross set against the sun experienced by Constantine the Great before the battle at the Milvian Bridge around AD 312 and associated with Conversion and the Triumph of Christianity. The cross and the Eucharistic vine-scroll which borders the reverse of the slab allow a reappraisal of the famous image of a female rider. It is argued that this dominant Christian context and the frontal pose of the mounted figure suggest that, like the male riders on Pictish slabs, the figure is not a specific contemporary aristocrat but rather an idealisation of female authority and Christian integrity. The figures on the front face of the mid-portion are seen as concerned with Death, Judgement, Heaven and Hell. The heavy fleshy creatures that flank the cross-base can be related to the

animal art of the other tall slabs of Easter Ross, the St Andrews Sarcophagus and to a number of Insular works of art of the second half of the eighth century, in particular the Anglo-Saxon Gandersheim Casket. This Casket was made in Mercia in the late eighth century and provides the most secure approximate date for the Hilton cross-slab. The condition of the carving on the hitherto unknown bottom edge of the Hilton vinescroll shows that the same animal style was used both for the inhabitants of the scrolls and for animals on the upper portion, a uniformity of style that was the creation of the Hilton sculptor. The art of the Hilton cross-slab underscores the relationship between the sculpture north and south of the Grampians evident in the other tall slabs of Easter Ross.

A biographical approach to the history of the Hilton cross-slab has enabled the changing meanings and values of the monument to be traced though time and has contributed to a wider understanding of attitudes towards early medieval sculpture. For the early medieval and medieval periods the sources are often remote from the cross-slab and its Tarbat environment, but for more recent phases in its biography, historical sources pertaining directly to the monument or its immediate context have been enlightening. The discovery of George Mackenzie's

letter of 1675 about a storm on 21 December 1674 that toppled a large obelisk has been important to the interpretation of 17th-century events surrounding the cross-slab. Later documents have enabled a much fuller picture to be drawn of the monument and the various people who have engaged with it, including a rich body of documentary sources relating to events in 1921 when the upper portion was sent to the British Museum in London and later that year returned to Scotland. Ethnographic research, involving interviews and participant observation, has also proved to be important in revealing the depth and range of meanings and values attached to the monument in contemporary society. Together, the historical and ethnographic evidence shows that the specific religious meanings surrounding the cross-slab prior to the Reformation declined from the Enlightenment onwards. In their place, the monument became involved in a complex body of symbolism relating to national, community and class identities.

At local initiative, a replica of the cross-slab has been erected close to the chapel site at Hilton of Cadboll, a project that commenced before the discovery of the lower portion, and the original lower portion is now in the Seaboard Memorial Hall in neighbouring Balintore.

Résumé

La 'cross-slab' de Hilton of Cadboll dans le comté de Ross et Cromarty est l'une des sculptures du haut Moyen-Âge les plus connues et les plus belles de Grande-Bretagne. Elle est exposée au National Museums of Scotland, Chambers Street, à Édimbourg, et le site de la chapelle médiévale dont elle est issue est entretenu par l'association Historic Scotland (NGR NH 8731 7687). La gravure picte d'origine est préservée sur un côté, avec notamment des symboles pictes richement ornés, une scène de chasse comprenant une cavalière et un panneau ornemental en spirale, le tout se trouvant à l'intérieur d'une bordure en vigne habitée par des animaux. L'autre face, sur laquelle on a supposé qu'il devait y avoir une croix chrétienne, a été écaillée et remplacée par une inscription commémorative portant la date de 1676. Des fouilles effectuées près de la chapelle en 1998 ont produit des fragments sculptés de la face à la croix manquante, et d'autres fouilles menées en 2001 ont révélé non seulement d'autres fragments sculptés mais également la portion inférieure de la

pierre qui était encore enterrée dans le sol. La portion inférieure est exceptionnellement bien conservée et est sculptée de part et d'autre. Il y a une partie manquante entre la partie inférieure et la partie supérieure, mais des morceaux de la portion médiane manquante ont été reconnus parmi les fragments retrouvés. Cette importante découverte a donné lieu à un projet pluridisciplinaire faisant intervenir l'histoire de l'art, l'archéologie, l'analyse scientifique, l'ethnographie et l'histoire culturelle.

Les fouilles archéologiques ont révélé que la «cross-slab» avait été cassée deux fois dans sa vie, la première fois lorsque le tenon s'est brisé et la seconde fois lorsque la portion supérieure est tombée, laissant la portion inférieure (le nouveau tenon) dans le sol. Son site original était sans doute près de l'endroit où elle a été replacée au milieu du XXIIe siècle, et il y a des chances qu'il y ait eu une église picte à cet endroit, accompagnée de tombes pictes et liée d'une certaine manière au monastère picte de Portmahomack. Le

contexte médiéval de la deuxième mise en place de la «cross-slab», qui a peut-être eu lieu avant la construction de la chapelle médiévale et du cimetière des enfants, a montré l'importance continue du site dans la société médiévale et le désir d'exprimer une vénération et un respect pour ce monument chrétien. Malgré la faible superficie de cimetière examinée, on peut voir que son utilisation a changé après la Réforme pour accueillir la population adulte. Les dépôts alentours ne sont pas riches en objets fabriqués mais correspondent à ceux d'un site situé près d'un village médiéval et post-médiéval.

Les fouilles ont produit 11 252 fragments de pierre, dont 7497 appartiennent à la «cross-slab» et parmi eux, 3370 fragments portent des traces de sculpture. La base de données numérique de tous ces fragments sculptés peut être consultée en ligne auprès du Services des données des Arts et Humanités (Arts and Humanities Data Service), de l'université de York (http://ahds. ac.uk/). Des études détaillées concerne la «cross-slab» elle-même (géologie, marque d'outils, la façon dont elle s'est fragmentée, l'épigraphie de l'inscription), les datations scientifiques, les preuves environnementales et d'autres objets découverts durant les fouilles, notamment une partie d'une croix médiévale de relief avec une croix incisée simple. Une source potentielle du vieux grès rouge moyen utilisé pour la «cross-slab» est la laisse de mer au site voisin de Jessie Port.

La dalle de Hilton of Cadboll est maintenant considérée comme étant profondément chrétienne, basée sur les imageries vénérables du début de l'ère chrétienne pour transmettre son message du Salut. La base architecturale unique échelonnée et estampée conservée sur le devant de la portion inférieure, confirme la connaissance des sculpteurs pictes de la représentation de la croix ornée de pierres précieuses érigée à Golgotha au Ve siècle. Des éléments de cette imagerie se retrouvent ailleurs dans le comté de Rossshire, sur la croix de Shandwick, sur une «cross-slab» de Rosemarkie et sur la «cross-slab' de Edderton. La reconstruction de la portion médiane a montré qu'une tête de croix de conception clairement picte était placée au centre du panneau en spirale au dos de la dalle. Cette croix glorifiée peut se comparer à la vision qu'eut Constantin le Grand de la croix de lumière superposée sur le soleil avant la bataille de Milvian Bridge aux alentours de 312 av J.-C. et associée à la Conversion et au triomphe du christianisme. La croix et la vigne eucharistique qui borde le dos de la dalle permettent une réévaluation de la fameuse image de la cavalière. On prétend que ce contexte chrétien

dominant et la pose frontale du personnage à cheval suggèrent que, comme les cavaliers des dalles pictes, le personnage n'est pas une aristocrate contemporaine précise mais plutôt une idéalisation de l'autorité féminine et de l'intégrité chrétienne. Les personnages de la face frontale de la portion médiane sont analysés comme ayant trait à la mort, au jugement, au paradis et à l'enfer. Les créatures charnues qui flanquent la base de la croix peuvent être reliées à l'art animalier des autres dalles de Easter-Ross, du sarcophage de St Andrews et à plusieurs œuvres d'art des îles de la seconde moitié du VIIIe siècle, en particulier le cercueil anglo-saxon de Gandersheim. Ce cercueil fut réalisé en Mercie à la fin du huitième siècle et fournit la date approximative la plus fiable pour la «cross-slab» de Hilton. L'état de la gravure sur le bord inférieur jusqu'ici inconnu de la vigne de Hilton montre que le même style d'animal a été utilisé à la fois pour les habitants des volutes et pour les animaux de la portion supérieure et cette uniformité de style a été la création du sculpteur de Hilton. L'art de la «cross-slab» de Hilton souligne la relation entre les sculptures au nord et au sud des Grampians évidente dans les autres monolithes de Easter Ross.

Une approche bibliographique de l'histoire de la 'cross-slab' de Hilton a permis aux significations et valeurs changeantes du monument d'être retracées à travers le temps et a contribué à une meilleure compréhension des attitudes vis-à-vis des sculptures du haut Moyen-Âge. Pour les périodes du haut Moyen-Âge et du Moyen-Âge les sources sont souvent éloignées de la 'cross-slab' et de son environnement Tarbat, mais pour les phases plus récentes de sa biographie, les sources historiques appartenant directement au monument ou à son contexte immédiat ont été instructives. La découverte de la lettre de George Mackenzie de 1675 à propos d'un orage le 21 décembre 1674 qui a fait basculer un grand obélisque a été importante pour interpréter les événements du XVIIe siècle entourant la 'cross-slab'. Des documents plus tardifs ont permis de dresser un portrait plus complet du monument et des diverses personnes qui y ont été lié, notamment un riche corpus de sources documentaires datant d'événements de 1921 époque à laquelle la portion supérieure a été envoyée au British Museum de Londres puis renvoyée en Écosse plus tard dans la même année. La recherche ethnographique, qui a fait intervenir des entretiens et des observations de participants, s'est également avérée importante pour révéler la profondeur et l'éventail des significations et valeurs attachées au monument dans la société contemporaine. Ensemble, les preuves historiques et ethnographiques montrent que les significations religieuses spécifiques qui entourent la 'cross-slab' avant la Réforme ont décliné à partir du Siècle des lumières et par la suite. Au lieu de cela, le monument a été associé à un corps complexe de symbolisme lié aux identités nationales, locales et aux classes sociales.

Sur une initiative locale, une réplique de la «crossslab» a été érigée près du site de la chapelle de Hilton of Cadboll. Ce projet a débuté avant la découverte de la portion inférieure, et la portion inférieure originale est maintenant au Seaboard Memorial Hall dans la commune voisine de Balintore.

Zusammenfassung

Der aus Hilton of Cadboll in Ross and Cromarty stammende Kreuzstein gehört zu den bekanntesten und schönsten frühmittelalterlichen Skulpturen in Großbritannien. Er ist im National Museums of Scotland, Chambers Street, Edinburgh, ausgestellt und der Standort der mittelalterlichen Kapelle, an dem er seinen Ursprung hat, wird von Historic Scotland (NGR NH 8731 7687) betreut. Auf einer Seite wurde die original piktische Steinzeichnung erhalten, die kunstvolle piktische Symbole, eine Jagdszene mit einer Reiterin sowie eine Platte mit spiralförmigen Verzierungen umfasst. Das Ganze wird von einer von Tieren bewohnten Weinrebe umgeben. Die andere Seite, von der man annahm, dass darauf ein christliches Kreuz abgebildet war, wurde abgetragen und mit einer auf das Jahr 1676 datierten Gedenkinschrift versehen. Bei 1998 in der Nähe der Kapelle durchgeführten Ausgrabungen, fand man behauene Teile der fehlenden Seite des Kreuzes und bei weiteren, 2001 durchgeführten Ausgrabungen, förderte man nicht nur mehr dieser Fragmente, sondern auch den unteren Teil des Steins zutage, der sich dort immer noch im Boden befand. Dieser untere Teil ist außergewöhnlich gut erhalten und auf beiden Seiten behauen. Es fehlt ein Stück zwischen dem unteren und dem oberen Teil, jedoch wurden Teile dieses fehlenden Mittelstücks unter den Fragmenten ausgemacht. Dieser bedeutende Fund führte zu einem fachübergreifenden Projekt, das unter anderem Kunstgeschichte, Archäologie, wissenschaftliche Analyse, Ethnographie Kulturgeschichte umfasst.

Die archäologischen Ausgrabungen zeigten, dass der Kreuzstein bereits während seiner frühen Existenz zweimal gebrochen war, das erste Mal, als der Verbindungszapfen brach und das zweite Mal, als der obere Teil zu Boden stürzte, wobei der untere Teil (der neue Verbindungszapfen) im Boden verblieb. Sein ursprünglicher Standort befand sich vermutlich in der Nähe desjenigen, an dem er Mitte des 12. Jahrhunderts wieder aufgestellt wurde und es ist sehr wahrscheinlich,

dass sich dort eine piktische Kirche mit angeschlossener Begräbnisstätte befand, die auf irgendeine Art und Weise mit dem piktischen Kloster in Portmahomack in Verbindung stand. Der mittelalterliche Kontext für den zweiten Aufstellungsort des Kreuzsteines, der vermutlich etwas vor dem Bau einer mittelalterlichen Kapelle sowie eines Kinderfriedhofs ausgewählt wurde, wies auf die anhaltende Bedeutung des Standorts für die mittelalterliche Gesellschaft sowie das Verlangen hin, diesem christlichen Monument Verehrung und Respekt entgegenzubringen. Trotz der Tatsache, dass bisher nur ein kleiner Teil des Friedhofs untersucht wurde, kann man erkennen, dass dieser nach der Reformation auch als Begräbnisstätte für Erwachsene benutzt wurde. Die in der Umgebung zu findenden Ablagerungen beherbergen nicht viele Artefakte, entsprechen jedoch einer sich in der Nähe mittelalterlicher und nachmittelalterlicher Ansiedlungen befindenden Stätte.

Bei den Ausgrabungen fand man 11.252 Steinfragmente, von denen 7.497 zum Kreuzstein gehören. Von diesen wiederum, weisen 3.370 Teile Spuren einer Behauung auf. Auf der Website des Arts and Humanities Data Service der Universität York (http://ahds.ac.uk), können Sie online auf die digitale Datenbank aller behauenen Fragmente zugreifen. Detaillierte Studien hinsichtlich des Kreuzsteines selbst (Geologie, Werkzeugspuren, die Art und Weise auf die er in Teile zerfiel, die Epigraphik der Inschriften), wissenschaftlicher Datierungen, umfeldbedingter Anhaltspunkte sowie weiterer während Ausgrabungen entdeckter Artefakte, einschließlich eines Teils eines mittelalterlichen Reliefkreuzes und eines Steins mit einem einfachen, eingeritzten Kreuz. Als potentielle Quelle des Middle Old Red Sandstone (mittelalten Rotsandsteins) des Kreuzsteins, gilt das sandige Ufer des nahegelegenen Jessie Port.

Der Stein aus Hilton of Cadboll wird mittlerweile als tiefgründig christlich betrachtet, wobei er sich ehrwürdiger frühchristlicher Symbolik bedient,

um seine Heilsbotschaft zu übermitteln. Das einzigartige, geprägte, architektonisch stufige Fundament, das auf der Vorderseite des unteren Teils erhalten geblieben ist, bestätigt, dass piktische Bildhauer über Kenntnisse bezüglich der Darstellung des im 5. Jahrhundert bei Golgotha errichteten, mit Edelsteinen besetzten Kreuzes verfügten. Elemente dieser Symbolik finden sich auch anderswo in Rossshire, so z.B. auf den Kreuzsteinen von Shandwick und Edderton und auf einem Kreuzstein bei Rosemarkie. Die Rekonstruktion des Mittelstücks zeigte, dass sich in der Mitte der sich auf der Rückseite des Steins befindlichen spiralförmigen Platte der obere Teil eines eindeutig piktisch aussehenden Kreuzes befand. Dieses glorifizierte Kreuz kann mit der Vision des gegen die Sonne ausgerichteten Kreuzes verglichen werden, mit dem Konstantin der Große vor der Schlacht an der Milvischen Brücke um 312 ad herum konfrontiert wurde und mit einem Wandel sowie dem Triumph des Christentums in Verbindung gebracht werden. Das Kreuz und die eucharistische Weinrebe, welche die Rückseite des Steins umgibt, ermöglichen eine Neubeurteilung des berühmten Abbilds einer Reiterin. Es wird argumentiert, dass dieser dominante christliche Kontext sowie die Frontaldarstellung der reitenden Person andeuten, dass es sich bei der Figur, wie bei den auf piktischen Steinen abgebildeten männlichen Reitern, nicht um eine bestimmte zeitgenössische Adlige, sondern eher um die Idealisierung der weiblichen Autorität sowie der christlichen Integrität handelt. Die auf der Vorderseite des Mittelteils abgebildeten Figuren werden als für den Tod, den jüngsten Tag sowie Himmel und Hölle zuständig betrachtet. Die schweren fleischigen Geschöpfe, die das Fundament des Kreuzes flankieren, können mit der Tierkunst in Verbindung gebracht werden, die auf den anderen großen Steinen in Easter Ross, dem St. Andrews Sarkophag sowie auf einer Reihe der von den Inseln stammenden Kunstwerken der zweiten Hälfte des 8. Jahrhunderts zu sehen ist. Insbesondere ist hier der angelsächsische Gandersheim Casket zu erwähnen. Dieser Schrein wurde im späten 8. Jahrhundert in Mercia hergestellt und gilt als der sicherste ungefähre Anhaltspunkt zur Datierung des Kreuzsteins von Hilton. Die Beschaffenheit der bislang unbekannten Behauung am unteren Ende der Weinrebe von Hilton zeigt, dass sowohl für die Bewohner der Reben als auch für die auf dem oberen Teil abgebildeten Tiere ein einheitlicher Stil angewandt wurde, der auf das Werk des Bildhauers von Hilton zurückzuführen ist.

Die Kunst des Kreuzsteines von Hilton unterstreicht die Verbindung zwischen der Bildhauerei nördlich und südlich der Grampians, die in den anderen großen Steinen von Easter Ross zutage tritt.

biographischer Ansatz hinsichtlich Geschichte des Kreuzsteins von Hilton ermöglichte die Nachverfolgung der sich im Laufe der Zeit verändernden Bedeutungen und Werte des Monuments und trug zu einem erweiterten Verständnis von Einstellungen zu frühmittelalterlichen Skulpturen bei. Was die Quellen der frühmittelalterlichen und mittelalterlichen Perioden betrifft, liegen diese oft weit vom Kreuzstein sowie seiner Umgebung in Tarbat entfernt, jedoch waren die das Monument direkt oder seinen unmittelbaren Kontext betreffenden historischen Quellen späterer Phasen seiner Biographie sehr aufschlussreich. Die Entdeckung des Briefes von George Mackenzie aus dem Jahr 1675 über einen Sturm am 21. Dezember 1674, der einen großen Obelisken zu Fall brachte, spielte bei der Interpretation der den Kreuzstein umgebenden Ereignisse des 17. Jahrhunderts eine wichtige Rolle. Aus späteren Jahren stammende Dokumente ermöglichten die Erstellung eines weitaus aufschlussreicheren Bildes des Monuments sowie der zahlreichen, damit in Verbindung stehenden Personen. Unter anderem entstanden umfangreiche dokumentarische Quellen, die in Zusammenhang mit den Ereignissen von 1921 stehen, als der obere Teil an das British Museum in London geschickt wurde, jedoch noch im selben Jahr nach Schottland zurückkehrte. Ethnographische Forschungen, die Interviews und Beobachtungen Beteiligter umfassen, haben sich bei der Enthüllung von Tiefe und Umfang der dem Monument von der zeitgenössischen Gesellschaft zugemessenen Bedeutungen und Werte ebenfalls als wichtig erwiesen. Zusammen zeigen die geschichtlichen und ethnographischen Nachweise, dass die den Kreuzstein vor der Reformation umgebenden, spezifischen religiösen Bedeutungen, mit dem Beginn der Aufklärung langsam abnahmen. An ihrer Stelle wurde das Monument in ein komplexes System von Symbolik eingebunden, das sich auf nationale, gemeinschaftliche sowie auf Identitäten gesellschaftlicher Schichten bezieht.

Aus einer lokalen Inititative heraus, wurde nahe des Standorts der Kapelle in Hilton of Cadboll eine Nachbildung des Kreuzsteines errichtet, ein Projekt, das vor der Entdeckung des unteren Teils begann. Das Original des unteren Teils befindet sich nun in der Seaboard Memorial Hall im benachbarten Balintore.

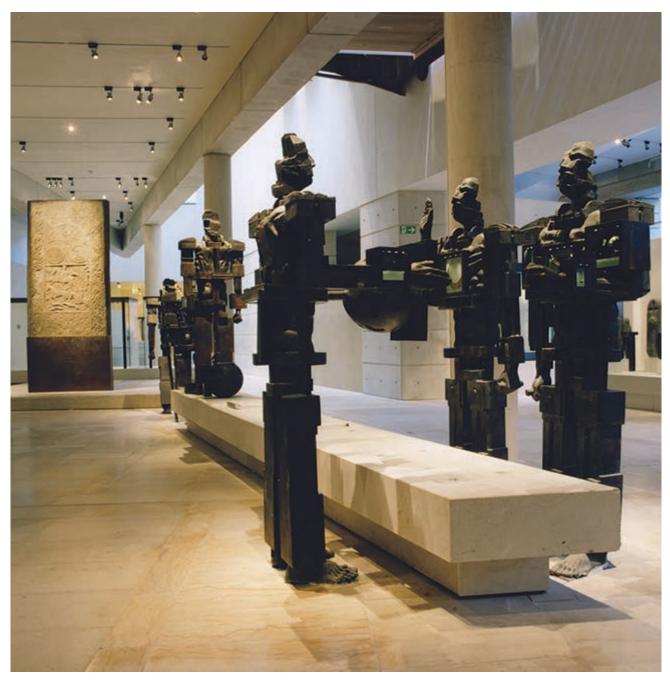


Illustration 1.1

The Hilton of Cadboll cross-slab on display with the Paolozzi figures in the National Museum of Scotland, Edinburgh (© Trustees of the National Museums of Scotland)

Chapter 1

The project

DAVID V CLARKE and SALLY M FOSTER

1.1 Introduction

This project reconstructs the biography of one of the most famous early medieval sculptures in Britain, the Hilton of Cadboll Pictish slab. The massive upper portion of this 'national treasure' is displayed as a key exhibit in the Museum of Scotland in Edinburgh,1 while the medieval chapel site on which it was found in the 18th century is cared for by Historic Scotland on behalf of Scottish Ministers.2 The pieces of our 1200-year-old biography are the thousands of newly discovered fragments of the slab from excavations at the chapel site, particularly the lower portion, and the inter-disciplinary research that this project has generated. The Picts were among the early inhabitants of what is now Scotland, living primarily in northern and eastern Scotland.3 They are renowned worldwide for their stone sculpture, which dates from around the sixth to the ninth centuries AD. Of these, the Hilton of Cadboll slab is one of the most important survivals, a member of the 'magic circle of Insular excellence', 'one of the most accomplished and significant displays of figural art in Pictish sculpture' (Henderson, Chapter 2.3). The content and quality of the Hilton of Cadboll slab places it in the mainstream of contemporary European art. It demonstrates that the Picts of northern Scotland were full and active participants in the artistic and intellectual developments of this time. This interest and value is considerably enhanced by its being one of a group of exceptionally high quality Pictish sculptures found on the Tarbat peninsula (at Portmahomack, Shandwick and Nigg), with an important assemblage also at Rosemarkie, in the Black Isle immediately to the south. These testify to the presence of a vigorous and wealthy early medieval church in this area.

The massive slab prominently displayed at the entrance to the Early Peoples Gallery of the Museum of Scotland is not only incomplete but also much worn due to earlier centuries of exposure to the elements and other mishaps, such as vandalism. The surviving decorative side faces the visitor at the end of an avenue of Paolozzi sculptures (illus 1.1). A series of highly ornate Pictish symbols loom above the famous scene

of a high-status female and her male associates hunting deer on horseback. Below this is a panel of spiral ornament, partially restored. Animal-inhabited vinescroll frames the whole: 'the Pictish masterpiece in the vinescroll tradition'. But the lower third of the slab is missing and the Museum display reconstructs this in metal. Moreover, because the slab became a memorial to Alexander Duff and his three wives in 1676, the reverse face is totally defaced and the sides and top are slightly reworked. In other words, we were missing around one third of the body of the monument and over half of its decorated surfaces. We knew nothing about:

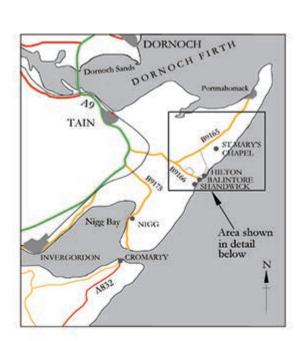
- 1 what we assumed would be the all-important, cross-bearing face
- 2 what the lower part of the slab looked like the monument's original proportions
- 3 where the sculpture originally stood, and in what setting and context.

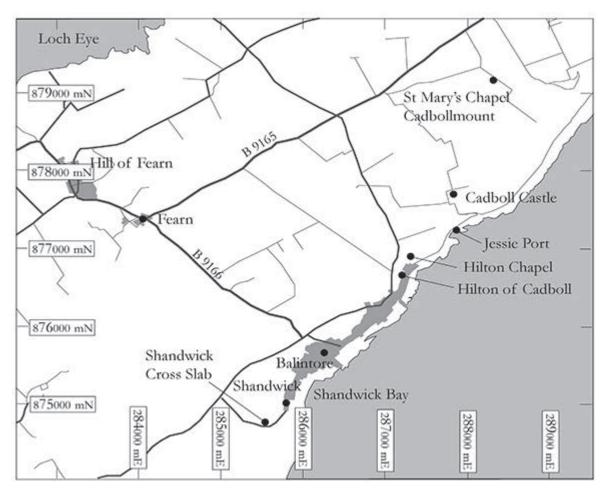
Fortunately, archaeological investigations at the chapel site in 1998 and 2001 led to the exciting recovery of thousands of fragments from the missing sculpture, including a substantial and exceptionally well-preserved lower portion that proved to be carved on both sides. We also gained a better understanding of the monument's immediate archaeological context. This discovery enables us to rethink completely the original form and content of the monument and to re-assess its art-historical significance. More than this, these excavations and associated research illuminate the complex and controversial biography of this sculpture.

This report recounts the results and interpretations arising from the work that began in 1998. Following this brief introductory chapter, Chapter 2 describes the art-historical significance of the Hilton of Cadboll sculpture prior to the 1998 discoveries. Chapter 3 recounts the archaeological evidence from the 1998 and 2001 excavations, including the evidence for what we know about the archaeological context of the sculpture at the chapel site. Chapter 4 discusses the catalogue of

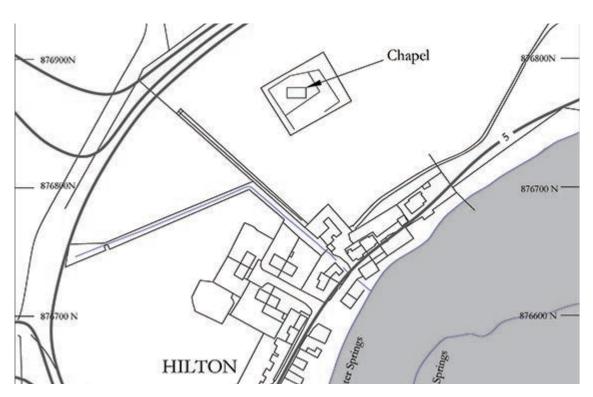
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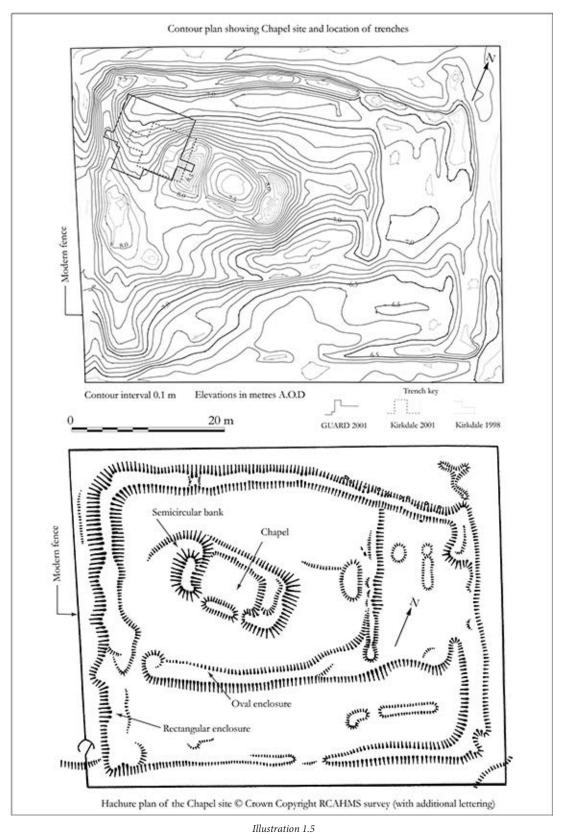
 ${\it Illustration~1.2}$ Location of Hilton of Cadboll (drawn by GUARD in the University of Glasgow)



 ${\it Illustration~1.3}$ Location of Hilton of Cadboll chapel site (drawn by GUARD in the University of Glasgow)



Illustration 1.4 View of the chapel site from the north-east



Hachure survey of the upstanding remains within the modern fenced enclosure at Hilton of Cadboll (GUARD in the University of Glasgow, after RCAHMS)

the upper, mid- and lower portions and the fragments. Chapter 5 draws together the new evidence from the recovered lower portion and thousands of fragments for the original form, decoration and content of the cross-slab, allowing us to revise its art-historical significance and our understanding of the monument. Chapter 6 brings together all the many strands of evidence to reconstruct a detailed biography for this most familiar, yet previously little understood, of Pictish monuments, and its many fragments. Chapter 7 comprises the specialist reports.

1.2 Hilton of Cadboll chapel site and its early history

The chapel at Hilton of Cadboll is situated on the east coast of the Tarbat peninsula in Easter Ross, Highland (NGR NH 8731 7687) (illus 1.2). Nestling at the centre of a natural amphitheatre defined by former sea cliffs (about 22m OD), the chapel lies 150m north of the village of Hilton and 220m inland from the sea in an area of wind-blown sand and dunes, at about 7m OD (illus 1.3 & 1.4). On the cliffs at Cadboll, 1km to the north-east, is the remains of a 16th-century towerhouse and later mansion. The bedrock is Middle Old Red Sandstone,⁵ and the soil is light, sandy and freedraining.

The surviving field remains sit on a slight mound and comprise the turf-covered footings of a medieval chapel (about 12m from east-west by 6.5m transversely) with an arc of semi-circular bank at its west end. We know that the chapel was a ruin by 1780.6 A broken font recorded immediately north of the chapel in 1978 is since lost. The chapel stands within a multiphase, sub-rectangular enclosure that is on a slightly different alignment to the building (illus 1.5). The precise chronological relationship between the chapel and the enclosures is not apparent from the field remains although the different alignments suggest different dates. The assumption has been that these enclosures define a burial ground of unknown date, although there are no visible gravemarkers and we cannot discount the possibility that some of these were plantation banks (see below). Until around 1625, when Hilton became part of Fearn parish, the burial place for Hilton was St Colman's Tarbat. We therefore do not know what role Hilton of Cadboll chapel played in medieval burial.8 There is a tradition of the burial of unbaptised infants until around the end of the 19th century.9 The sources do not agree on whether, like the old burial ground at Shandwick, they used Hilton for the burial of 1832 cholera victims.¹⁰ We cannot discount the possibility that burials might extend beyond the visible enclosures.¹¹

A modern fence protects the chapel and enclosures. The enclosed area and its surrounding land are scheduled as legally protected because of the national importance of the site. Since 1978, the land has also been in the care of Scottish Ministers and managed by Historic Scotland (owned since Spring 2002 by Historic Hilton Trust).

We address the detailed documented history of the site in our later attempt to reconstruct the biography of the monument. For present purposes, it is sufficient to note that Pictish sculpture from Hilton was first noted in 1780:

near to the ruins of a chapel, which was in an early age dedicated to the Virgin Mary. The proprietor, from a veneration for the consecrated ground, has enclosed it with some rows of trees; and it is well worthy of his care, for the obelisk is one of the most beautiful of ancient sculpture that has been discovered in Scotland. The stone is of enormous size, and has lain unnoticed on its face from time immemorial, and by that means is in the highest state of preservation.

Charles Cordiner's account led to considerable subsequent antiquarian interest in the sculpture and its recording.¹² The reference to 'rows of trees' is particularly interesting for there is no visible evidence of these today.

By 1856 the sculpture lay in a shed, 'the wall of which is believed to form part of an ancient chapel'. ¹³ As noted in 1978, the arc of walling at the west end of the chapel may be the remains of this shed. ¹⁴ Some time after 1856, and before 1872, the owner of the chapel site removed the slab to the gardens of his residence at Invergordon Castle. By 1872 only '(Site of) Standing Stone (Sculptured) (illus 1.6) was noted on the OS First Edition map, by implication a memory by the OS' local informant of where the stone had last lain. ¹⁵ This is the earliest known map to record the site of the chapel or the sculpture.

1.3 Recent archaeological interest in the chapel site

It is helpful to view the recent phase of archaeological work at Hilton of Cadboll in the context of the revived interest in Hilton of Cadboll in the mid-1990s. In 1994, Martin Carver of University of York developed an interest in Hilton of Cadboll as he sought to understand his discoveries at Portmahomack in the

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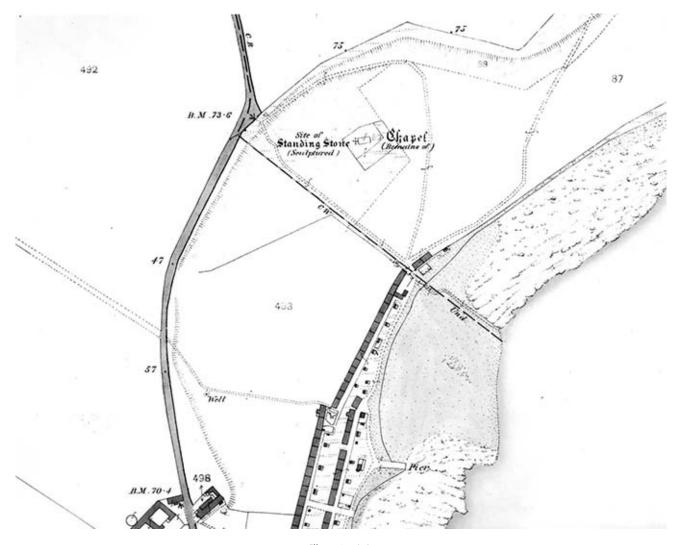


Illustration 1.6

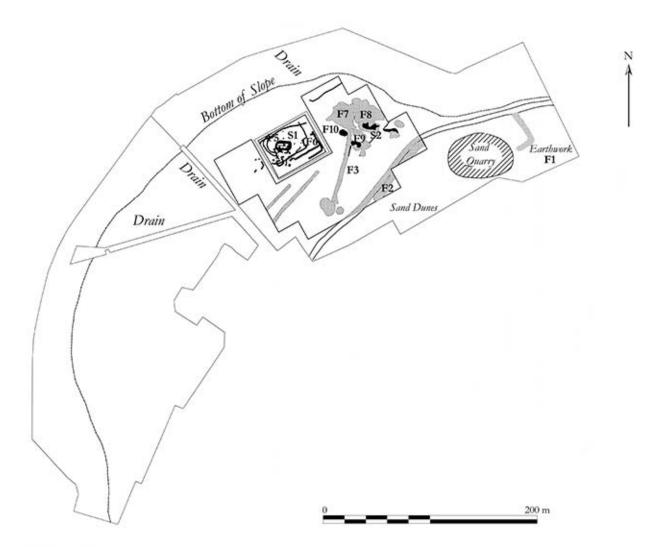
Extract from the first edition OS map (OS 1872 Ordnance Survey. 'Cromartyshire', surveyed 1872, scale 1:10,560) (reproduced by permission of the National Library of Scotland)

context of the wider Tarbat peninsula. In liaison with Jane Durham, who wanted the slab returned from Edinburgh (see Chapter 1.4), he developed proposals for a non-destructive site evaluation and replica. In 1998 Carver produced an Archaeological Assessment and Project Design, commissioned by Tain and Easter Ross Civic Trust (Appendix 1). This had the following objectives:

- 1 to erect a replica of the Hilton of Cadboll stone at Hilton
- 2 to develop the site¹⁶ in order that it can be visited by the public
- 3 to evaluate the site prior to any development

4 to investigate the site in the context of University of York's ongoing major programme of research into early historic Easter Ross, centred on Tarbat.¹⁷

The Trust hoped such an initiative would bring economic and social benefits to the Seaboard Villages (Hilton and its neighbours, Balintore and Shandwick). As part of this assessment, University of York had undertaken a topographical and geophysical (magnetometer and soil resistivity) survey of the chapel and its surroundings in 1997 (illus 1.7), and this was complemented by a 1997 topographic survey of features within the fenced area by the



 ${\it Illustration~1.7}$ Summary of features interpreted from its magnetometry and soil resistivity surveys (© FAS Heritage)

Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) (illus 1.5). ¹⁸ The University of York team interpreted their results as suggesting that there may be further enclosures and structures in the vicinity of the chapel site, but they did not detect any likely original locations for the Hilton of Cadboll slab. ¹⁹ Other sources suggest that this area may be the site of a medieval village, perhaps Catboll Fisher (see Chapter 6.3.2). This includes stray finds of what may be 14th/15th-century pottery comparable with Inverness local wares. ²⁰

Discussions took place between Historic Scotland and local parties about where it might be appropriate

to erect a replica. In 1998 these led Historic Scotland to organise a minor, three-day excavation of an area 6sq m just outside the west gable of the chapel. This aimed to test the hypothesis that the sculpture had once stood here (informed by the First Edition OS map, the RCAHMS interpretation of the semi-circular feature at the west end of the chapel as the site of the slab in the mid-19th century, local tradition and dowsing).²¹ Kirkdale Archaeology limited their exploration to the levels above the surface on which tumble from the west gable rested,²² on the grounds that this was the most likely level at which to reveal any basal structure that held the slab, and in order to

avoid intrusion into medieval levels. While they did not recover any evidence for the basal structure, they did find over 650 fragments of stone of which 458 bear decoration. These seemed to be from the 17th-century redressing of the missing side of the slab and suggested that there was the potential for further discovery of missing sculpture.²³ It also demonstrated that this was an inappropriate place to consider erecting a modern replica given the archaeological sensitivities of the area.

The following year Barry Grove, a sculptor, was commissioned by Highland Council and Tain and Easter Ross Civic Society (funded by Highland Council, Highlands and Islands Enterprise and Glenmorangie Distillery) to carve a new stone for the site (the 'Pictish Stone Replica Project'), due for completion in July 1999. The first phase involved making a copy of the surviving Pictish face, and Grove interpreted what the missing lower portion might have looked like. With the permission and co-operation of Historic Scotland, in 2000 this was erected in an archaeologically sterile area to the west of the fenced-off chapel.²⁴ Grove completed his carving of the second side of the modern carving in September 2005.

The Pictish Stone Reconstruction Project, as the Replica Project became formally known by August 2001, always intended to carve both sides of the new sculpture. The original intention has been to carve modern designs on the unknown Pictish face, but the 1998 excavations had opened the possibility that further research at the chapel site might enable the original form of the sculpture to be recognised, and for the new sculpture to be informed by this. This possibility prompted Historic Scotland to commission further exploratory work by Kirkdale Archaeology, again on a modest scale.²⁵

Early in 2001, three-week excavations of an area of 40sq m led to the discovery of more carved fragments, but also, and to everyone's surprise and delight, the massive lower portion of the sculpture was discovered in the ground. ²⁶ (This was known colloquially as 'the stump' or, incorrectly, 'base'.) We now knew that that the cross-slab had stood on the chapel site for part of its life and that there was further evidence to be recovered relating to how the slab was broken up and defaced. There was also the potential, given the volume and quality of the surviving carved fragments (an additional 1680 carved fragments), to reconstruct missing parts of the cross-slab. Significantly, the buried lower portion was seen to be carved on both sides (ie its buried part had been saved from defacement in

1676) and was exceptionally well preserved. Clearly, the future recovery of this provided the greatest opportunity yet to understand the original form of the monument. We also recognised that there was a gap between the lower portion (in the ground) and the slab in Edinburgh (the upper portion), and that we were finding parts of the missing mid-portion (there were three mid-portion fragments from 1998 and 47 from 2001). We also found a fragment from an additional carved stone, part of a ring-headed cross.

With the financial support of Ross and Cromarty Enterprise, the National Museums of Scotland and Highland Council, Historic Scotland organised an expanded archaeological exploration for summer 2001 (88.5sq m).27 It is the results from this fourweek excavation, undertaken by Glasgow University Archaeology Research Division (GUARD), directed by Heather James, that form the body of Chapter 3, along with the publication of the earlier 1998 and 2001 excavations by Kirkdale Archaeology.²⁸ The objectives of this final stage of fieldwork included recovering and recording all surviving material relating to the Hilton of Cadboll cross-slab, and in such a way that all reasonable efforts could be made to reconstruct the missing sculpture.²⁹ The aim was to explore, date and explain the sculpture's history and association with the chapel site, both before and after 1676. Geological and pigment analysis were to be included and the possibility of OSL dating was encouraged. Afterwards, the site was to return to its appearance prior to excavation.

1.4 The modern heritage politics of Hilton of Cadboll

The Hilton of Cadboll cross-slab is something of a *cause célèbre* in the history of the curation of early medieval sculpture. The circumstances are quite unique, a factor of its highly fractured and complex biography (see Chapter 6). For present purposes, it is sufficient to note that the owner moved the upper portion of the slab to Invergordon Castle sometime in the mid-19th century. His son then donated it to the National Museums of Scotland's predecessor body in 1921, but not before there had been national outcry because he first offered it to the British Museum. Opinion divided as to whether or not it would have been more appropriate to return it to Hilton or a home somewhere in the near vicinity.

Over the last century or so, the issue of where sculpture, particularly early medieval sculpture,

should be curated and displayed has sometimes been a 'hot' political issue. We see occasional high-profile disagreements about this material between national institutions, as well as between institutions (local and national) and local communities. The issue has usually been about where to display, but occasionally also ownership.³⁰ In curatorial terms, this issue has arisen because of the dual identity of sculpture. While originally conceived by its creators as a monument, years later each individual survival we have inherited retains greater or lesser monumental qualities and it is the present form of a sculpture that determines how it is treated. This means that different institutions can have different attitudes to where it is most appropriate to display such material, specifically, whether or not it is better to retain sculptures in situ or locally, or whether display in a suitable museum (regional or national) is more appropriate. The issue of dual identity also links closely to the question of legal ownership, since we legally define portable sculptures as an artefact rather than a monument, and this affects the process by which we assign ownership to new discoveries.

In fact, the present position for all new discoveries is quite open and straightforward.31 New finds must be declared as Treasure Trove and reported to the Queen's and Lord Treasurer's Remembrancer (Q<R), advised by an independent panel, the Scottish Archaeological Finds Allocation Panel (formerly known as the Treasure Trove Advisory Panel), to make a decision on ownership. If the crown claims an object, ie the finder cannot keep it, registered museums have the opportunity to bid to become the owners of the new find. Once allocated, it is then up to them where to display the find. For new finds from a site where a museum already holds earlier finds, the presumption is that the Q<R will normally allocate new discoveries to the museum that holds the rest of the collection. A museum may have earlier finds from a site because they were donated or because it actively acquired them (eg through purchase).

The rare past instances of where disagreements have arisen between institutions tend to relate to the relocation of known finds that are monumental or retain significant monumental qualities.³² The Dupplin Cross is the classic example. In the mid-1990s, Historic Scotland and the National Museums of Scotland had contrary views about whether or not the Cross should be preserved at or near Dupplin or in Edinburgh.³³

To return to Hilton of Cadboll, ongoing local unhappiness about the slab being in Edinburgh came

to the fore in the 1990s when local parties sought to have the slab returned to Hilton. This initiative was led by Jane Durham, a Commissioner of RCAHMS, who lived locally. Some contested the Museum's ownership of the slab in the first place, arguing that it was not Captain Macleod's to give in 1921. The National Museums of Scotland were not able to agree to loan requests for the slab from Hilton because the poor condition of the stone meant that the journey would have involved considerable risk to it and because no suitable site for displaying the slab was available. Further, the fragile nature of the surviving decoration prevented the creation of a cast of the slab. Consequently, the community developed alternative plans for the site (see below).

The discovery and excavation of the lower portion of the slab in 2001 re-ignited the long-running controversy over the ownership and display of the monument (see Chapter 6.8). In curatorial terms, it was clear enough that the ownership of new finds would go to the National Museums of Scotland (the new finds were not simply from the same site, but the majority from an object already owned by the Museum) and this inflamed local passions. One outcome was local opposition to the lifting of the slab, because of the misconception that if left in the ground its ownership rested with the owners of the ground.³⁴ We eventually lifted the lower portion of the slab but left it in Hilton, for the local political difficulties did not allow for the safe conveyance of the slab. Historic Scotland brokered this temporary compromise, to allow clarification of the formalities of ownership.³⁵ As of November 2006, the National Museums of Scotland has sought, unsuccessfully, to agree a partnership with Historic Hilton Trust. The basis of their proposal requires the recognition that ownership lies with the National Museums of Scotland. Once the Trust acknowledges this, the National Museums of Scotland are committed to working with them to find ways to ensure that the new finds would normally be on local display, as has happened 'up the road' at Tarbat Discovery Centre. The way forward lies in drawing a distinction between legal ownership (which formally rests with the National Museums of Scotland) and the question of where the material is displayed, and by whom (Hilton being an option).36 Initially the lower portion was stored and presented to the public in the Wm Paterson Industrial Unit in Hilton, but latterly the Trust has moved the lower portion to the Seaboard Memorial Hall at Balintore, the settlement conjoined to Hilton.

1.5 Related research: a community study

Encouraged and supported by Historic Scotland, Siân Jones of Manchester University undertook a community study, in parallel with the second season of excavation in 2001. She sought to gain an understanding of the meanings and values surrounding early medieval sculpture and the basis of conflict between various interest groups. This is published in full elsewhere (see Chapter 6 for key findings as they relate to the biography of the monument).³⁷

The benefits of this study extend beyond Hilton of Cadboll to wider methodological, practical and political implications.³⁸ It is a critical assessment of aspects of the wider practices of heritage management, with implications for all involved in this. We recognise that it is important to embrace social value and broader cultural significance, as well as to have the tools and means to do this. This provides an excellent case study of one way in which to do this. It is particularly timely as Historic Scotland and others involved in the conservation of monuments now operate in an environment in which formal assessment of the significance of monuments is becoming the standard first step in the development of conservation plans. The recommendations arising from the study have also informed the Scottish Government's 2005 policy and guidance on carved stones.³⁹ Finally, we have learned something about Hilton of Cadboll chapel site itself, and a considerable amount about what this means to its immediate residents, the community at Hilton, as well as others. This knowledge will inform how Historic Scotland interprets and presents the chapel site in the future.

The circumstances at Hilton of Cadboll are of course unique to this place, and the controversy raised by the discovery of the lower portion of the cross-slab is by no means typical. Nevertheless, it is a good example of the difficulties of determining the correct home for such an object, while such extreme circumstances have provided here a most productive test-bed for a community study.

1.6 Bringing the project to fruition

Out of the field, the post-excavation of this project has provided some unique practical and political challenges. GUARD has been responsible for writing up the excavations, directing and co-ordinating the production of the report as a whole, including the catalogue and associated analytical work. Isabel Henderson has been responsible for all art-historical aspects. Ian G Scott has produced the illustrations of the sculpture and undertaken most of the reconstruction. A project group of the key specialists from GUARD (Heather James), independents Isabel Henderson and Ian G Scott, plus National Museums of Scotland staff (David Clarke, Andy Heald and Fraser Hunter) and Historic Scotland (as overall project manager, Sally Foster, latterly Noel Fojut) have sought to steer the work. Siân Jones has built on her earlier community study to make a major contribution to our understanding of the later history of the monument.

It would only be fair to acknowledge that determining how to deal realistically with the 11,252 fragments, of which 3370 are carved, has posed major methodological questions. The approach taken has had to evolve as the project developed and we had a better understanding of the material and its potential for analysis and reconstruction (see Chapters 4, 5 and 7.1). We have also had to decide when to come, as Isabel Henderson describes it, to an 'honourable stop'. One significant aspect of this was out of our control, since Historic Hilton Trust refused to 'release' the lower portion of the cross-slab from Hilton for study in Edinburgh. This means that it has not been possible to examine all parts of the sculpture side by side and we recognise that this has impaired optimum reconstruction and interpretation of the sculpture. They have been more than willing, however, to facilitate access to the lower portion in Balintore. As to the rest of the sculpture, we have had to determine carefully what approaches to analysis stood the best chance of enabling us to understand the original form, layout and decoration of the monument, and could provide value for money when it came to detailed reconstruction. This has involved focusing on the 800 most informative carved fragments, with selective analysis of the remainder. We have aimed to make it clear what has and has not been done, and why, and we recognise that this material will still provide plenty of scope for study by future researchers.⁴⁰

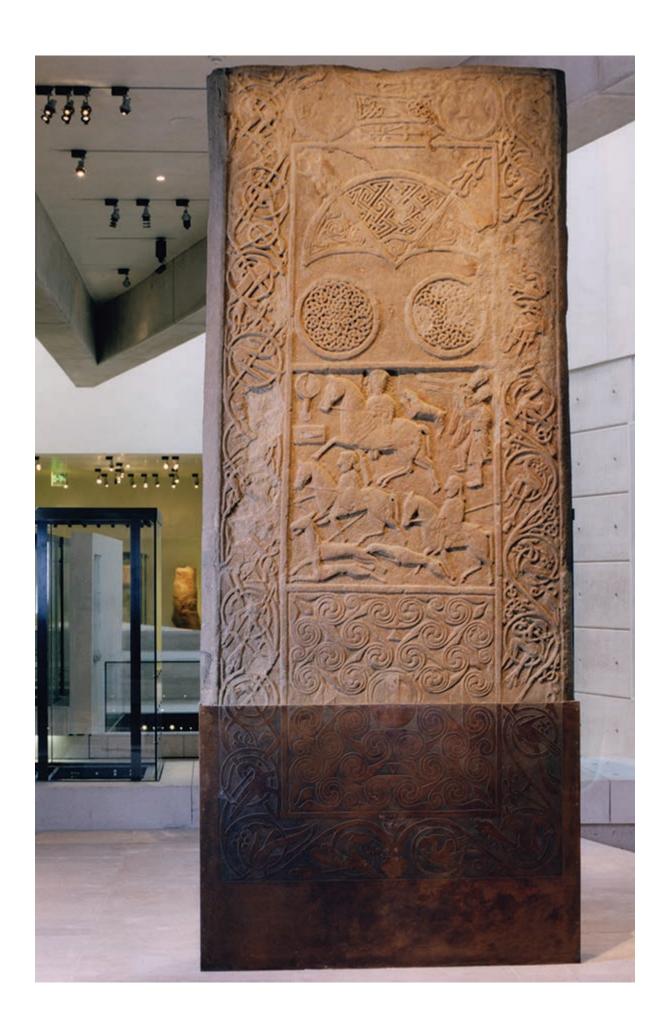
Financial support for the post-excavation work has come from Historic Scotland, the National Museums of Scotland, and Ross and Cromarty Enterprise. The National Museums of Scotland, as owners of the finds, additionally provided considerable in-kind support.

It is also appropriate to acknowledge the limitations of the archaeological approach that we took. These focused on the sculpture, recovery of the fragments and gaining and understanding of the sculpture's immediate setting (see above). Without the local political circumstances, the fieldwork, and indeed post-excavation work, would not have developed in the way that they did, but on the other hand the project would probably not have happened. There remain many unanswered questions, and the largely unexplored site retains high archaeological potential for addressing future broader research questions and strategies, including some of those posed in the conclusions of this study (Chapter 8). Meantime, we have developed beyond expectations our appreciation of the art-historical significance of the cross-slab (Chapter 5), and of its biography (Chapter 6). The wider implication is that we will all now look in a different way at the work of Pictish sculptors, the later uses of such monuments, and the values which society has placed on these artistic achievements through time.

Notes

- 1 Accession no NMS X.IB 189.
- 2 SAM index no 90320.
- 3 For an introduction to the Picts see Carver 1999 and Foster 2004.
- 4 Henderson & Henderson 2004, 53.
- 5 Johnstone & Mykura 1989, illus 29, 136.
- 6 Cordiner 1780, 66.
- 7 RCAHMS 1979, 26, no 224.
- 8 Robbins 1996b; Alston 1999, 181.
- 9 Watson 1904, 44.
- Macdonald & Gordon (1971, 59) suggest that the cholera victims were buried at Cadbollmount; Miller (1889, 442) states that the Hilton of Cadboll burial ground 'seems' to have been used.
- 11 Pace Robbins 1996a, 10.
- 12 Cordiner 1780, 66. See also Cordiner 1795.
- 13 Stuart 1856, 10.
- 14 RCAHMS 1979, 26, no 224.
- 15 OS Name Book, Book 11, Fearn Parish, 33.
- 16 The site was already formally accessible to the public, since it was in the care of Scottish Ministers.
- 17 Carver 1998, 1.
- 18 RCAHMS Archive E 10517, drawn at 1:250 by J Borland.
- 19 Carver 1998, 9–10, 12, illus 2; Field Archaeology Specialists Ltd 1998.
- 20 Robin Hanley in litt to Nick Bridgland, 10 January 1997.
- 21 The dowsing was undertaken in December 1996 by D L Bates, at the invitation of Jane Durham (Bates & Durham 1996), and is reported by Carver (1998, 11): 'A rectangular plinth was said to have been detected at this location, in which the stone would have stood facing west. The missing portion of the stone was said to remain in position in this plinth. The mound west of the chapel was interpreted as the grave of a prominent person dated by dowsing to 724 AD. Dowsing dated the walls of the enclosure to 736 and the chapel itself to 844 AD.'

- 22 Kirkdale Archaeology 1998. Nick Bridgland, Inspector of Ancient Monuments, initiated this work.
- 23 Not all of the opened area was excavated fully to the level at which fragments were was encountered.
- 24 Kirkdale Archaeology 2000.
- 25 Kirkdale Archaeology 2001.
- 26 The initial area opened was 36sq m, but this was extended when the lower portion was located on the edge of the trench.
- 27 The original intention was to excavate 100sq m, but we modified this during the course of excavation when the complexities of the area around the lower portion were recognised.
- 28 GUARD 2001.
- 29 Strictly speaking, the use of 'cross-slab' at this time was incorrect. It was assumed (rightly) that the slab had originally been a cross-slab, but proof awaited the recovery of the buried lower portion of the original front (cross-) face.
- 30 Foster (2001) explores the history of this issue in Scotland.
- 31 Scottish Executive 1999; www.treasuretrove.org.uk.
- 32 This might include, for example, where the present location of the sculpture is highly significant in terms of its understanding and appreciation.
- 33 Foster 2001, 18.
- 34 This was incorrect. The fact that the lower portion was still in the ground did not affect its status as a new find.
- With the benefit of hindsight, there was nothing ambiguous about ownership to clarify. The finds from the 1998 and earlier 2001 excavations, which comprised new pieces from the Hilton of Cadboll slab, as well as other artefacts, were declared to the TTAP. They passed them to the FDP to make a decision on because they came from a state-funded excavation. In line with existing guidance, they disposed them to the National Museums of Scotland. Again, with hindsight, it might have been easier for all parties if we had made a distinction at this earlier stage between the new finds from the Hilton of Cadboll slab, which were technically not ownerless, and the other artefacts, which did need ownership defined. As it was, the finds from the later season of 2001 work, in which we lifted the lower portion, were subsequently formally declared to the TTAP. In May 2002, the TTAP agreed not to recommend the new finds from the slab for claiming by the Crown under the Treasure Trove procedures because they are part of an object that appears by the Panel to be owned by the National Museums of Scotland. The Q<R endorsed the Panel's view in writing on 6 November 2003.
- 36 See Chapter 5 and Jones 2004 and 2005a & b for an understanding of why it is difficult for some local parties to be happy with this distinction.
- 37 Jones 2004; 2005a & b.
- 38 For a critique of the approach taken see Clarke forthcoming.
- 39 Scottish Executive 2005.
- 40 The electronic database is lodged in the Arts and Humanities Data Service, University of York: http://ahds.ac.uk.



Chapter 2

'the work of a genuine artist': a review of the art-historical literature on the slab from Hilton of Cadboll up to 1998

ISABEL HENDERSON

This review traces the development of art-historical perceptions of the defaced Hilton of Cadboll cross-slab from the second quarter of the 19th century onwards, first at its location on the Hilton chapel site, then at Invergordon Castle, and finally in the Museum of Scotland in Edinburgh. As it became more accessible, as a consequence of its relocations, so also critical appreciation of its significance in the history of Pictish art has increased steadily.

2.1 'The obelisk at Hilton'

Apart, perhaps, from investigating the local Gaelic names ascribed to what we now call Pictish sculpture, it is difficult to give a balanced view of how a local population in past times responded to its presence. If, as now seems possible, the slab from Hilton had a familiar Gaelic name, 'Bardvour', with the meaning, 'Mary's Meadow', then when it was recorded it was not thought necessary to include the usual adjunct 'clach', 'stone'. The use of the truncated name 'Bardvour' to identify the slab presupposes the awareness of a notably large slab in this location, and may imply an awareness of another locational name for a large slab at nearby Shandwick, although here 'clach' regularly precedes the location (see Chapter 6.5). Watson discusses the components of the name Bàrd Mhoire in his collection of the place-names of Ross and Cromarty.1 The slab, of course, did not have the advantage of being a prominent landmark, like the Shandwick slab, or being in the eye every Sunday morning at the Parish Church, like Nigg (at least after the 1830s), but the area seems to have been one that the local Hilton community, in the recent past, appreciated as a recreational area. For a record of local response to the art carved on the sculpture one has to turn to the works of Hugh Miller, the self-taught Cromarty geologist and writer.

Illustration 2.1

The Hilton of Cadboll cross-slab in the National Museum of Scotland. The lower portion is reconstructed in metal (© Trustees of the National Museums of Scotland)

Miller was curious about everything, observing in minute detail, responding in a first-hand way and always attempting a generalisation about man and his condition. For periods of his early adult life he was a stonemason and a sculptor by trade, and thus he was bound to take note of such early sculptured stones as came his way.

Miller had family connections in Nigg and he was often in Easter Ross on the north side of the Cromarty Firth. When reading his literary works it has always to be remembered that he had the cast of mind of a journalist who knew how to tell a good story and turn a good phrase, and that some of his material is shaped in a literary way to this end.

In Scenes and Legends of the North of Scotland, published in 1835, Miller tells at length the story, current in Easter Ross, of the erection of the monuments at Hilton, Shandwick and Nigg by a Danish King, whose sons, on a mission of revenge, had been drowned off the coast (see Chapter 6.5). He considered this Easter Ross tradition likely to be more authentic than the alternative view, held south of the Moray Firth, that monuments of this type were erected by the native inhabitants to celebrate victories over the Danes.² In fact, the Easter Ross 'tradition' is almost certainly based on the pervasive, learned, antiquarian practice of ascribing early-seeming artefacts and structures of any quality to either the Romans or the Vikings. For example, there had been a running controversy from the early 18th century as to whether brochs were the work of Scandinavians (Danes or Norwegians) or of the native inhabitants. It was the ascription of the Easter Ross monuments, by a learned person, to the Danes, that inspired the story. It was not, as Miller argued, worthy of respect because it was founded on a belief belonging 'to a district still peopled by the old inhabitants of the country'.

In the description of the Hilton slab which follows the telling of the princes' story, Miller remarks that it is less well known than the other two monuments although it is perhaps 'the most elegant of its class in Scotland'. This easy generalisation (there is no evidence

that he was aware of Pictish sculpture south of the Grampians) appears to be based on his appreciation of the borders of vine-scroll running the length of the left and right sides of the broad face of the slab, which he thinks of in terms of classical art. In his view it is 'in a style of ornament that would hardly disgrace the frieze of an Athenian portico'. His perception of the Hilton vine-scroll as exotic and appropriate for frieze decoration cannot be faulted. He makes the most of the defacement, denigrating the work of 'some barbarous mason of Ross', and ruminating on various aspects of the 'laughable inscription', which he transcribes in full. His indignation may stem from the fact that as a stonemason he could himself feel how outrageous was the very act of defacing ornamental sculpture, but the creation of the Duff memorial is a good story and there is an element of relish in his telling of it.

The details of the more straightforward description and interpretation of the Nigg cross-slab that follows need not concern us here. In general he notes, pertinently, the use of borders by both the sculptors of Hilton and Nigg to contain their figural scenes. He could not identify the hermit saints, Paul and Antony, in the Nigg pediment, or more surprisingly David with his lamb and harp on the reverse. His careful description of the pediment with two 'priest-like' figures in an attitude of a prayer, with a 'wafer' between them above what may be 'the sacramental cup' shows just how close he was to discerning the Eucharistic significance now assigned to the scene. In the end, however, this man of the Free Church, backs away from the notion of the portrayal of the Mass, preferring 'a treaty of peace between rival chiefs' whose locks curl 'upon their shoulders in unclerical confusion'. Oddly, he supports this secular interpretation with the observation that this would account for the preservation of a monument of 'a people so little beloved [the Danes]', for the visual record of the treaty would be important to the natives.³ Miller's interpretations show that he had an observant eye but little knowledge of Christian art. His natural tendency of mind made him want the monuments to have local significance at the time of their erection. The advocacy for contemporary local significance being a function of Pictish sculpture was not to appear again in the literature on the art of the Picts, in any fully developed form, until the 1980s. Although we do not hear any more of the two local chiefs on the Nigg slab, the subject-matter of the Hilton of Cadboll slab features strongly in 20th-century discussions that favour sociological rather than theological interpretations of Pictish sculpture.

In a later work first published in 1854, My Schools and Schoolmasters, Miller gives a tantalising account of 'a very elaborate set of drawings' of the art of the Easter Ross monuments made by a friend of his young manhood, William Ross, who was about five years his senior (1797–c1830).4 Ross lived in very straitened circumstances in Nigg. He had been apprenticed as a housepainter, but his health prevented him from making a living from this trade. He had a talent for drawing and Miller took a great interest in his work. His drawings of sculpture, seen by Miller in the early 1820s, were not, Miller writes, mere 'picturesque approximations'. Ross made separate drawings of each panel, working out the mathematical framework that formed the groundwork of the designs before embarking on the drawing of the whole face. Miller felt that with such a set of drawings he himself could have learned how to carve in this 'complex ancient

Again the story of the sick and impoverished Ross, 'a poor friendless lad of genius ... anticipating the labours of antiquarian societies' is given full dramatic effect by Miller, but he and Ross were kindred spirits in respect for exactitude and there is no reason to doubt that Ross's drawings did indeed anticipate the mathematical methods of J Romilly Allen which, more than half a century later, were set out in Part II of *The Early Christian Monuments of Scotland*, and were to remain such an important aid to study of Insular sculpture in general.

Miller's accounts are evidence that he and Ross. both of whom lived locally and saw the monuments regularly, were alarmed by the weathering of the Easter Ross sculpture and were intellectually curious about its art and craft. But they were probably exceptional, and the general local understanding of the Hilton of Cadboll slab in the first half of the 19th century was probably in the main limited to its role in the 'three princes' folk-tale, which presentday writers of popular guides keep alive for its own sake. Although, as we have seen, the 'tradition' of Hilton being one of the three monuments erected by a Danish king is fundamentally the creation of early scholarship, and not of folk memory, the story is still told, and it undoubtedly has had the effect at all periods of bonding the three monuments, Hilton, Shandwick and Nigg together, in local, otherwise uninformed, perceptions. Both Scenes and Legends and My Schools and Schoolmasters were immensely popular with all classes of society in Scotland, and there can be no doubt that they brought what Miller termed 'the

obelisks of Easter Ross' to the attention of many who otherwise would have been unaware of them. Those whose curiosity was aroused were soon to get a much more interesting evaluation of Easter Ross sculpture from the 'labours' of an antiquarian society.

In 1856, just two years after the publication of My Schools and School Masters, the first volume of John Stuart's Sculptured Stones of Scotland was published by the Spalding Club of Aberdeen, one of the antiquarian societies that Miller had in mind. The second, more discursive, volume appeared 11 years later.⁵ Stuart's work covered all of Scotland and in particular was recognised as the first publication to do justice to the northern sculpture. The second volume was almost too ambitious, covering all aspects of the context of the sculpture including associated archaeology and historical sources. Most significantly Stuart demonstrated the degree to which the sculpture shared the decorative repertoire of early illuminated manuscripts such as the Lindisfarne Gospels and the Book of Kells. The connection put paid to the theory of Danish origin. In the introduction to the facsimile of the Book of Deer, published by the Spalding Club two years later, Stuart takes the question of origins a step further: 'Are we to ascribe the Book of Deer to an Irish or a Pictish origin?'6 Using his deep knowledge of the sculpture, and aware of the recently published 'great work' of J O Westwood, Facsimiles of the Miniatures and Ornaments of Anglo-Saxon and Irish Manuscripts, Stuart makes a very reasonable case for the manuscript being the work of a Pictish scribe. This is still an open question, but Stuart's argument is strengthened by the significant number of references to both volumes of his own 'great work', and a natural context for the art of the Picts in the early manuscript art of Great Britain and Ireland could no longer be ignored. In many respects the publication of facsimiles of the manuscripts by Westwood in 1868 was the greatest single factor in bringing Pictish sculpture into the domain of contemporary art in Great Britain and Ireland.⁷ To realise that manuscript art provided a key to the understanding of the art of the cross-slabs, and even to some of the animal art on the symbol stones, to a large extent unlocked the mystery. Without the need for argument, the connections were revealed, whether it was specifically the lion of St John in the Book of Durrow, the animal ornament in the Lindisfarne Gospels, or the ornamental repertoire generally. The repertoire included all the decorative patterns used on the reverse of the Hilton slab, including inhabited vine-scroll.

Stuart's fieldwork in Easter Ross led to the taking down and repositioning correctly of the two surviving fragments of the Nigg cross-slab. Regrettably there was no such re-presentation of the Hilton slab, which he records as being in a lean-to shed at the Chapel. On the other hand, he makes no reference to the slab being exposed to any particular danger, and the shed will have played its part in protecting the carving from the elements. Thanks to recent research we now know a good deal about how Stuart worked with his illustrator, A Gibb, in order to achieve 'scrupulous accuracy in detail'.8 Gibb's lithograph of the Hilton of Cadboll slab was 'Drawn from nature' in 1853 (illus 6.5). It is an extremely good record. The weakest part of the drawing, understandably, is the left-hand border of vine-scroll. He is aware that the design differs from that of the right-hand but he expects it to have a similarly undulating stem and so misses the characteristic angularity of its structure. Gibb's drawings did not make good the worn parts of the carving and thus it is an accurate record of the state of the slab some time before it was moved from the site. The damage to the top edge is clearly recorded. Gibb's drawing must have been made in favourable conditions, with good light and an unobscured view. Perhaps the nature of 'the lean-to shed' needs to be reassessed.

The Spalding Club imprint ensured that Stuart's volumes reached both the libraries of its members, and many research libraries and institutions in and outwith Scotland. The Hilton of Cadboll slab was now available for wider art-historical study. Stuart also published an account and illustration of the fragment from Portmahomack, Tarbat, which is carved with a vine-scroll border very similar indeed to that on Hilton of Cadboll. It was drawn by P A Jastrzçbski and, even allowing for the obscurity of the figural sculpture, it is a poor effort. Nevertheless the drawing existed, showing a carving essential to the understanding of the options open to the Hilton of Cadboll sculptor.

2.2 'now at Invergordon'

The Welshman, J Romilly Allen, used Stuart's volumes to guide him in his first expeditions to see for himself the sculptured stones of Scotland. Allen respected Stuart's work but he came to the conclusion that something rather different was needed if the subject was to be advanced. In this he was supported by Joseph Anderson, the Secretary of the Society of Antiquaries of Scotland. The first paragraph of

A FRAGMENTED MASTERPIECE

Anderson's introduction to their joint publication in 1903, *The Early Christian Monuments of Scotland*, sets out their objectives: an attempt was to be made to deal scientifically with the monuments in order that systematic knowledge of them could be made available. Allen would make an archaeological survey and Anderson would call attention to its systematised results by means of the Rhind Lectureship. It did not quite work out so neatly, but basically both authors were of the same mind: the survey should be disciplined, and the facts obtained from the survey should be kept separate from their interpretation. Both men had wide knowledge of other contemporary art and experience of photography; the age of the local anecdote, and of lithography was over.

How did their approach affect study of the Hilton of Cadboll slab? In the 1890s Allen came to Easter Ross to check Stuart's texts and illustrations and to make his own descriptions. He made rubbings, which, if photography were to prove impractical, could form the basis for line drawings. By this period there were a great many interested local people in Easter Ross, mostly lawyers, medical doctors, and parish ministers, eager to assist. Notable among these was the Reverend Dr J M Joass, of Golspie, an active amateur archaeologist, who was the honorary curator of the antiquities in Dunrobin Castle museum. Allen will not have been pleased when he learned that the slab had been moved from Hilton to the drive of Invergordon Castle. He disapproved strongly of monuments being moved from their find-spots unless they were in danger, or difficult of access for study.¹⁰ Allen was dismayed at the fragile state of the carving, which after a second visit he believed was deteriorating fast. The position at Invergordon Castle was exposed, and clearly Allen thought that the slab should have been indoors. He records that, at Invergordon, the Tarbat fragment with the vine-scroll was placed alongside the slab, a display desideratum yet to be achieved. Allen made full-scale rubbings of the slab, including the vine-scrolls, which he later inked over (see illus 4.19). One would have expected these to appear as drawings in part III of Allen and Anderson, for there were, after all, drawings supplementing the photographs of Shandwick and Nigg. Unlike Gibb, Allen, in his unpublished rubbing, reproduces accurately the angularity of the design in the left-hand border. He understood exactly how it worked. However, he was content to illustrate Hilton and the Tarbat fragment with vine-scroll with photographs supplied by Mr David Whyte of Inverness.

The description of the carving on the slab is typically thorough except in respect of the vine-scroll which he restricts to a generalised comment, describing them as 'beautiful scrolls of foliage springing from a single undulating stem and involving winged beasts and dragons in every scroll'. 11 Perhaps he felt that his drawing was insufficiently informative, or more probably, he was aware of the wearisome nature of descriptions of forms which have no geometrical structure. His description of the hunting scene highlights its characteristic features, features that were to be debated repeatedly in future studies: the female rider seated frontally; her long hair; the fact that she seems to be holding something in her hands as well as the reins; the double outline of her horse conveying the presence of another rider abreast; the trumpeters, to be compared to those on the back of the slab at Aberlemno, known as Roadside or no 3. Allen reserves 'art-historical' comment on vinescroll to the description of the motif on the Tarbat fragment.¹² In a rare comment on chronology he notes that the similarities of the vine-scrolls on the Hilton of Cadboll slab and the Tarbat fragment were so great that they must be contemporary, 'the work of the same school of design'.

Allen reserved his more general views on Pictish vine-scrolls to his extended discussion of St Vigeans no 1, the 'Drosten stone'. 13 Here, a vine-scroll is carved on a narrow face of the slab. Its upper reaches have a small 'inhabitant', which Allen appears to have missed. However, he notes that this kind of ornament is specially characteristic of the Anglian sculptures of the 'ancient kingdom of Northumbria' but that it is also found on Mercian sculpture. He rightly compares the art of St Vigeans no 1 to the decoration of the Insular gospel-book known as the Codex Aureus of Stockholm, 'especially the foliage and reptilian creatures on the 'Xpi autem' initial page of St Matthew's Gospel', footnoting the analogy to a plate in Westwood's Miniatures. He points out that the St Vigeans slab 'affords evidence that scroll foliage, the symbols, and spiral ornament of the best quality were, at all events, in this instance, contemporaneous, as also on the upright cross-slab at Hilton of Cadboll, Ross-shire'. This careful wording has in mind Anderson's view that, while scroll-foliage was an indicator of 'lateness', spiral ornament was 'early'.

The presence of scroll foliage was important to Anderson as a means of placing the manuscripts in chronological order. In a fully referenced discussion in the introduction to chapter IV of part I of *The Early Christian Monuments of Scotland* Anderson, to his credit,

opted for the Book of Durrow preceding in date the Lindisfarne Gospels, with the Book of Kells latest of all, the order accepted today.14 The presence in the Book of Kells of foliate ornament he felt supported this chronology, and in this respect the Hilton of Cadboll vine-scroll is recognised by both Allen and Anderson as having a crucial role in understanding the relationship of Pictish sculpture to the art of the manuscripts, carrying with it significant implications for its own chronology. The difficulty, which still remains an impediment in art-historical study, is the absolute dating of the manuscripts. They are the problem, not Pictish sculpture. For the Codex Aureus, for example, Allen had to rely on a dating as vague as 'earlier than AD 871' for a manuscript now dated to the mid-eighth century.¹⁵ Anderson gave due weight to the arguments of the palaeographers, carefully considering their views and citing dated Anglo-Saxon charter evidence of the eighth century as having a bearing on the dating of the Book of Kells. As always, the thoroughness and logic of the discussions of both Allen and Anderson astonishes. Anderson was determined to make a review of all the evidence, including what he considered to be relevant datable historical events, and thus to be able to offer a fixed conclusion about the dating, and technical and artistic linear development of the sculpture. Admirable though it was, this objective was premature, and Allen distanced himself from it.

Reviewers of Allen and Anderson were for the most part not users of it. Had they been users, they would have understood the usefulness of Allen's detailed analyses of the ornamental patterns that they considered otiose. The analyses were not self-standing to be read in isolation. It is true that Allen's clear accounts of the prehistoric origins of the patterns and his breadth of analogy had sometimes no direct bearing on the study of the sculpture, but the analyses of the ornamental designs carved on the monuments were an essential part of the descriptive list of the monuments, making for briefer entries in the main text, and at a glance, revealing regional connections and wider art historical context. Allen knew at first hand much of the sculpture of Great Britain and Ireland, and for manuscripts he had Westwood. Anderson remained the authority for metalwork and this was fully covered in part I.

We can see how this systematic study advanced perceptions of the art of the reverse of the Hilton of Cadboll cross-slab. Spiral pattern no 1078 is a schematic drawing of how its spiral panel was constructed, and shows what it would have looked like when complete. Pattern no 1079, of Shandwick's spiral panel, is drawn

beside it, in order that the similarities and differences of these panels on two proximate monuments are made apparent. Drawings of other rectangular panels with spiral ornament arranged round a centre, pattern nos 1069 to 1085, include the two superlative spiral panels on Nigg. They also include related panels of spirals in the Book of Kells, the Lindisfarne Gospels and the Book of Armagh. The pattern analyses also heighten awareness of other spiral designs of this nature on sculpture outwith Ross-shire, for example at Glenferness in Moray, at St Vigeans in Angus, at Meigle in Perthshire, at Golspie and Clyne in Sutherland, and Skinnet in Caithness. All this readily accessible information broadens perspectives of the sculpture of Easter Ross. Similarly the interlace pattern used to fill the two disc symbols on the Hilton of Cadboll slab, pattern no 792, and related patterns nos 791-93, is shown to be found carved at Nigg, at Tullylease, Co Cork, at Lastingham, North Yorkshire, and used on the Monymusk Reliquary and the Rogart brooch. The common spiral pattern no 1096 found on the Hilton of Cadboll double disc symbol is found on other Pictish sculpture, grave slabs in Clonmacnois, hanging-bowl escutcheons, and in the carpet pages of the Book of Durrow and the Lindisfarne Gospels. Today such a sharing of basic repertoire is taken for granted and we know that Allen did not intend to imply any direct connection between these art productions, but in Allen's time the listing of analogous patterns securely bedded down Pictish sculpture in art of all media in the British Isles from 600 to 900. His observation of more specific connections is still at the heart of understanding the art of the Hilton of Cadboll slab. For example, Allen writes, 'It is evident from the foregoing analysis of the key-patterns how very close a resemblance there is between the Ross-shire group of erect cross slabs and the Book of Kells.'16 It took many years for this observation to be taken up by an art-historian. Part of the key pattern analysis is Allen's account of the central section of the interior decoration of the crescent symbol on the Hilton of Cadboll slab. Allen observed, what is obvious after it has been pointed out, that the curve of the crescent symbol was part of a circle, an annular ring. The geometry of the crescent is drawn out in pattern no 1022. Much Pictish sculpture has still to be studied at this level of detail. Allen's observation allows us to see the Pictish sculptor at work adapting (a word which appears throughout the pattern analysis) the repertoire to fit the requirements of his own creativity.

The publication of *The Early Christian Monuments* of *Scotland*, preceded by the work of Anderson in his Rhind Lectures, was thus not only an

'Archaeological Survey' followed by a 'Descriptive List, with Illustrations', the results of which would be commented on in an Introduction, but was also the beginning of the detailed study of the 'Art Relations of the Monuments', what is now called art-history, set in the context of early medieval art of all media in the British Isles and of other relevant scholarly disciplines.¹⁷ In one important particular, it established that Pictish sculpture had connections with a number of aspects of the art of the Book of Kells, an important instance of which was the presence of scroll foliage, itself of Northumbrian origin, but found on the Hilton of Cadboll slab, and in the manuscript, providing a clear example of what, is now called 'Insular art' in action.

2.3 'now safely preserved in the National Museum at Edinburgh'

In 1924, Early English Ornament, a major study on vine-scroll, was published by the Danish scholar, J Brøndsted. He regarded the vine-scroll motif as an important guide to the chronology of Anglo-Saxon sculpture and proposed a linear development for the inhabited vine-scroll motif. He reproduced the righthand border of vine-scroll on Hilton of Cadboll from Gibb's drawing in Stuart, describing it as an 'interesting imitation which has somewhat of an Irish stamp, of the vine pattern still in its coherent shape'.18 He notes also the vine-scrolls at Tarbat and Crieff, both with references to Stuart. Brøndsted only refers to his admiration for the scope of The Early Christian Monuments of Scotland in his discussion of English vine-scrolls. Presumably the photographs published there were not sufficiently clear to use in his analysis. Although it was important that there was an illustration of Hilton in such a magisterial work, his perceptions belong to the period before Allen and Anderson and the relocation of the slab to Edinburgh.

In 1936, around 15 years after the arrival of the Hilton of Cadboll slab in Edinburgh, the first of a group of articles of the late 1930s and early 1940s appeared. Only one directly concerned the slab but they were all important and lastingly influential, in a number of respects. All but one were published outside Scotland, four in the journal *Antiquity* and one in the *Gazette des Beaux-Arts*. Three of the authors were scholars who were emerging as major art-historians of international significance.

The first paper, in *Antiquity*, was by Cecil Mowbray, who under her married name, Mrs C L Curle, was to become an important figure in the study of Pictish

sculpture. In this, her first paper, 'Eastern influence in the St Andrews Sarcophagus and the Nigg cross-slab', she acknowledges the help of her friend, Françoise Henry, an art-historian trained at the Sorbonne under Henri Focillon, who had just published her definitive survey, *La sculpture irlandaise*. Henry was to become the universally acknowledged expert on all aspects of early Irish art until her death in 1982.

The eastern influences proposed were new and surprising, and on the whole convincing, but Cecil Mowbray was at a loss to reconcile her primitivising view of the Picts with their presence on the monuments. This was the first study that firmly attributed developments in Pictish sculpture almost exclusively to Irish influence. She considered St Andrews and Nigg to be too far apart geographically to be in direct contact, and suggested that possibly the intermediary which made such exotic models available 'by accident' was Iona.²⁰ The Hilton of Cadboll slab is mentioned only in connection with the trumpeters on the Aberlemno Roadside slab (no 3), which she believed were derived from the Hilton panel. Allen had of course noticed the similarity but with typical reserve described them as merely 'like'.

In the same year in the same journal Ernst Kitzinger, a German refugee scholar, working under T D Kendrick in The British Museum, and later to become a world authority on Early Christian and early Byzantine art, published an article on vine-scroll ornament on Anglo-Saxon sculpture. Kitzinger was in touch with Cecil Mowbray, and had usefully drawn her attention to animal ornament on the Northumbrian Rothbury Cross, which he thought relevant for the animal ornament of the St Andrews Sarcophagus. In his article in Antiquity he writes in the context of the widely perceived urgent need for a survey of all types of decoration on Anglo-Saxon monuments so that they could be collated with each other to form the basis of a chronological system. He points with approval to the methodology of Henry's La sculpture irlandaise. Kitzinger's paper demonstrated convincingly the ultimately oriental origins of the vine-scroll motif and it is still a necessary first point of reference for later studies.21

The following year, again in the same journal, a well-illustrated note by O G S Crawford, Ordnance Survey Archaeology Officer, by way of a supplement to Kitzinger's paper, drew attention to examples of vinescroll on Scottish monuments. Of the examples north of the Forth he inevitably singles out examples of the motif on the Hilton slab and the Tarbat fragment as 'the most

remarkable'. Of the Hilton slab he writes eloquently, 'The whole carving is admirably executed; it is a work of real beauty, with its well-balanced designs, and is the work of a genuine artist.'22 His analysis of the vinestems at Hilton, illustrated by an excellent photographic detail of the right-hand border, are generalised, but he attempts to define the difference of the Tarbat vine, which he regards as more attenuated and stylised. Even so, he felt that they might be by the same sculptor. Like Allen before him, he believes that the closest analogy for the Ross-shire inhabited vine-scroll design is to be found on the fragment of a shaft from St Peter's, York now known as St Leonard's Place 2 (see illus 5.58). Depending on Collingwood's dates for Anglo-Saxon sculpture, he concludes that the Yorkshire fragment falls within the period AD 800-50. He regards the resemblance to be so close that the Hilton slab cannot be dated earlier than the ninth century. Crawford notes the coastal distribution of his examples of vine-scroll on monuments north of the Forth, something that he feels can be explained by easy communication by sea along the east coast from Northumbria. Crawford's tone is authoritative: the vine-scroll motif in Scotland is isolated and to be attributed solely to Northumbrian influence. He achieves this certainty in his short note by restricting his comparisons to vine-scroll in Northumbrian sculpture. Unlike Allen and Anderson he ignores the implications of vine-scroll on Mercian and Irish sculpture and in manuscript illumination. The publication in 1938 of the Ordnance Survey map of Britain in the Dark Ages (North Sheet) contained a distribution map of the occurrence of the vine-scroll motif on relief-carved slabs in eastern Scotland. The edges of the front cover of the map had a Bewcastle vine-scroll on the left, and the right-hand vine-scroll from Hilton on the right. In the introduction Miss C L Mowbray was thanked for her work. She had provided a list of incised symbol stones for including on the map. Symbol-bearing cross-slabs were not mapped.

Mrs Curle's long paper, 'The Chronology of the Early Christian Monuments of Scotland', was published in Scotland, appropriately, in the *Proceedings of the Society of Antiquaries of Scotland* in the volume for 1939–40. Her aim was to establish a detailed chronology, something Allen had shied away from, and Anderson, essentially, had related to broad historical periods. She acknowledges the fundamental importance of *The Early Christian Monuments of Scotland* but accepts that no 'very precise dating was at that time possible'.²³ She lists the studies of Irish and English art currently available which make the opportunities for

comparative study much greater. The details of her overall chronology need not concern us here. Hilton of Cadboll appears in a class called Elaborate Eastern Monuments along with the St Andrews Sarcophagus, Nigg, Rosemarkie, Shandwick, Aberlemno Roadside and the Tarbat fragments. As a class she dates these monuments to the late eighth or early ninth century. She strengthens the links between the St Andrews Sarcophagus and the Nigg slab published in her earlier paper by more detailed observations on the animal ornament on the Nigg cross-head. Without attempting any characterisation of the vine and its inhabitants she simply accepts Crawfords's view that the Hilton of Cadboll and Tarbat vine-scrolls are versions of the Northumbrian vine-scroll of the type found at St Peter's York, their style, however, being 'Celticised'.

More interesting is her response to the huntingscene panel. She considers it to be a 'new version' of the Pictish hunting scene because of the novelty of the framing of the scene, its compactness within a panel, the presence of a woman rider, and the trumpeters. In her account of Aberlemno Roadside (no 3), part of her grouping, she sees the hunt there as a slightly altered version of the scene on Hilton of Cadboll. To Mrs Curle must go the credit for first recording the presence of the bearded profile of the face of the rider behind the women sitting frontally on her mount. She considers that the riders on the top of the reverse of Meigle no 2 are similar to the Hilton of Cadboll composition, presumably because here too riders are shown riding abreast by the simple device of contouring. She suggests that the similarity can be accounted for by access to an 'eastern source'. An eastern source is also proposed for the trumpeters.

Her account of the Pictish symbols on the slab goes no further than Anderson's view that on 'later' slabs they became larger, were treated as decorative fields, and were limited to the principal symbols. She has nothing to say about the spiral panel. Rightly, she focuses on the lettering style of the inscription from Tarbat as important for understanding the context of the art of the tall slabs of Easter Ross, but her arguments, endorsed by Françoise Henry, accounting for the inscription and other Tarbat sculpture as the production of an off-shoot of a monastery in southern Ireland are flawed and seriously misleading.²⁴ It was Mrs Curle too who formulated the oft-repeated view that the Picts were uninterested in Christian themes, and that what Christian themes they represented were turned into motives that are decorative rather than iconographical, far from their early Christian meaning as symbols of deliverance and redemption. Whether she meant to include the omnipresent decorated cross in this assessment is not clear. The system of symbolism, she writes in her concluding sentence, is 'one of the strangest features in the strange episode in Christian art which the Pictish monuments present'. In spite of its heavily Irish bias and a view of Pictish culture as essentially primitive, Mrs Curle's paper was an ambitious and necessary attempt to bring discussion of Pictish sculpture up to contemporary art-historical standards.

Mrs Curle's chronology was disparaged by C A R Radford, at the time an influential Member of the Royal Commission on Ancient Monuments in Wales, in *Antiquity* for 1942.²⁵ His preferred chronological scheme was very different. He dated Hilton of Cadboll to \$\cappa 800\$ along with slabs which included Meigle no 2 and Dunfallandy, but Nigg and the St Andrews Sarcophagus were dated to the first half of the 10th century, a late date he largely supported by historical circumstances. For many years Radford's late dating was displayed prominently in front of the St Andrews Sarcophagus in the Cathedral Museum.

The final paper in this lively burst of activity was a joint paper by Mrs Curle and Françoise Henry entitled 'Early Christian Art in Scotland' and published in the Gazette des Beaux-Arts a year later. It has the great benefit of Françoise Henry's unsurpassed powers of description. The Hilton of Cadboll slab does not feature, but Pictish sculpture is given a significantly more positive role. The raised snake-bosses on the St Andrews Sarcophagus, on Nigg, and on the crosses of Iona are seen as inspirational for some pages of the Book of Kells. It is suggested that this 'richer style' passed from St Andrews and Nigg to Iona. Through Iona it was introduced into Irish art helping 'the Irish sculptors' to achieve 'more sensitive modelling'. 26 It is the Pictish sculptors who have developed skills in relief, and St Andrews that has the exotic models in its treasury, not Iona. In her many later publications Françoise Henry, while not altogether ignoring Pictish sculpture, did not refer again to this view of its possibly influential role in Irish art.

More than 10 years passed before another major study of Pictish art appeared. The publication in 1955 of a set of essays by scholars of different disciplines, *The Problem of the Picts*, edited by F T Wainwright, was an enormous advance for many aspects of Pictish studies. Wainwright's own contribution, a first general chapter on the nature of all the available sources, was a masterly piece of interdisciplinary work. He included

the evidence to be obtained from Pictish sculpture but was frankly sceptical of the usefulness of analyses of the art-relationships of the monuments. They might 'throw a little light on the Picts, their origins and their neighbours', but he felt that the study of the distribution of 'Class I' and 'Class II' and the assembly of all the evidence for contemporary material culture represented on 'Class II' offered 'more direct and more promising approaches'. This marked the beginning of an unhappy drifting apart of the archaeologists' Picts and the Picts of the art-historians.

In spite of Wainwright's views on art-history the collection of essays contained a seminal study of the art-relations of the monuments. Robert Stevenson's chapter, 'Pictish Art', was enormously influential, and in terms of use by 20th-century students of the subject eclipsed the work of Mrs Curle.²⁸ Methodologically it was important for Stevenson's detailed analysis of the interior decoration of the incised versions of the crescent symbol. His conclusion that the designs could be arranged chronologically was regarded as convincing, but the real significance of the endeavour was that at last a particular symbol design was being looked at in detail individually, and then compared with others, instead of being lumped together as more or less part of the same phenomenon. Because of its decorative complexity the Hilton of Cadboll crescent was the sole example of his type D, included on the strength of its being partly incised.

In spite of the pressure of space in a general review Stevenson devoted a whole section to the Hilton of Cadboll slab. His observations have to be given full weight and are worth quoting at length, for as Keeper of the National of Museum Antiquities, where it was housed, he must have known it as few others can ever have done. He observed, as none had before, that the relief carving of the Hilton slab is no longer flat but roundly modelled, and that it is the only slab 'on which rounded relief and motifs of varied origin are combined with the serene uncramped feeling of the cross-slabs at Glamis (No 2) and Aberlemno (No 2)'. For Stevenson, the Hilton slab represented 'a brief stage of perfection between those earlier classics and the full flower of the art, as represented by the higher relief and more restless complexity of three monuments, that at Nigg, ... at St Andrews, and the great roadside stone at Aberlemno (No 3)'.²⁹ This is a sensitive response to the monument as a work of art founded on knowledge of its technique and composition. That he was dealing with only half a monument does not seem to have troubled him. For Stevenson the trumpeters were a fresh borrowing

direct from classical Mediterranean art. He describes the frame as of 'striking eclecticism' presumably because of its Pictish symbol in the horizontal border, and what he terms the 'Anglian inhabited vine-scroll of a rather wiry form' on the vertical strips.

He has interesting observations on the hunting scene. He regards the mirror and comb symbol as 'determinative' of the lady riding frontally who must 'surely be the person honoured by the monument'. He notes that along, with David on the St Andrews Sarcophagus, she is a rare example of a full-face figure, until the Daniel on Meigle no 2, a cross-slab which, because of its lack of symbols, he dates to the latter half of the ninth century. He describes carefully the nature of the recession used to carve the heads of both riders abreast. The riders and dogs in the rest of the hunting scene 'follow the fashion at home in Angus' and the interlace decoration of the pair of roundels under the crescent are compared to the tight 'knitted' knots seen on the Angus crosses. The comparison with the crossslab on the roadside at Aberlemno (no 3) covers not only the trumpeters in the hunting scene but the use of this close interlace and the choice of decoration for the crescent and double-disc symbols. In a footnote he raises the possibility that the Aberlemno slab was carved before the one at Hilton in spite of its being in some respects typologically later.³⁰ Such a relationship would have suited better his belief that Angus was the beginning of the line of development for the tall slabs, and that Hilton was the earliest example of later developments in Easter Ross. He notes similarities in the treatment of the spiral panel at Hilton, the Shandwick spiral panel, spirals in the Book of Kells and on shrine fragments at South Kyme, Lincolnshire (see illus 5.33).

This authoritative review of Pictish art, which for the earlier monuments was a substantial revision of Mrs Curle's paper, was followed by an equally important paper by Stevenson, 'The Chronology and Relationships of some Irish and Scottish Crosses' published in an Irish journal in 1956-7.31 This paper is remembered best for its reassessment of the sculpture at Iona and his proposed redating of the Donegal sculpture, both of which had implications for Pictish sculpture. In this paper Stevenson also argued cogently against Radford's late dating for the St Andrews Sarcophagus, stressing in particular Mrs Curle's analogy, pointed out to her by Kitzinger, between its animal ornament and that of animals on the Rothbury Cross dated to about 800 by Kendrick. He pointed to both Northumbrian and Pictish traits on the Iona crosses concluding that

the sculptors on the island were the receivers of formal technical and iconographical elements from both these regions. His view of the transmission was similar to that of Mrs Curle: an origin in Fife and Angus passing to Iona and from thence to Nigg and Ireland. To the snake bosses and David iconography which linked St Andrews, Iona, Ireland and Nigg he added a further link in the 'thin-lined' inhabited vine-scroll on the slab from Hilton, 'one of the most notable Pictish monuments'. There was no surviving vine-scroll on the Iona crosses, but he was prepared, without entering into specific comparison, to attribute the introduction of the inhabited vine-scroll in Ireland to Pictish sculptors. If this was acceptable then Hilton of Cadboll became part of the long-lasting but unresolved debate about the priority of the techniques and repertoire used on these monuments. He concludes 'Whichever has priority it is hard to avoid the conclusion that the Bealin and Iona groups, the Hilton and St Andrews masterpieces, the Nigg cross-slab and the Ahenny crosses, are manifestations of little more than a single generation of rapid sculptural development in Celtic lands'.32 This was the first time that Hilton had entered this magic circle of Insular excellence.

A third paper by Stevenson in the 1950s was a collection of notes of unpublished or 'insufficiently' published early Christian monuments.³³ Among these was Hilton of Cadboll. A new photographic detail of the riders abreast showed the profile of the male rider more clearly than previous illustrations had done, though he was careful to point out that it did not show the hair that falls in 'corrugations ³/₈ inch long' on the lady's right shoulder, which had helped to obscure the head of the male rider. The usual comparison with the tall slab at Aberlemno (no 3) is made and described as 'a fuller version'.

More surprising was Stevenson's further consideration of Allen's observation that the female rider held something in her hands. Following his study of the forms and surfaces he concludes that they could be interpreted as an outsize penannular brooch fastening the lady's mantle. This view was widely accepted and enriched the already strong perception of the hunting-scene panel as being heavily loaded with contemporary hierarchical social indicators.

Evidently still thinking about chronology, the paper ends with an Appendix in which Stevenson sets out his own chronological scheme as argued in *The Problem of the Picts*, but with 'with additions and adjustments'. One of these was to put Hilton and Tarbat into a class of their own called the 'Cadboll

Style'. Did he feel that the slab and all the Tarbat fragments in the National Museum had distinctive properties which required definition? Or was it simply that since the potentially boss-bearing face of Hilton had been obliterated it could not be part of his Pictish and Ionan Boss Style? The chronologies of Mrs Curle and C A R Radford were also set out. In his general introduction he warned: 'agreement is still far off on relative chronology, and all absolute dates are intended only as approximations'.

The chapter on Pictish art in Isabel Henderson's The Picts, published in 1967, acknowledged the help of Robert Stevenson who had supervised her postgraduate work on Pictish art.34 Her analysis of some aspects of the iconography of the St Andrews Sarcophagus and the hunting scene on Hilton of Cadboll aimed at reducing somewhat the exotic element in these monuments, the brilliant, accidental product of the hypothetical rich treasury at St Andrews. She pointed to a number of more tangible analogies particularly in Mercian art. For Mrs Curle's lion wrestler Gilgamesh, the influences that lay behind the Breedon angel in the tower of Breedonon-the-Hill, Leicestershire, and of David iconography in English manuscripts were proposed. Central to this new emphasis on art south of the Humber was the analogy between the trumpeters who appeared in the miniature of David and his musicians in the Vespasian Psalter, a Canterbury manuscript, dated to the earlier part of the eighth century, which she felt had 'the merit of being found in Insular art at about the right time, giving them an advantage over Mrs Curle's analogies from Persian rock carvings'. The version of the trumpeters motif on the Aberlemno Roadside slab was regarded as a debasement of the model used by Hilton, but the display on that slab of David iconography reinforced the likelihood of its derivation from a David miniature, and created thereby a stronger connection between the monuments at Aberlemno, Hilton, Nigg, St Andrews and Iona.35 Stevenson had boldly maintained that the main sculptural influence had travelled [from Northumbria and Pictland] 'towards, rather than from, Iona and Ireland'. Henderson wanted to change the perception of the nature of these relationships, maintaining that 'Pictish sculpture in no way represents a late or provincial reflection of the main developments in Hiberno-Saxon art; it was, rather, the creation of artists freely participating in the evolution of that style and contributing to it some of its most daring and magnificent monuments'.36 The change was from 'influenced by' to 'participating in'. Such a change does not help chronological schemes

based on the comparative method, itself so dependent on changing views on the dating of all the media, but it was hoped that it gave Pictish art a new status as a primary source, on an equal footing with the art of the other regions of the British Isles, an art which could contribute to an understanding of the wider issues. Looked at this way the evidence of the half-monument from Hilton of Cadboll could have a new value.

In 1973 David Wilson published his definitive analysis of the rich store of objects in the hoard from St Ninian's Isle, Shetland. Wilson was rigorous in discounting artistic parallels as evidence for chronology, or even for stylistic connections, but he believed that some of the resemblances between the repertoire of Pictish sculpture and the art of the Treasure were strong enough to support the suggestion that most of the objects in it were probably manufactured in Pictland. For example, the foliate terminals of the tails on the animals which decorated two of the silver bowls he saw as derived from vinescroll, and he pointed to the quality of the vine-scroll motif on the Hilton of Cadboll slab, considering it to be 'one of its finest expressions'. His suggestion that a mount from Lilleby, Eiker, Buskerud, Norway, was plundered from Pictland was based on its 'eclectic' repertoire of coiled animals and snake bosses, as found on Nigg and Shandwick, and foliate ornament, derived from vine-scroll, as found at Hilton of Cadboll.³⁷ Egil Bakka in his classic study, 'Some English Decorated Metal Objects found in Norwegian Graves', published in 1963, had attributed the mount to Northumbria.³⁸ Bakka devoted a long footnote to Insular vine-scrolls. For the Pictish examples he depended to a large extent on Crawford's Antiquity paper, although he also refers to Allen and Anderson, Brøndsted and Mrs Curle's 1940 paper. He is of the view that the style of the Hilton of Cadboll and Tarbat vine-scrolls are, pace Mrs Curle, untouched by Hiberno-Saxon stylisation. Rather they represent a competent imitation of a Northumbrian model 'not earlier than the opening and hardening linear stylization of the Northumbrian vine in the middle and second half of the eighth century'. He considers that their 'isolated location in Ross-shire, further north than the majority of vine representations in southern Pictland, adds to the episodic character of the appearance of the motif in Pictish art of the eighth century or rather c800'.39 This long and well-referenced footnote, echoing the vocabulary of previous writers, has something defensive about it. Bakka obviously recognised the existence of a significant number of Pictish vine-scrolls, and that

plundered objects, bearing vine-scrolls, such as the Lilleby mount, could have had an origin in Pictland, whatever the origin of the motif, must have crossed his mind. However, in this matter, the Picts, for Bakka, were part of 'greater Northumbria' and he would have regarded the introduction of the possibility of Pictish manufacture as unnecessarily speculative.

The Easter Ross sculpture in many respects formed an appropriately sophisticated and ambitious background for the *de luxe* objects in the Shetland treasure. And then, of course, there was the penannular brooch on the breast of the female rider on Hilton of Cadboll. The treasure contained a suite of brooches of distinctive form and decoration. These and other brooches, Wilson argued, could reasonably be thought of as distinctively Pictish. ⁴⁰ The brooch on the mantle of the female rider could therefore now be seen to be part of contemporary specifically Pictish personal adornment. The Hilton of Cadboll slab played an important part, therefore, in the interpretation of this extensive new corpus of Pictish decorated silver metalwork.

By the 1970s the Hilton of Cadboll slab had, as we have seen, become part of the debate on the relationship between Pictish, Ionan, Irish and Northumbrian sculpture. The 1980s saw the first close examination of its vine-scroll ornament, in Isabel Henderson's contribution to the Stevenson Festschrift.41 Here for the first time the nature of the differences between the designs used for the two vertical borders was highlighted: the one on the right with its simple undulating stem, and that on the left with a more complex angular stem that zig-zags up the border. The degree of difference justified her speculation that the two borders had their own growing points on the missing lower portion of the slab, and thus were not part of a frame with a lower horizontal edge of the type carved on Tarbat no l. No exact parallel was found for the zig-zagging stem among Northumbrian vine-scrolls, although it was proposed that it could have been an adaptation of an inhabited bush scroll of the type found on a shrine fragment at Jedburgh. Henderson felt that the closest Northumbrian parallel in terms of the animals was an inhabited bushscroll on the reverse of a fragment of a shaft from Croft on Tees, Yorkshire (see illus 5.60), dating to the late eighth century, considering it to be very much closer than the parallel at York, cited by both Allen and Crawford, which was dated to the ninth century. However, the closest parallel for the construction of the left-hand stem was shown to be on folio 8 recto of the Book of Kells.⁴² Allen had emphasised how close were the connections between Kells and the sculpture of Easter Ross in respect of key patterns, and the analogy with the Hilton of Cadboll vine-scroll told the same story. Henderson also drew attention to similarities between the Hilton scroll and the inhabited scrolls on the Ormside Bowl and the Brunswick (Gandersheim) Casket. Clearly the Hilton scroll could not be dismissed as merely 'Northumbrian', even though the possibility of the influence of sculpture at Jedburgh meant a shared cultural connection with Northumbria, which for the Picts, in the early eighth century, had rare historical backing.⁴³

Henderson was able to list 20 examples of Pictish vine-scroll, more than double the number cited by Crawford, two of which had to be discounted. Six of the additions were in the collection of sculpture at St Andrews. The variety of types of vine-scroll raised unresolved questions of models, internal and external. A subsequent listing of all vine-scrolls on Irish sculpture by Nancy Edwards, focused on an analysis of the motif at Clonmacnois, led to the conclusion that only one model lay behind them all.44 Edwards did not comment on Stevenson's tentative suggestion that the model could have been Pictish.⁴⁵ By this time the volumes of the Corpus of Anglo-Saxon Stone Sculpture were appearing steadily. In the 1970s Rosemary Cramp had been producing papers which were defining what she believed to be the sequence of progression for uninhabited and inhabited vine-scrolls. Her wideranging discussion of the classic Northumbrian vinescroll on the Bewcastle Cross allowed for the possibility that 'the fashion for inhabited vine-scrolls could have been differently explored at the same time in different centres'. 46 Cramp referred to Henderson's 1983 paper on Pictish vine-scrolls and cited the Pictish use of detached berries in her discussion of an inscribed crossarm at Carlisle, dated to the eighth century. On this Carlisle monument she pointed to the combination of vine-scroll and inscription, already noted by Bailey as occurring, perhaps significantly, elsewhere. Cramp felt that the best analogy for the Carlisle vine-scroll was to be found in the Leningrad (St Petersburg) Bede, a manuscript dated to the mid-eighth century.⁴⁷ Neither the Corpus coverage for the venerable analogy for the Hilton vine-scroll at York, described there as St Leonard's Place 2, or indeed for the sculpture at Croft on Tees, referred to the Hilton of Cadboll scroll, although the 1983 Pictish vine-scroll paper does appear in the list of references for Croft.⁴⁸

Many of the papers in the 1990s that referred to the Hilton of Cadboll slab were focused on the hunting scene panel. Notable was an increasing interest in identifying the representation of women on the sculpture. 49 The discovery when ploughing in 1994, at Wester Denoon, Angus, of a slab, now in The Meffan Museum, Forfar, carved with a mirror and comb symbol adjacent to a standing frontal figure, wearing a garment on which was pinned a large penannular brooch, was particularly striking.⁵⁰ In 1992 hunting scenes on Pictish sculpture generally, and in particular on the Hilton of Cadboll slab, were interpreted by Henderson in terms of royal rituals such as are known to have been part of Carolingian court life.⁵¹ In 1996 in the first general study of all aspects of the Picts written to modern standards, the Hilton of Cadboll hunting scene was singled out for its rare depiction of women in society, with the Hilton woman treated as an active patron rather than being passively memorialised. Such slabs with secular scenes and crosses were interpreted as propaganda which 'encapsulates the changing political scene' where seculars and the Church were competing for land and judicial authority.52

The monograph on the St Andrew Sarcophagus appeared in 1998, the year of the first finds on the Hilton of Cadboll Chapel site of fragments from the front face of the slab.⁵³ It is tempting to speculate how what was written there would have been affected if the later find in 2001 of the lower portion carved on both sides had been known. Certainly the animal ornament preserved on either side of the cross-base would have enriched discussion of the animal ornament on the corner slabs flanking the surviving long panel of the Sarcophagus. The suggestion in the St Andrews volume that the structures that lie behind the animal ornament on the corner slabs might be, ultimately, a derivative of vine-scroll could now be developed in terms of the indications we now have of the relationship between the animals in the scrolls on the reverse, and the animal ornament on the cross-face. The evident grandeur of the Hilton cross-face design also pulls the monument closer to the Sarcophagus. The relationship between the Sarcophagus and Nigg is clearly there, both in the animal ornament on the cross-head, and in the shared snake-bosses, but we now see Hilton of Cadboll as less of 'a brief stage of perfection' as Stevenson put it and more of a technically and intellectually virtuoso monument, in that respect, closer to Nigg and Shandwick. The known delicate miniature style of the vine-scroll on the reverse, appears as something much heavier and dramatic, even violent, on the front face. The whole monument, even though still only partially perceived, bridges, therefore, a stylistic, and to some

degree, formal gap between the Sarcophagus and the sculpture of Easter Ross. In its figural iconography the completed monument extends the range of Easter Ross sculpture, a range also recently enlarged by a new find, located in 1995 at Portmahomack, the Apostles' Stone.⁵⁴ Writers prior to 1998 rarely referred to the 'probable' loss of the sculpture on the front face of Hilton of Cadboll, and its nature seemed to have been considered beyond speculation. The same detachment, to the point of suppression, is true for discussion of the Crieff cross-slab, which had its reverse removed.⁵⁵ On the other hand, if writers had been asked directly what the front face of Hilton might have looked like they would probably have opted for arrangements of high-relief snake bosses in the background of the cross. So far no clear evidence has been found among the fragments for the use of that much discussed motif. On the other hand the fragments do seem to support a further possible use of inhabited vine-scroll on the front face and a case can be made for the symbolic identity of serpent and vine-scroll ornament. The Hilton of Cadboll sculptor had his own vision, and his own visual 'language' with which to express it, and in that respect he is certainly in the same class as the sculptors of the other tall cross-slabs of Pictland. Prior to the excavations, Hilton of Cadboll, for arthistorians at least, had by the 1990s moved out of a cul de sac signed 'female rider and Northumbrian vine-scroll'. The recovery of the lower portion of the cross-slab must now make it obvious that we have here a mainstream Christian monument that must be taken into account in all future assessments of the achievement and relationships of Pictish sculptors.

Notes

- 1 Watson 1904, 10, 44, 80.
- 2 Miller 1835, 39-40.
- 3 Miller 1835, 41–3.
- 4 Miller 1854, 209-12.
- 5 Stuart 1856; 1867.
- 6 Stuart 1869, xxi.
- 7 Westwood 1868.
- 8 Ritchie 1998, 11-13.
- 9 ECMS, pt I, iii.
- 10 ECMS, pt II, 21.
- 11 ECMS, pt III, 61–3.
- 12 ECMS, pt III, 74-5.
- 13 ECMS, pt III, 234-9.
- 14 ECMS, pt I, lxxvii-lxxx.
- 15 Alexander 1978, no 30, 56-7.
- 16 ECMS, pt II, 363.
- 17 ECMS, pt II, 1; pt III, 1; pt I, v, lxviii-ci.

'THE WORK OF A GENUINE ARTIST'

- 18 Brøndsted 1924, 84, fig 69.
- 19 Henry 1933.
- 20 Mowbray 1936, 440.
- 21 Kitzinger 1936.
- 22 Crawford 1937, 470.
- 23 Curle 1940, 103-4.
- 24 Henderson 1982, 86, n 22.
- 25 Radford 1942.
- 26 Curle & Henry 1943, 268-70.
- 27 Wainwright 1955, 32-3.
- 28 Stevenson 1955, 97-128.
- 29 Stevenson 1955, 116-17.
- 30 Stevenson 1955, 117 n 3.
- 31 Stevenson 1955, 116 n 2, 120.
- 32 Stevenson 1956, 91, 92.
- 33 Stevenson 1959.
- 34 Henderson 1967, 104-60.
- 35 Henderson 1967, 154-6.
- 36 Henderson 1967, 157.

- 37 Wilson 1973, 81–105.
- 38 Bakka 1963, 36, 40-1, figs 40, 41-3.
- 39 Bakka 1963, 32-3, n 71.
- 40 Wilson 1973, 81–105.
- 41 Henderson 1983.
- 42 Henderson 1983, 254, fig 106b.
- 43 Colgrave & Mynors 1969, 532-52.
- 44 Edwards 1986.
- 45 Stevenson 1956, 91.
- 46 Bailey & Cramp 1988, 67.
- 47 Bailey & Cramp 1988, 85-6, ills 202-5.
- 48 Lang 1991, 109–10; 2001, 89–92.
- 49 Robertson 1991.
- 50 RCAHMS 1999, 23.
- 51 Henderson 1994, 53.
- 52 Foster 1996, 93–5.
- 53 Foster 1998.
- 54 Carver 2004, fig 10a & b.
- 55 Hall et al 2000.

Chapter 3

The archaeological investigations

HEATHER F JAMES

3.1 Introduction

The archaeological investigations associated with the Hilton of Cadboll cross-slab at the Chapel site in Hilton began optimistically with a small trial pit and ended with an almost overwhelming array of information on the cross-slab settings, the carved fragments and the archaeological deposits at the chapel site. The work of the numerous specialists who have been involved with this project has been incorporated into this chapter, while their detailed reports are in Chapter 7 and the archived database. The various strands of evidence have not been easy to reconcile and as a result it has been necessary, at times, to consider more than one hypothesis to account for our observations. The fragmented nature of the cross-slab itself, into an upper, middle and lower portion, has required different approaches to their analysis, which have been brought together in this section. The different faces of the cross have also been analysed separately and are referred to here as faces A, B, C, D and E. Face A is the main cross-face, the numbering then proceeding anti-clockwise around the monument, with E being the top.

The cross-slab

As part of this project, the upper portion has been studied and re-drawn by Ian G Scott (illus 4.1, 4.2 & 4.3), highlighting features such as the tapered and slightly unsymmetrical shape of the slab. The upper portion measures about 2.4m high, 1.4m wide and between 0.15m and 0.18m in thickness and has a distinctive red colouration on its surface. He has suggested that slight evidence for two upper and a top projections could be either remnants of the original cross or perhaps projections to aid the handling and lifting of the cross-slab. A soft plastic cast of the lower edge of the upper portion was made available by the National Museums of Scotland and this has informed the reconstruction work, although the soft nature of the material hampers certainty when joining fragments to it. Examination of this cast by Ian G Scott has revealed that some trimming of the lower edge has taken place, probably to enable the display of the upper portion in Invergordon House in the 19th century. The intriguing 17th-century memorial that was carved for Alexander Duff, which caused the removal of the Pictish cross face, has been analysed by George Thomson, who has suggested that the work, dated 1676, was relatively unskilled and possibly of more than one hand.

The discovery of the lower portion of the Hilton cross-slab still in situ at the chapel site has contributed greatly to what is known about the history of the monument. The top edge of the lower portion was broken revealing the laminated nature of the stone and the nature of the break. A fairly straight edge on one side of the break prompted early suggestions that the stone had been deliberately felled, although Peter Hill did not recognise any toolmarks that would have supported this. Subsequent research by Sally Foster has suggested that it blew down in a storm in 1674. The lower edge of the lower portion was also fractured where the substantial tenon for the crossslab had broken off, clear evidence that the cross-slab had suffered a dramatic fall that required a redesign of its setting (see below). There were two enigmatic projections on either side of the lower portion, which had apparently been trimmed, perhaps to accommodate the re-setting.

It has been suggested by some that there are significant differences in the quality of design layout between both sides of the lower portion, prompting the idea that the cross-slab is the work of more than one person; one highly skilled, another less so.1 This suggestion is, however, rejected by others in the Project Team (see Isabel Henderson, Chapter 5.2.2). It was also noted that the bottom of the designs on the two faces are not level, the bottom of the design on face C being above the level of the projections. Perhaps the cross-face (face A) was initially carved while the stone was lying down and the tenon broke before the other face could be carved. The order of events, which includes the designing of the faces, the breaking off of the tenon, the trimming of the projections and erection of the cross-slab, has been one of the most contentious

issues associated with this project and one that cannot be answered by study of the lower portion alone.

It was, however, possible to tell immediately from a comparison of face C, upper and lower portion designs, that there was a gap of about 0.4m, only part of which could have been the result of the trimming of the upper portion, mentioned above. This 'missing' middle portion has been partially reconstructed from the carved fragments that were retrieved from the excavation. So far, this has proved the most productive part of the reconstruction process undertaken by Ian G Scott. This work has resulted in the significant discovery of the nature of the central cross, surrounded by a spiral pattern in the lower panel of face C. Reconstruction of face A has also enabled the width of the original cross to be suggested and has established the presence of a series of human and animal motifs to either side (illus 4.4). Analysis of the fragmentation of the middle portion fragments by Ian Scott and Douglas Morton and analysis of the locations where the fragments were found, by Stuart Jeffrey, have indicated that there was a dramatic disintegration of this section of the cross-slab, which has resulted in large fragments being widely spread across the excavated area.

The petrology of the cross-slab, has been examined by Suzanne Miller and she has been able to suggest a quarry site for the slab nearby at Jessie Port (NGR NH 879772). She has confirmed that the stones of the supporting structure and that the small sandstone fragments within layer (007) to the west of the pit are not of the same geology as the cross-slab. She has suggested that the red staining could be an applied material, although further work would be required to determine this.

The fragments

The first small excavation at the chapel site revealed that the defaced fragments of the cross-face (face A) still lay *in situ* on the site where they had fallen, and the great hope was that by excavating and recording these carefully during the subsequent phases of work all these fragments could be retrieved and reconstructed into the lost cross-face. A total of 11,252 fragments was finally retrieved from the excavations, of which 7497 are thought to be from the Hilton cross-slab and 3370 bore a carved surface, and these are thought to constitute *c* 75 per cent of the missing cross-face. The digital catalogue containing all these fragments was created by Meggen Gondek and Douglas Morton

in an Access database designed by Stuart Jeffrey. The most significant 800 fragments, which constitute the remains of the cross-face (face A) and the middle portion, are described by Isabel Henderson in Chapter 4 and have been photographed by Neil McLean of the National Museums of Scotland (a selection of whose photographs is included in Chapter 4). The catalogue entries for the complete slab are in Chapter 4, and the entire catalogue, including all the fragments, may be consulted on-line from the Arts and Humanities Data Service (University of York, http://ahds.ac.uk/).

An initial sorting process by Allan Hall and Amanda Brend separated the fragments into groups reflecting what they could contribute to the reconstruction. Class 1A includes those fragments with a recognisably carved surface, class 1B includes those with a flat surface, classes 2A and 2B probably derive from the Hilton cross-slab but have no carved surface, and classes 3A and 3B are only possibly part of the Hilton cross-slab. A small proportion of the fragments retrieved were natural stones (classes 4A & 4B). It would require thin section analysis of all the fragments to be absolutely clear whether the fragments belonged to the Hilton crossslab or not, and visual examination was considered to be the most expedient approach. This sorting process enabled the work on the fragments to be prioritised to ensure that all the fragments with significant carving were dealt with first. Douglas Morton's analysis of the type and shape of the fragments has suggested that there were three phases of fragment removal. The first was the initial removal of the carved surface, represented by classes 1A and 1B fragments, followed by the removal of the underlying unsculpted stone (classes 2A & 2B). He has suggested that a third preparation of the surface for carving of the memorial took place and that this is represented by the class 3A and 3B fragments. However, these have practically no toolmarks and may just be a subset of classes 2A and 2B.

The impetus to locate each fragment within a 0.5m grid square was the hope that the final resting place of each fragment would reflect its original location in the cross-slab design. As a result, Stuart Jeffrey undertook a spatial analysis of the fragments within the excavation trench. This revealed that there was a fairly localised spread of the fragments within a few metres of the *in situ* lower portion. Within this spread, two high density areas could be detected. One was within a pit to the west side of the setting of the lower portion and the other was an area to the south-east of the lower portion. He interpreted these as possibly representing two discrete defacement episodes, one when the slab

was standing and the other after it had fallen. He also tentatively suggested that a slight patterning could be detected in the location of the fragments described as 'spiral' and 'vine scroll', although generally the location of the different kinds of carved fragment was extremely mixed and was therefore, unfortunately, not immediately helpful to the reconstruction process.

Only when the catalogue was finished was it possible to conduct a short pilot study to test whether the database could be used to aid the reconstruction process. Douglas Morton attempted to fit together all the fragments with decoration which was described as 'band', as it was hoped that this would indicate the shape of the cross of face A (see Chapter 7.2.4). This proved a very time consuming process and, while many joins were made, it did not result in the outline shape of the cross. It has shown, however, how the database could be utilised by future researchers to identify and retrieve specific fragments from storage. Total reconstruction of the cross-face proved to be an impossible task within the time available, but all the fragments have been analysed and catalogued, and the significant ones have been photographed, with the result that an immensely useful database is available for any future reconstruction work.

The chapel site and graveyard

In order to retrieve the fragments and reveal the lower portion, Historic Scotland commissioned a series of three excavations at the chapel site, each with very specific objectives. Initially, the primary aim was to retrieve fragments of the cross-slab found, predominantly although not exclusively, within a post-medieval context that lay above a medieval burial ground. Once the lower portion of the cross-slab was identified *in situ*, a second aim was to reveal its full depth in order that its conservation and retrieval could be considered and its archaeological context examined.

These excavations in 1998 and 2001 were of ever increasing size as the potential of the site was revealed, but the final excavated area was still a very small proportion of the chapel site as a whole, which presents certain limitations for the interpretation of the site. The excavations explored, within a very restricted area, the relationship between the setting in which the lower portion was found and its relationship with the ruined walls of the chapel and with the bank enclosing the churchyard. These relationships were not unequivocal because, on the west side of the setting, key stratigraphical relationships had been destroyed by

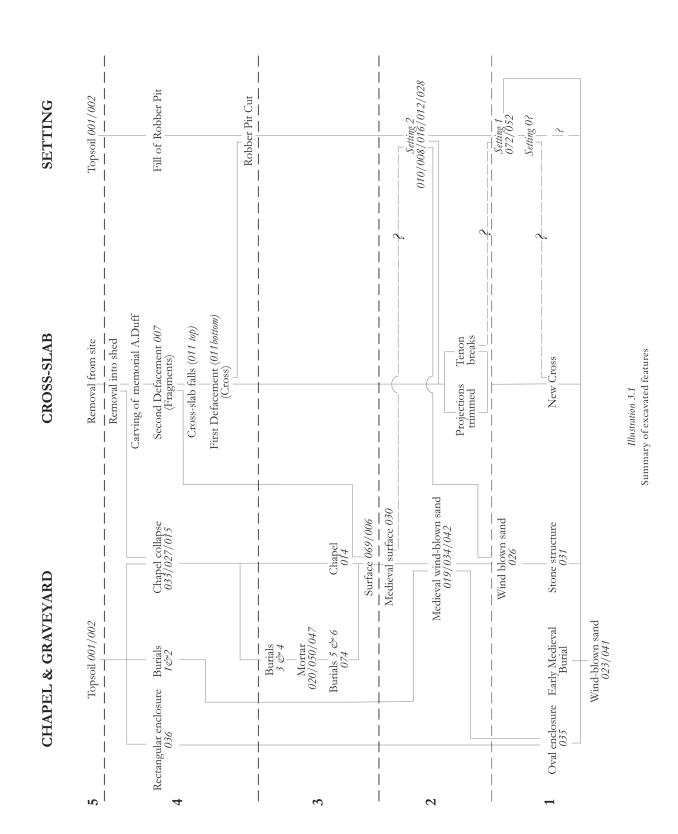
the digging of a pit and, on the east side, the excavations were constrained by medieval burials.

The excavation revealed a series of features thought to date from Pictish to post-medieval times, which have been summarised in illus 3.1. The earliest deposits consisted of the slight remains of an early medieval stone structure, disarticulated human bones dated to the seventh to ninth centuries AD, wind-blown and beach sand layers with charcoal dated to the seventh to 12th centuries and a possibly oval-shaped enclosure bank. All these point to the presence of a significant site here in the Pictish period.

These early deposits were overlain by a wind-blown sand which contained medieval pottery and into which the lower portion of the cross-slab had been set. These sand layers were sealed by a medieval crushed sandstone surface, burials and the horizon of carved debris. Further structural elements consisted of the foundations of the chapel wall, the clay foundations of a shed and the final debris from the collapse of the chapel walls. The restricted nature of the excavations and the disturbances that were observed have hampered resolution of the relationships between all these features, especially in relation to the settings of the lower portion. As a result, several scenarios for the setting of the cross-slab are possible and these are discussed further below.

An understanding of the site formation processes and chronology has been greatly aided by the soil thin section analysis (Chapter 7.3.1) and the OSL dating (Chapter 7.3.2). The soil thin section analysis concluded that the site was formed of several, gradually accumulating, layers of wind-blown sands, which in the early medieval period contained very small amounts of anthropogenic material and organic matter. By the medieval period (ie by the mid-12th century), the wind-blown sands contained an increased amount of organic matter perhaps as a result of cultivation in the local vicinity. The soil thin section analysis also noted significant movement of iron within the lower wind-blown sands, which may be associated with the red staining of the cross-slab surface.

The OSL dating programme was specifically designed to address the question of the dating of the settings and this technique was chosen because of the sandy nature of the subsoil. Although still an experimental technique, it has proved extremely successful in dating the deposits that were sampled. The programme has provided a broad late first millennium AD date for the formation of the wind-blown sand into which the cross-slab was initially erected and a



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mid-12th-century date for the wind-blown sand that pre-dates the second cross-slab setting. Further OSL dates have been obtained for the primary fill of a pit associated with the setting of the mid-12th century and for the deposition of the carved fragments in the late 16th century. This later date is about 100 years earlier than would have been expected from the date on the memorial of 1676.

The site continued in use as a medieval cemetery in the vicinity of a chapel. In an attempt to reduce disturbance to the burials, only a few of them were lifted for dating and analysis. Those examined were found to be extended inhumations without cists, aligned both east/west and north/south. The two north/south burials (of children) were dated to the 14th to 17th centuries. That the cemetery continued in use after the Reformation is shown by an extended inhumation dated to the 17th to 20th centuries and by the remains of small children and babies that are likely to be relatively recent.

The excavations resulted in the retrieval of medieval and post-medieval pottery (Chapter 7.5.6), the earliest of which were sherds of Yorkshire type wares of the 13th or 14th centuries and Scottish Redware thought to date to between the 13th and 15th centuries. This pottery has helped to date the medieval layer of the site into which the cross-slab was erected but contrasts with the OSL date for this layer of the mid-12th century, which may suggest that the introduction of Scottish Redwares may have been earlier than the 13th century. The artefacts found are few in number and suggest that the site was in the vicinity of a settlement but not the focus for intensive activity (Chapter 7.5.7–9). Ironworking debris consisted predominantly, in the medieval and post-medieval periods, of nails, which could relate to the chapel, a post-medieval shed or the cemetery (Chapter 7.5.5).

The chapel was not excavated and there is little evidence for its date of construction. The external stratigraphy suggests that it post-dates the 11th/12th centuries and there is possible evidence that the cross-slab had already been re-erected on site when the chapel was built. This would agree with the only architectural fragment retrieved from the excavations (possibly a window mullion or a vaulting rib) which dates to the early 13th century (Chapter 7.5.3).

The settings

The evidence for the settings is probably the most problematic. The setting in which the lower portion

was found was clearly not the original setting as the tenon had broken and was missing. The cross-slab was consequently set deeper into the ground with the result that part of the design on both sides was obscured (Setting 2). A large flat stone (Setting 1), which could have acted as a collar stone for the cross-slab, was set about 0.3m to the east of Setting 2. While Setting 2 has been dated by OSL to the mid-12th century, there is only a broad late first millennium date for Setting 1. The detailed descriptions of these settings are given below, and several possible interpretations can be put forward which include one, two or even three stages of cross-slab erection (Table 3.1). One issue that needs to be taken into account is that it is not clear what the function of the upper and lower projections was. They could form part of the original design, the upper projections being the outer extent of the arms of the cross and the lower projections the stepped base. They could also have been functional, assisting the lifting of the stone, perhaps being held within a timber construction during transportation. We do not know why or when the upper and lower projections were trimmed. It is possible that the trimming of the lower projections was to enable the slab to sit deeper into a collar slab, and the upper projections could have been trimmed when face A was defaced and being prepared for use as a memorial.

Whether Setting 1 was the original Pictish setting is also an important question as it has been suggested by Martin Carver that the cross-slab was brought to this site from the cliff top to the north of the chapel.² Another suggestion is that the stones of the two settings are in fact modified parts of the same setting. However, while there are several possibilities, to introduce yet another setting into the story would not be the simplest explanation of the remains so far uncovered. There are therefore several complexities to be considered when bringing together all the evidence presented below. Each aspect of this complex story is considered in detail as it arises in the hope that a satisfactory conclusion can be presented.

3.2 The excavations

Kirkdale excavations 1998

In 1998, Historic Scotland funded a three-day trial excavation to test whether the cross-slab once stood at the chapel site. This work was undertaken by John Triscott and Paul Sharman of Kirkdale Archaeology in 8–10 July 1998.³ A trench, 6sq m in area, was placed

Table 3.1 Chronology and phasing of the site

Phase	Description	OSL Date	Calibrated Radiocarbon dates 2	Pottery	Phase Date	Interpretation
	Wind-blown sand and cross-slab Setting 1		AD 650–860 (context 026) AA-54984 (GU-11013) (charcoal, cf Betula)		Late 1st millennium AD to mid-12th century	Accumulating wind-blown sand during Pictish period, collapse of A high status structure, human burial and enclosure bank. Setting 1
			AD 680–900 (context 026) AA-54985 (GU-11014) (charcoal, cf Betula)			
			AD 980-1160 (context 026) AA-54986 (GU11015) (charcoal, Betula)			
			AD 680–900 (context 026) SUERC-9141 (GU-13807) (human bone)			
			AD 680 –890 (context 026) SUERC-9142 (GU-13808) (human bone)			
2	Cross-slab Setting 2	1140+70 AD SUTL 1449 (context 019)		13th-15th	Mid-12th-13th century	Medieval setting for cross-slab and medieval wind-blown sand
		1120+70 AD SUTL 1448 (context 016)				
		1100 + 70 AD SUTL 1447 (context 042)				
3	Medieval chapel and burial ground		AD 1310–1620 (Skeleton 3) AA-54982 (GU-11011) (human bone)	13th–15th	13th–15th centuries AD	Construction of the chapel and use of burial ground. Medieval soil horizon seals the earlier settings

Table 3.1 (cont)
Chronology and phasing of the site

Phase	Phase Description	OSL Date	Calibrated Radiocarbon dates 2	Pottery	Phase Date	Interpretation
			ар 1410–1630 (Skeleton 4) АА-54983 (GU-11012) (human bone)			
4	Defacement of cross-slab (context 007), shed and burials	1570 + 25 AD SUTL 1450 (context 007)	AD 1520–1960 (Skeleton 1) AA-54981 (GU-11010) AD 1650–1960 (context 011) SUERC-9143 (GU-13809) (horse jaw)	13th-15th	Late-Medieval/ Post-Medieval	Continued use of burial ground, attempt to dig up the cross-slab, defacement of the cross, cross-slab falls, face is dressed for re-use. Post-Medieval shed and continued use of site as a burial ground, collapse of Chapel gable
ιC	Topsoil and turf			13th–19th	20th century	Modern grass cover

to the west of the chapel (illus 1.3), where the first edition Ordnance Survey map of 1872 depicted the 'site of Standing Stone (sculptured)' (illus 1.4). Below turf and topsoil, the excavators came down on to a bank of loose rubble that extended westwards from the remains of the chapel wall. This debris contained a few sherds of post-medieval pottery and a sandstone architectural fragment described as a 'vaulting rib' (context 002) (illus 7.21). A ridge of orange brown sand and stones was found at the base of the rubble bank and was interpreted as the remnants of an annex wall to the west of the chapel. To the east of this ridge, stony sand containing a clay pipe stem sealed a thin layer of soft grey sand, which in turn sealed a dense layer of carved fragments. This layer of fragments was exposed over an area only 1m square (which is equivalent to square 1020 E 1030 N, see below). About 40 carved fragments were retrieved from this horizon and were interpreted as the debris from the defaced side of the cross-slab. Four large bags of this soil layer (equivalent to context 007) were taken for later dry sieving, in order to retrieve the many small, uncarved fragments. Beneath this horizon was a mid-grey sand which was not explored further. The finds from the layers above the fragment horizon include postmedieval pottery, some fragments of mammal bone, a few nails, a fragment of green bottle glass and some shells, which are all consistent with a post-medieval date. Apart from an architectural fragment, which may have been from the destruction of the chapel, no medieval finds were recovered.

The presence of these carved fragments indicated that the Pictish stone had indeed been re-carved at this location, and it was thought that this probably took place in the 17th century when the Duff memorial was inscribed. The lower portion was not located at this time. The stony ridge and rubble deposits were interpreted as the remains of a 19th-century lean-to 'shed' noted by Stuart (1856) as abutting the chapel and in which the cross-slab had once stood. No carved fragments were found in the area to the east of the stony ridge.

Kirkdale excavations 2001

The success of the first season was followed by a second season in January 2001, when Kirkdale Archaeology returned to Hilton for a three-week excavation, directed this time by Dave Murray. This season aimed to retrieve the remaining fragments that the earlier excavations suggested lay in a discrete and



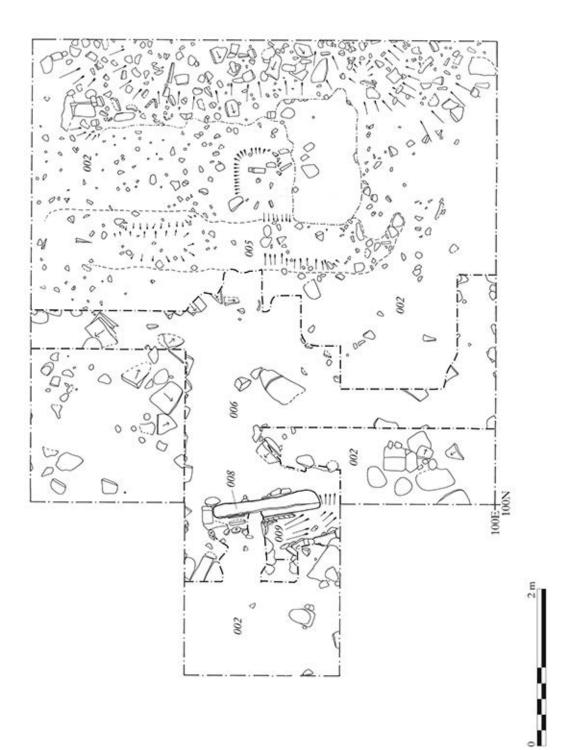


Illustration 3.2 Kirkdale plan 2001

superficial context just beneath the turf.⁴ In total, an area of 38sq m was uncovered (illus 3.2). The ridge of mortar and stone (005) was exposed further in plan and found to run parallel with the chapel wall and to have a southern return towards the chapel, forming a round corner. This was interpreted as the remains of a possibly D-shaped annex.

As no fragments had been found to the east of this stony ridge during previous work, the 2001 season concentrated in the area to the west of it. There, the horizon of fragments (007) was uncovered just below the turf and topsoil (001 & 002). The site was then laid out with a grid and excavated in 0.5m squares, and the locations of the carved fragments were identified with unique numbers linked to the squares. It was hoped that this might aid in reconstructing the Pictish design. There was little to differentiate between the sand that was excavated as context (002) and that excavated as (007), the latter being distinguishable only by the presence of carved fragments. Squares to the east, north and south of the lower portion were investigated in order to see how far the fragments spread, but the westward extent of the debris was not investigated fully. The results of this work showed that the carved fragments were concentrated in an area about 3m by 3.5m lying to the east of the lower portion, and a total of 740 'certainly-carved' and 122 'possibly-carved' fragments were retrieved.

Not all the squares within this trench were excavated completely to the bottom of the debris layer (context 007), because effort was being concentrated on squares which were producing carved fragments, the retrieval of which was the principal aim of the project. Illus 3.2 shows the exposed features after the topsoil (001) and some of the layer beneath (002) had been removed. The areas where layer (006) is exposed show where the carved fragments (007) have been removed from the plan.

At the very end of the excavation, when cleaning the side of the trench for recording, the lower portion of the Hilton cross-slab (008) was discovered *in situ* at the western edge of the original trench (illus 3.2). The trench was then extended westwards in order to investigate the lower portion. A cut (009) around the west side of the lower portion was identified and part of its fill, which consisted of carved debris, was excavated. The upper part of the fill contained large stones and was excavated as context (002), while the lower fill was excavated as a continuation of context (007).

Kirkdale concluded that the digging of the pit beside the lower portion of the cross-slab had been

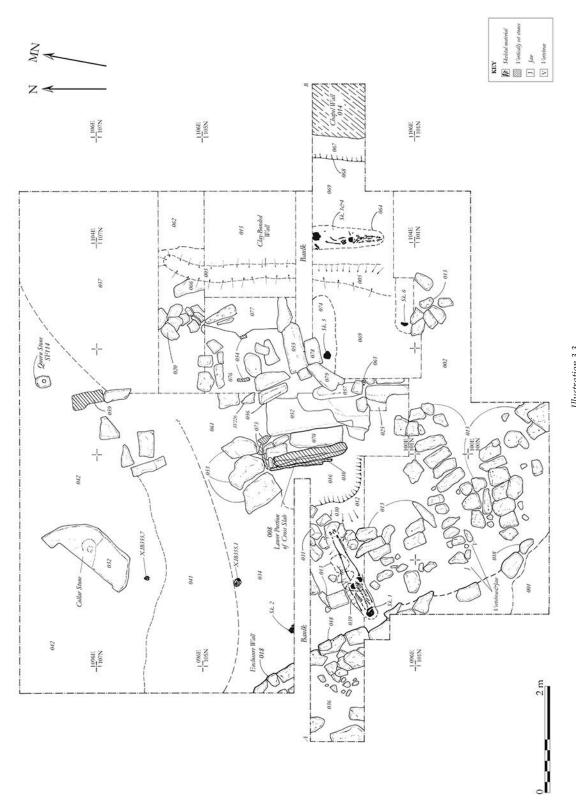
undertaken in an attempt to dig up the cross-slab in 1676 and when this failed, probably because of the great depth of the setting, the cross-slab was deliberately felled and then prepared for use as a memorial to Alexander Duff. The condition of the top of the lower portion and the location of the densest concentration of fragments suggested to them that the cross-slab had fallen to the east. It was then re-dressed and the carved fragments swept off the stone to the south. Another significant find was a fragment of a medieval relief cross of a different geology to the Hilton slab, which was found just east of the lower portion within context (007) (Finds number 1000 1030.001, illus 7.47). Some post-medieval pottery, disarticulated human bone, a roof slate and nails were recovered from context (002), but no other finds were noted.

GUARD excavations

Later in 2001, GUARD were commissioned by Historic Scotland and its partners to undertake further excavations at the west end of the chapel (illus 3.3 & 3.4). A degree of continuity between the Kirkdale and GUARD excavations was achieved by the employment of the majority of the same staff for the second and third phases. The four-week long excavation took place in August and September 2001 and was directed for GUARD by Heather James.

The aims of the excavation were:

- 1 to recover all the remaining fragments of the sculptured stone;
- 2 to recover information about the cross-slab's context and its relationship to the chapel and outer enclosure bank;
- 3 to provide dating evidence for the setting;
- 4 to provide Historic Scotland with sufficient information to allow a decision to be made about whether or not to attempt to recover the lower portion;
- 5 to recover evidence for any surface treatments, such as paint, which might explain the red colouration (or staining) of the carved surface;
- 6 to integrate the new information with the art-historical and reconstruction work being undertaken by Isabel Henderson and Ian G Scott:
- 7 to return the excavated area to its pre-excavation appearance.



 ${\it Illustration~3.3} \\ {\rm GUARD~composite~site~plan~(GUARD~in~the~University~of~Glasgow)}$



 ${\it Illustration~3.4}$ The Setting 2 slab (052) in place, with the chapel mound in the background

The post-excavation aims were:

- 1 to facilitate the reconstruction and interpretation of the sculpture by providing locational information on the carved fragments;
- 2 to provide dates for the settings of the crossslab and to reconstruct their original forms and sequence of use;
- 3 to provide a chronological framework for the other activity around the settings including the burials and the building work;
- 4 to retrieve information from the artefactual record which would illuminate the social, economic and environmental aspects of site history and use;
- 5 to examine the nature of the deposits around the stone setting and the extent of post-depositional disturbance;
- 6 to publicise the results of the programme so that they are widely available;
- 7 to bring the various strands of the research to final publication.

3.3 Methodology

The on-site methodology was specified by Historic Scotland in order to minimise the extent of intervention into the site and the amount of disturbance of human burials. The initial emphasis was on the rapid exposure of the lower portion in order that a decision could be made about whether to remove it for conservation. Then the impetus was directed towards the retrieval of the fragments, with the horizontal extent of the excavations to be limited to 1m beyond the extent of the fragment distribution. GUARD initially undertook a detailed topographic survey of the site within the fenced area using an electronic total station. The data was downloaded into SurvPro for production of a contour plan at a suitable scale with a contour interval of 0.10m (illus 1.5, upper).

The original plan was to excavate an area of 100sq m, centred on the lower portion of the cross-slab. For continuity, the Kirkdale site grid was maintained. However, the complexity of the site and the fairly limited extent of the fragment spread resulted in the trench finally measuring 88.5sqm (illus 3.3). The

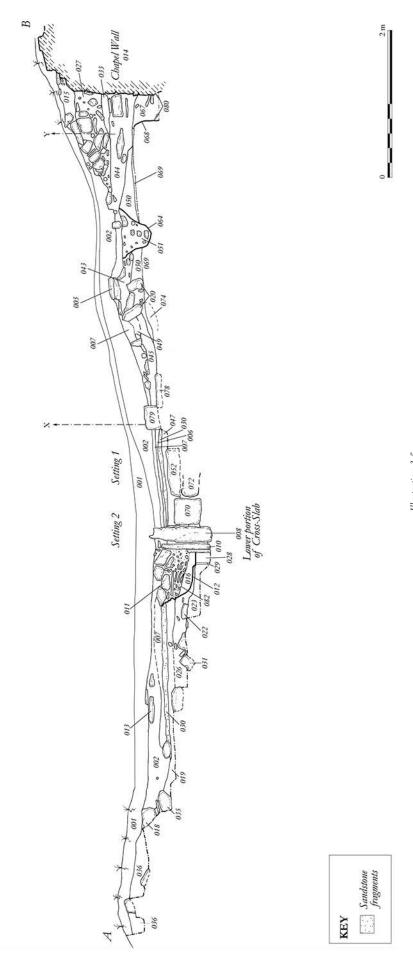


Illustration 3.5
Main section line A–B

excavated area extended in plan at least 1m beyond the extent of carved fragments. In general the area was excavated to the base of the deposit containing the carved debris (context 007). The exception to this was a trench, 1m wide, within the main trench and extending the whole way across it and across the centre of the setting, which was dug in order to examine the relationships between the debris horizon, the chapel wall to the east, the setting of the lower portion and the enclosure bank to the west (illus 3.5) (called the 'deep central trench'). An extension eastwards through the stony ridge and tumble was excavated north of the 105N grid line and called the 'northern sondage'.

Initially an area about 8m by 8m, centred on the lower portion, was stripped of topsoil, as it was not certain in which direction the debris would extend. After de-turfing and removal of the packing around the lower portion, the surface was cleaned so that the earlier Kirkdale excavations, which were deeper in the vicinity of the lower portion, could be identified. All excavation was done by hand and all soil from the debris layer and above was sieved in order to retrieve the fragments. The trench was then extended to the north, west and south in response to the discovery of carved fragments.

The technique used by Kirkdale, of excavating within 0.5m squares, was modified to excavating within 1m squares, because it quickly became apparent that the archaeology was more complex than had been originally thought and it was hoped that a slightly more 'open plan' technique would enable the deposits to be excavated stratigraphically. The positions of the carved pieces were still recorded within the relevant 0.5m squares. Despite the previous work, the complexity of the site proved to have been underestimated, as an earlier setting for the cross-slab and a medieval graveyard were revealed. In order to allow the maximum time to evaluate whether or not the lower portion should be lifted, excavation around the lower portion proceeded in advance of the rest of the trench.

The context numbering sequence used by Kirkdale in 2001 was continued by GUARD in 2001. However, the earlier excavations in 1998 had a different numbering system and these have been converted. Carved fragments over 0.1m long were given a unique finds number which included the 0.5m grid square number and a finds number for each square starting at 100 (for example 0975 1040.101). All other carved fragments, per 0.5m square, were bagged and given a group finds number which were later allocated their

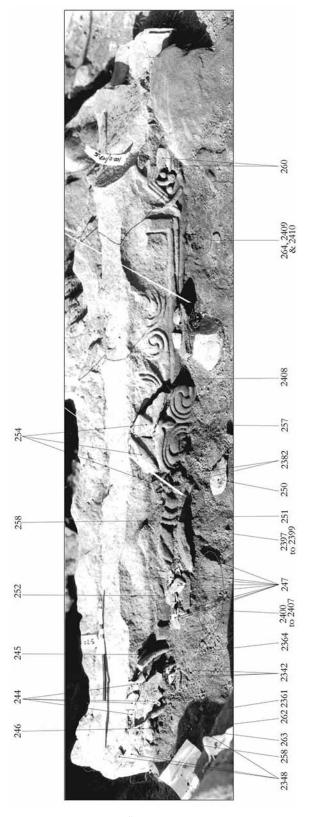


Illustration 3.6
Photomontage of upper edge of lower portion, face C

own museum accession numbers back in Edinburgh (see Chapter 4.3 for a description of the numbering systems used). Many of the large fragments were photographed *in situ*. Sketch plans were made in the day book by the individual excavator of each square as it was excavated, showing the location of the large numbered fragments within the square. Fragments that were in close proximity to the upper edge of the lower portion were photographed *in situ* and collected, as these were thought to have split off from the face and could perhaps be re-applied (illus 3.6).

Soil samples were taken of 10 contexts which appeared to contain charcoal or to have the potential to produce environmental evidence. More extensive samples were not taken as only charcoal large enough to be identified to species should be radiocarbon dated. Charcoal recovered was low and, as there was a high possibility of residuality, only three samples of charcoal from a secure context were initially selected for radiocarbon dating. Subsequently, three further samples were submitted, two of human bone from context (026) and piece of horse jaw from context (011).

The discovery of six burials led to the decision to excavate only those graves which fell within the deep central trench, where the relationships between the chapel, lower portion and outer enclosure were being investigated. Skeleton 1 was recorded *in situ* by an osteo-archaeologist and lifted. Skeleton 2 was not fully revealed or lifted as it lay within the baulk. Skeletons 3 and 4 were recorded and lifted with some disarticulated bone. Skeletons 5 and 6 were left *in situ* as they were beneath the level of the carved fragments. Samples from Skeletons 1, 3 and 4 were submitted for radiocarbon dating, and the remains were returned to Hilton for a service of re-burial (NGR NH 8733 7692) attended by members of the community.

Sediment samples were collected and environmental gamma radiation measurements recorded to assess the feasibility of luminescence dating. Eight small soil samples from two profiles and four larger bulk soil samples were collected by Iona Murray (SURRC). The profile samples were collected to enable an assessment of luminescence characteristics prior to OSL dating (Chapter 7.3.2). Profile 1 samples were taken from the main section line A–B. Profile 2 samples were taken from beneath a discarded collar stone (032) in the north-west of the excavated area. Eight thin sections were also taken for soil micromorphological study in order to understand the soil accumulation process and to provide information that could help

with the interpretation of the OSL study. Six samples were taken from Profile 1 and two were taken from Profile 2.

The limitations on the horizontal and vertical extent of the excavations restricted the conventional excavation techniques and have resulted in an incomplete excavation with many stratigraphical relationships on this small, but complex, site left unresolved. This has resulted in a certain amount of uncertainty with regard to the phasing of the site, which is discussed in more detail below. For example, the speed with which the lower portion was to be revealed meant that the deposits in the vicinity of the lower portion were excavated first, out of stratigraphical sequence with the rest of the site. While every care was taken not to loose important stratigraphical information this way, it is not the preferred excavation method.

3.4 Chronology and stratigraphy

The chronology of the site has been based on the stratigraphy recorded in the field and the evidence provided by nine radiocarbon dates, five OSL dates and an assemblage of 146 pottery sherds. Five 'phases' of activity have been suggested dating from the first millennium AD to the present day (illus 3.1):

Phase 1 Pictish

Phase 2 Mid-12th-13th centuries

Phase 3 13th–15th centuries

Phase 4 Late medieval/post-medieval

Phase 5 Modern

Because of the limited nature of the excavations, many of the stratigraphical relationships could not be fully resolved. This, coupled with the fact that some contexts contained no useful dating material, has meant that the site could only be broadly phased (see the site matrix in Chapter 3.5). Where firm dating and stratigraphic evidence exists to inform this interpretation, this is described and discussed in detail below. Further excavation may well provide information that would enable this phasing scheme to be refined. As it is, the many unresolved stratigraphical relationships and the contradictory or imprecise dating evidence have contributed a certain degree of uncertainty in the division of events into these phases. Nevertheless, the following account attempts to make these phases comprehensible to illustrate the complex history of the

Phase 1 consists of two layers of wind-blown sand with dressed tumble sandwiched between them. The

OSL analysis has indicated that the lower stratigraphical layer of wind-blown sand was likely to have been deposited in the late first millennium AD, which provides a very broad date for the accumulation of these deposits. The upper wind-blown sand produced three radiocarbon dates from charcoal, which ranged from the mid-seventh to the mid-12th century, and two dates from disarticulated human bone of the late seventh to late ninth centuries. A collar-stone, belonging to what is interpreted as Setting 1, was found set into wind-blown sand which is broadly contemporary with those layers that have been dated.

The setting in which the lower portion of the cross-slab was found (Setting 2) belongs to Phase 2. The OSL dating programme has provided a date of AD 1120+70 for the back fill of the setting. A horizon of crushed sandstone containing medieval pottery sealed Setting 1 from view and formed a hard surface around the base of Setting 2.

Phase 3 consists of wind-blown sand layers containing pottery dated to the 13th to 15th centuries, the chapel (possibly built in the 13th century) and burials dated to the 14th to 17th centuries.

Phase 4 included the digging of a robber pit beside Setting 2, and the horizon of carved fragments for which the OSL dating programme has suggested a date of AD 1570+25. The collapse of the chapel, the construction of a shed and a rectangular enclosure are all thought to date broadly to the late medieval and post-medieval periods. Further burials took place in the cemetery, one dated to the mid-17th to 20th centuries. The pottery from this phase dates from the 13th to 19th centuries.

Phase 5 consists of the modern turf and topsoil that sealed the site and contained pottery dating from the 13th to 19th centuries.

3.5 Phase descriptions

Phase 1 Wind-blown sand and cross-slab Setting 1 (late first millennium AD – mid-12th century) (illus 3.1 & 3.7)

(Contexts 022, 023, 026, 031, 041, 052, 053, 056, 057, 071, 072)

Phase 1 encompasses three stratigraphically separate groups of archaeological deposits which are included together here because they are all potentially late first millennium in date. One group consists of two wind-blown sand layers with a horizon of tumble

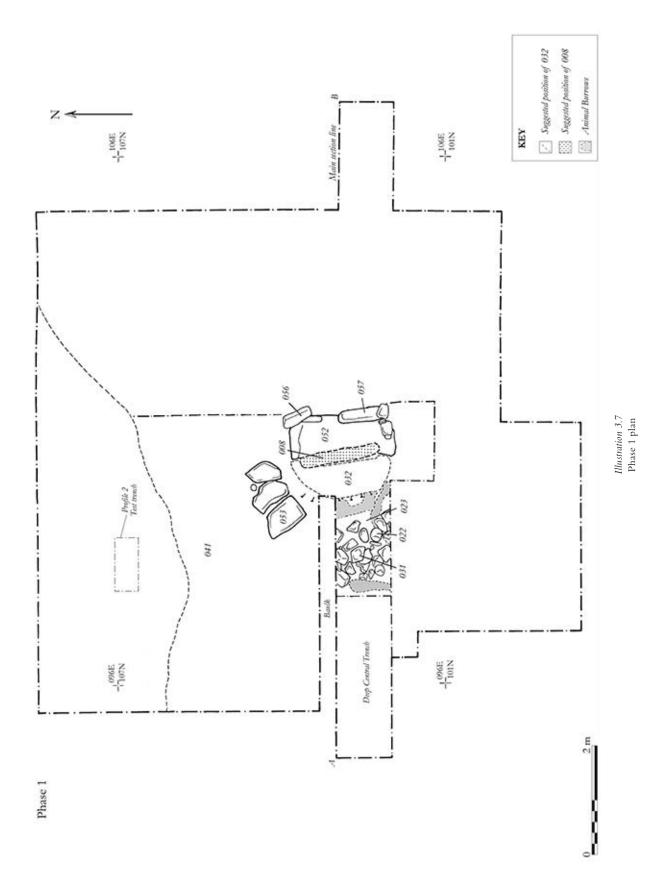
sandwiched between them. A second consists of a separate exposure of wind-blown sand that is probably equivalent to the upper layer of the first group. The third consists of a probable setting for the Hilton of Cadboll cross-slab.

Lower wind-blown sand (023)

The deepest deposit encountered on site was a yellow wind-blown sand (context 023) that was exposed for a very limited extent within the deep central trench, up to a depth of 1.0m below the surface (illus 3.5). This sand was mottled with orange and brown colourations and contained two fish bones (one of which was identified as cod), a single cattle bone, seven very corroded nail fragments (some with disk-shaped heads) and a possible quartz flake. The wind-blown sand contained some concentrations of organic material although there was no charcoal visible in the field. The soil thin section analysis indicates that this was slowlyaccumulating wind-blown sand incorporating a sparse and patchy distribution of organic material with small, fairly degraded, fragments of charcoal and bone. There were at least three rabbit burrows running across the surface of this deposit (illus 3.7). The burrows towards the eastern edge were backfilled with a mottled brown, orange and white sand, while those to the west were intact and empty. These were very distinctive areas of disturbance with clear edges and mid-brown coloured fill and thus they were easily excavated separately from layer 023, and it was thought at the time that the chances of contamination were minimal. The evidence suggests that this wind-blown sand was accumulating in the vicinity of human activity which has resulted in the incorporation of a small quantity of anthropogenic debris.

Horizon of tumble (031 & 022)

Within the deep central trench, the wind-blown sand (023) was sealed by tumbled, angular, red sandstones (031), at least one of which had a tooled face (illus 3.8). The size of these stones varied from about 0.20m to 0.35m long, and they appeared to form a 'band' aligned north/south across the narrow trench. Just east of these angular stones were large water-rolled stones (022) that survived with a slightly curving line across the trench (illus 3.7). These stones were very similar in size and appearance to those that can be seen on the present Hilton beach. The full extent and depth of these tumbled stones were not investigated and they



42



Illustration 3.8 Pecked face of one of the tumbled sandstones

were left *in situ*. Their presence indicates the presence of a structure of probable Pictish date, perhaps an early chapel. The tumble was sealed by a further layer of wind-blown sand (026).

Upper wind-blown sand (026)

A yellow sand with dark brown silty patches (026) was c 0.15m deep and contained fragments of decaying sandstone which may relate to the decay of the sandstone tumble in the layer beneath. These fragments were all uncarved and were not thought to be from the Hilton cross-slab. The sand also contained two possible iron fragments, which turned out later to be non-metallic (one was a bone that had become encrusted with iron), two disarticulated human feet bones and a single human vertebrae. The human bones did not belong to the burial that was located above this layer (Skeleton 1, Phase 4) and showed that there were early burials on the site. The human bones have returned radiocarbon dates of AD 680-900 (SUERC-9141/GU-13807) and AD 680-890, (SUERC-9142/GU-13808). Small fragments of poorly-preserved birch charcoal were also retrieved from layer (026) and yielded three radiocarbon dates: AD 650-860 (AA-54984/GU-11013), AD 680-900 (AA-54985/GU-11014) and AD 980-1160 (AA-54986/GU11015). Apart from the last, all these dates belong to the Pictish period between the mid-seventh and the late ninth centuries.

The soil thin section analysis of layer (026) confirmed the wind-blown nature of this deposit, with a similar sparse organic input to layer (023) below. There was little sign of bioturbation or disturbance within the thin sections apart from beneath the pit (012, see Phase 2). This disturbance was not observed in the field and may have related to the cutting of the pit. As with layer (023), iron movement within the deposit was also observed. In general, the soil thin section analysis concluded that the deposit had accumulated gradually and it is possible that the range of radiocarbon dates from this deposit reflects this gradual accumulation. While the visible unburnt bone was described as 'slightly degraded', the charcoal element was not described as being particularly 'abraded', which suggests that the material had not experienced any significant amounts of disturbance or transportation which would have led to abrasion.

Wind-blown sand to the north (041)

To the north of the deep central trench, a wind-blown sand deposit (041) was seen close to the surface. This was thought in the field to be the equivalent to layer (026) as they were both light-coloured wind-blown sands, although no stratigraphical relationship was established between them. This sand was white with orange mottles and was fairly homogenous in plan except for a patch of small pebbles.

The basal layer (041) was only examined during the OSL sampling programme in Profile 2. Samples were taken from Profile 2 at depths of 0.05m, 0.10m and 0.15m beneath a large slab (032). The two deepest samples of (041) were layers of light yellow sand thought to be equivalent to (026) (while the uppermost sample was a dark coloured sand, 042, Phase 2). The OSL dating programme (Profile 2, nos 1502, 1503 & 1504) has not, however, suggested a date for this lower deposit.

The soil thin section analysis confirmed that (041) was a wind-blown sand with a low organic content, very similar to (026). It also revealed a vertical disturbance that had not been visible in the field (probably because the observed sample face is set back a few centimetres into the deposit). The cause of the disturbance could have been the result of animal burrowing resulting in material from (042) being brought down into this

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horizon, but there is also the possibility that it is an archaeological feature.

Setting 1 for the Hilton cross-slab (052 & 072)

A possible setting for the Hilton of Cadboll cross-slab was located in the centre of the excavation trench. It consisted of a large slab (052) roughly rectangular in shape and measuring approximately 1.9m long by 0.75m wide (illus 3.9 & 3.10), which was left *in situ*. The thickness of the slab (where visible) varied between 0.12m and 0.16m, and it was broken at both the southern and northern ends. A worked, rectangular-



Illustration 3.9
Slab (052) of first setting in situ

shaped slot had been cut into this slab, surviving now in its western edge. The dimensions of this slot were difficult to ascertain because of the breakages, but it was thought to be at least 0.20m wide and possibly c1.12m long.⁵ There was a roughly rectangular-shaped recess in the surface at the southern edge of the slot and the suggestion of a similar recess at the northern end (illus 3.3 & 3.10). This slab was interpreted as one half of a 'collar-stone' and the possibility that the cross-slab could have sat within the slot in this stone was considered. The full width of the lower portion

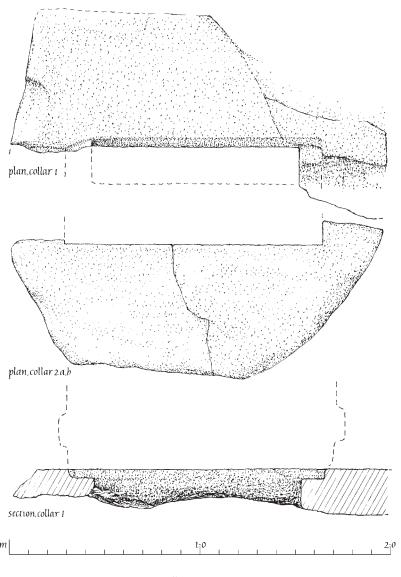
of the cross-slab including the projections is c1.47m, the width beneath the trimmed projections is between c1.33m and 1.39m and the remains of the tenon are about 1.09m wide. It is therefore possible that the cross-slab sat in the collar stone slot, although without more accurate measurements or actually testing the fit, one cannot be absolutely certain. This would have left about 0.1m of the trimmed projection visible above the collar-stone (052), which would suggest either that other collar-stones were utilised in the setting or that the projections were mistakenly over trimmed.

A large sandstone block and two smaller sandstones (072) were set in the sand immediately beneath the

collar-stone (illus 3.5 & 3.11). These would have abutted the tenon of the cross-slab as it sat in the collar stone (052). Between these large blocks and the collar-stone (052) there was a dark brown, concreted deposit which was thought to have been formed as a result of water percolation for a significant period of time, perhaps down the west edge of the collar-stone. Such a deposit was not noted beneath any other large stones.

Two oblong stones (056 & 057) lay across the eastern edge of the collar-stone (052). The possibility that these stones once sat vertically in the ground to act as a horizontal brace for the collar-stone has been considered, but, as this area to the east of the collar stone was not fully excavated, there is no evidence for this at present. They were interpreted therefore as an apparent decorative kerb rather than as structural supports.

A small stone (071) with a tapering profile and a prepared face was seen immediately beneath the south end of the slot (illus 3.11) and was lifted with other setting stones for storage. This stone measured 0.33m long and was about 0.1m thick, and there was evidence for a dressed face in its western edge. This was the only stone that was located beneath the slot of the collar-stone (052), after a particularly large block of stone (070) was removed. The possibility that this was a fragment of the original tenon was considered, but unfortunately there was no opportunity to fit this stone back on to the base of the lower portion and it



 ${\it Illustration~3.10}$ Plan of collar-stones (052) and (032) (scale 1:15; drawn by Ian G Scott)

has now been misplaced. The shape of this stone is very suggestive of a fragment of tenon and there is a bleb or nodule in its broken face similar to those on the Hilton cross-slab. However, the axis of the break in this stone, which is east/west, would suggest that it had been rotated 90° from its original position, as the laminations of the cross-slab are north/south, and thus it is not exactly *in situ*. This would mean that the dressed face of the possible tenon fragment could have been either face B or D of the cross-slab. It is supposed

that other fragments of the tenon would have been swept away before the stone (070) was put into place during Phase 2. Another possibility is that it relates to the horizon of tumble (031 & 022).

The collar-stone and bracing blocks were embedded into a light-coloured wind-blown sand that is thought to be equivalent to the wind-blown sand layers to the west (023 & 026) because they are at the same level on the site. This deposit was not investigated further and thus any cut for this setting, presumably through

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Illustration 3.11
Slab (052) of first setting with sandstone blocks and 'tenon' in place

the wind-blown sand, was not identified and no direct dating evidence was retrieved. However, these stones are still *in situ* and available for further study. Three paving slabs (053) were laid flat on to the wind-blown sand (041) to the north-west of the setting. These slabs could be contemporary with Setting 1 but could also be later.

A second flat slab (032), similar in appearance to (052), was found lying 3.0m away to the north-west lying over wind-blown sand (041) and a dark sand (042 Phase 2). This stone measured c1.90m long, 0.70m wide and varied in thickness at its edge from 0.05m to 0.11m. This stone also had the remnants of a slot in one side. It was difficult to be certain of the length of the slot as this edge was broken and the slab had been broken in half, as if hit with a hefty blow (illus 3.10). However, a slight kink remained in its north-west edge, suggesting that the top of the slot had been about 1.35m long.⁶ We regret that during the excavation we did not try to fit these two stones together to see whether they had once formed a single collar-stone or had formed two sides of a composite setting. There

was no evidence for a recessed slot as with the other slab (052), but as this area of the slab was broken this does not mean that one could not have existed. The different apparent thicknesses of these stones may be a result of this stone (032) breaking horizontally with the laminations of the sandstone, leaving as yet undetected fragments. No fragments from the packing of the setting were fitted against this collar-stone to see if they could have been derived from it. See illus 3.12 for a possible reconstruction of Setting 1.

Dating of Setting 1

There is no direct dating evidence for this setting because the sand layers to the east were not excavated and the stratigraphical relationship between this setting and the sand layers to the west were destroyed by the insertion of Setting 2 and the digging of a pit. It is, however, assumed (because of the level of the wind-blown sand) that the setting has been dug into the wind-blown sand deposits (023). Two of the three radiocarbon dates from birch charcoal from

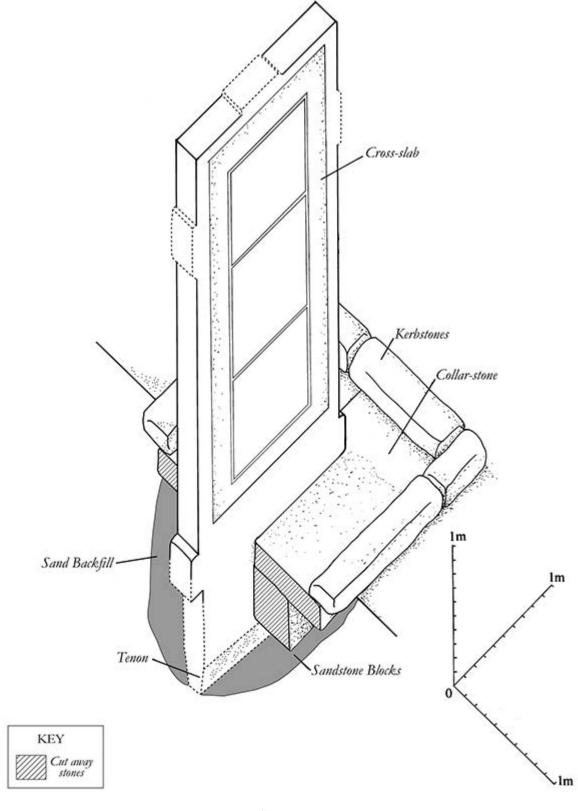
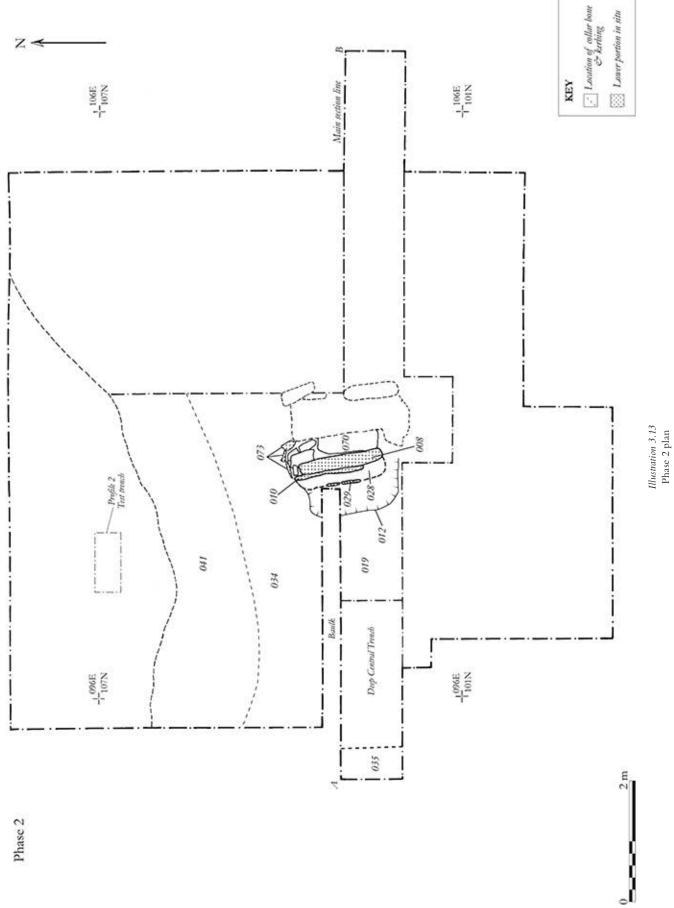


Illustration 3.12
Reconstruction of Setting 1



the upper wind-blown sand layer (026) and both the human bone radiocarbon dates have produced dates of between the seventh and the ninth centuries. One date of the 11th to the early 12th century may be explained by the soil thin section analysis, which indicated that this deposit had gradually accumulated during the late first millennium and into the medieval period. Layer (026) was immediately sealed by a deposit (019) which contained medieval pottery. Further discussion of the possible scenarios for the relationship of Setting 1 to Setting 2 are included at the end of the Phase 2 description. The archaeological evidence is therefore not inconsistent with the date proposed for the carving of the Hilton of Cadboll cross-slab in the later eighth century (Chapter 4) and its original setting here.

Phase 2 Medieval deposits and cross-slab Setting 2 (mid-12th-13th centuries) (illus 3.1 & 3.13)

(Contexts 008, 010, 012, 019, 028, 029, 030, 032, 034, 035, 042, 047, 070, 073)

Phase 2 consists of the setting in which the lower portion was found sandwiched between medieval deposits.

Medieval wind-blown sand

Immediately above the wind-blown sand (026, Phase 1) were three shallow layers of brown wind-blown sand (019, 034 & 042), which were slightly higher in organic material and contained medieval pottery. Layers (019) and (034) were equivalent but (042) was unrelated stratigraphically.

To the west of the cross-slab settings, a layer of brown sand (019), up to 0.12m deep, extended from the edge of the pit (012) to the west for a distance of 2.7m where it disappeared beneath tumbled stones (018 & 035; see section A-B, illus 3.5). This material contained one sherd of Yorkshire type (13th/14th century) and three sherds of Scottish Redware conventionally dated to between the 13th and 15th centuries. Layer (019) also contained small amounts of midden material such as fishbone, mammal bone (horse, cattle and sheep/goat), small fragments of alder, birch and oak charcoal and nine disarticulated human bones (including teeth and feet bones). A single grain of six-row barley was retrieved from the soil sample. The soil thin section analysis indicated that context (019), rather than being a homogenous

layer, was composed of a series of wind-blown sand lenses, with varied amounts of fine, organic, mineral elements that has resulted in the darker colour observed in the field when compared with layers (023) and (026) below. From the size and type of sand grains and the differing amounts of fine organic matter at least three distinctive layers (019A upper, 019B middle & 019C lower) within context (019) were identified. Layer (019B), the middle layer, had a distinctively high density of charcoal inclusions. The visibility of this lensing of the wind-blown sand would have been affected by the moisture content of the soil, and the relatively wet conditions may explain why the lenses were not observed in the field. This lensing, and the diffuse boundary with layer (026) below, suggested a gradual accumulation process.

The OSL programme provided a date of AD 1140±70 for the sand layer (019) (SUTL 1449), and this analysis suggested that there had been very little mixing of this layer with sand of a different date. This date was derived from the upper part of layer (019A) and would therefore provide a *terminus ante quem* for the deposition of the lower lenses of (019). The OSL date is a little earlier than the date suggested by the presence of Scottish Redwares. However, the date of the introduction of this pottery is not exact and it could possibly have been introduced as early as the 12th century, although it is not thought to have been earlier than this.⁷

To the north of the deep central trench, a brown grey sand, similar to layer (019), was partially excavated as context (034). This contained three sherds of Scottish Redware, a stone disc or pot lid (illus 7.50, no 10), one human bone, one mammal bone and a nail.

In the far west of the main section, there was a suggestion of an early enclosure wall in the form of several tumbled stones (035) which protruded from beneath layer (019) and the walling (018) (Phase 4). This was not examined further, but it may be a remnant of the oval-shaped enclosure seen in the topographic survey.

In the north-west corner of the trench, the wind-blown sand (041, Phase 1) was sealed by mid-brown sand (042). Layer (042) was only investigated within the OSL test trench beneath the discarded collar stone (032) and very little of (042) was therefore excavated. The soil thin section analysis has shown that, while (042) is generally similar to (019) and (041), the presence of fine siltstone fragments suggests that they are different in character. Layer (042) produced a fragment of industrial slag, which indicates that

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smelting of bog ores could have been taking place in the medieval or post-medieval periods. However, the soil thin section analysis found no evidence of smelting residue or heating activity within the thin section.

Setting 2

The setting in which the lower portion of the Hilton of Cadboll cross-slab (008) was found was located only 0.3m to the west of Setting 1 (illus 3.5). The slab stood within a pit (012) which had sloping sides and a flat base. This pit was semi-circular in shape, 1.6m wide and 0.5m deep. At the base of the pit was a flat-bottomed 'trough', which was lined with a few flat slabs (029) and filled with sterile sand (028). The largest slab used to line the trough had a dressed face and an iron bleb (X.IB 355.3) and the geology has confirmed that it is not part of the Hilton cross-slab (Chapter 7.2.1).

It was not clear from which surface this cut had originally been made, as the upper part of the pit was filled with carved fragments that were interpreted as the fill of a secondary post-medieval 'robber' pit, although the line of the robber pit could not be distinguished in the field from the initial cut. This pit had been partially excavated, south of the section line (103N), by the Kirkdale team earlier in 2001. Within the pit the lower portion of the cross-slab was aligned north/south, with what would have been its crossface (face A) facing west. The lower portion (008) stood vertically, with a thin flat slab wedged against its east face which was then abutted by two large red sandstone blocks (070), which themselves abutted the stones of Setting 1 (the collar stone (052) and the block (072) beneath it) (illus 3.14). On the west side, the lower portion was abutted by three thin slabs of sandstone (010, two of which are numbered X.IB 355.7272 & X.IB 355.7273). These stones were not embedded deeper than the base of the lower portion and would not have provided much additional support. Again these stones are not from the Hilton cross-slab (Chapter 7.2.1).

The trough between (010) and (029) was filled with sterile grey sand (028) to a depth of 0.15m and



*Illustration 3.14*Setting 2 from the east



*Illustration 3.15*Setting 2 from the west

the remainder of the pit was filled with mid-brown sand (016) similar in colour to layer (019). Smaller flat stones (073) were wedged vertically around the northern and southern edged of the pit fill. Overall, the impression was of a rather informal setting that obscured the bottom of the design. The second fill of the pit (016) survived to 0.15m deep and contained one sherd of Scottish Redware and a small fragment of mammal bone. Three carved and two uncarved fragments from the cross-slab were retrieved from the surface of layer (016), and alder, birch, heather and willow charcoal and a single grain of cf *Hordeum vulgare* sl were found within it.

The field interpretation of layer (016) was that it was the second fill of the pit for Setting 2, which was later truncated by the digging of a robber trench (082). However, in the post-excavation phase, a second possibility was considered. If the robber pit had in fact been dug down deeper, to the top of the stones (029), then the sand layer (016) could perhaps be interpreted as slumped material from the sides of the pit, incorporating material from layer (019),

which it so closely resembled in the field. This would then imply that the pit lay open for some time before the defacement of the stone had commenced resulting in the deposition of the carved fragments (011).

The soil thin section work addressed this issue and confirmed that (016) was a wind-blown sand deposit, generally similar to layers (019), (023) and (026), but with minor differences. Direct comparisons between (016) and (019) were made more difficult because of the variable lenses present in what was excavated as a single layer (019). While deposit (016) was more similar to the upper and lower lenses (019A & 019C) than to the middle one (019B), the general conclusion was that (016) was unlikely to have derived from context (019). Therefore the post-excavation interpretation was rejected in favour of the initial field interpretation. Thus 016 was interpreted as the fill of the pit associated with Setting 2 rather than being a slumped deposit from (019).

The pit (012) could have been cut from either the surface of (026) or (019). If it had been cut from (019), it is assumed that the fill (016) would have originally

obscured the supporting stones (010). However, if it had been cut from (026) then the fill would have left the stones (011) exposed on the surface. It is possible that there was a superstructure of some kind, although no evidence for this was noted.

The OSL dating programme produced a date of AD 1120 ± 70 (SUTL 1148) for this secondary fill of the pit (016). This is very similar to the OSL date for layer (019) of AD 1140 ± 70 (SUTL 1449), and thus, while layer (016) was generally accumulating at the same time as layer (019), layer (016) contains evidence of being a more mixed layer than (019). It is assumed that the (016) material was backfilled into the pit from somewhere in the vicinity. However, the soil analysis suggested that this deposit was the result of a gradual slumping rather than a backfilled deposit, which one would expect if (016) was a fill of the setting.

The function of the trough-like pit base and the stones (029) is not known, but it could have been associated with the erection of the slab. No other features have been identified which could indicate how the slab was erected.

Settings 1 and 2 were sealed on the east side by a layer, 0.08m thick, of mid-brown sand (047), which extended towards the chapel for a distance of 1.3m where it disappeared under a flat slab (079). It contained 26 sherds of Scottish Redware. It also contained a small amount of re-deposited midden material, including carbonised oats and hazelnut shell, three mammal bones (one sheep/goat, one cattle and one unidentifiable mammal), a single nail and a white quartz pebble. It also contained one carved fragment of the Hilton stone, which is described as a 'strip' or band (X.IB 355.136) and another uncarved fragment from the Hilton stone (10051030.101). Layer (047) was interpreted as a re-deposited midden.

Sandstone surface around Setting 2 (030)

Sealing Settings 1, 2, layers (019) and (047) was a thin layer (0.05m thick) of weathered sandstone fragments (030), which formed a roughly oval-shaped area measuring about 4.5m east/west and 2.0m north/south, around Setting 2. Layer (030) differed slightly in character on either side of Setting 2. On the east side, it was reddish in colour and very compact, while to the west it was more yellow and was less compact. Layer (030) contained three sherds of Scottish Redware, a leaf-shaped fragment of copper alloy (illus 7.51, no 6) and three corroded nails with some

preserved wood attached. Layer (030) also contained very small quantities of carbonised birch, heather and oak, perhaps re-deposited waste from a hearth. A layer of weathered sandstone fragments (077), possibly a continuation of the layer (030), was seen further east beneath later tumble (020), indicating that the sandstone fragment surface may extend further.

To the north-west of Setting 2 there was a second layer of paving slabs (017) overlying the slabs of Phase 1 (053). Beneath this paving, two sherds of Scottish Redware were found. One of the uppermost packing stones (048) around the lower portion (008) on the north-east side also overlay a sherd of Scottish Redware, indicating that perhaps some addition to the upper packing stones around the base of the cross-slab was taking place.

The eastern extent of layer (030) was examined very briefly at the end of the excavation and it is unfortunate that this crucial relationship was not investigated more thoroughly. However, at the time, the limited examination of layer (030) concluded that it continued to the east beneath a layer of dark brown sand (069, Phase 3) that sloped up gently towards the chapel. This dark brown sand (069) was not excavated and there is no dating evidence or further information as to its origin.

The evidence from the lower portion of the cross-slab (008)

The discovery of the lower portion revealed the stepped base design of a cross on face A and the continuation of the vine-scroll border around the base of the lower spiral-filled panel on face C, the design and workmanship of which are discussed in detail by Isabel Henderson in Chapter 4. The discovery has also provided information relating directly to the nature of the settings, perhaps the order in which the cross-slab was carved and the nature of the damage that the cross-slab has suffered.

The lower portion had clearly broken both at the top and at the bottom and thus had suffered at least two major collapses. It measured 1.40m wide, $\epsilon 0.20$ m thick and was $\epsilon 0.85$ m high (for comparison, the upper portion tapered from 0.15m thick to 0.18m thick). The tenon had broken off, leaving concave fractures on either side (illus 4.4) and slight evidence of its original width at $\epsilon 1.09$ m. There is no evidence to indicate how long the tenon would originally have been. The suggestion that a third of the height would be found below the ground (information from Stephen Watt & John Turner) may be an exaggeration, given the

often-shallow holes discovered beneath (admittedly) fallen standing stones (Ritchie 2004, 58). However, it clearly managed to stay upright with only a fifth of its height in the ground in Setting 2. Without the tenon it would not have been able to stand in Setting 1 without massive restraint from some upper structure, for which there is no evidence.

It is not known whether the breakage of the tenon was the result of compaction (from being dropped on its tenon for instance) or the result of being snapped (falling over). Retrieval of more of the original tenon stones might assist here, but only one possible fragment of the tenon was noted *in situ* beneath the collar stone (052) (Phase 1) and this has since been lost.

The fairly straight top edge across the whole width of the stone led to early speculation that the stone had been deliberately felled, assisted by the cutting of a horizontal notch. However, no toolmarks creating such a notch could be identified and it appeared to be a creditable fracture, while the straight edge could be explained by the slab being firmly embedded in the ground and snapping at 90° to the bedding planes under lateral force from the wind.⁸

There is a deep diagonal crack across the top of the lower portion, which had resulted in a wedge-shaped section of face C parting slightly from the rest of the stone. The conservator from Historic Scotland, Colin Muir, ensured that this large chunk was clamped in place until the stone could be properly conserved. Reconstruction work on the middle portion of faces A and C has shown that intact fragments once extended above the straight top edge on either side (illus 4.4). This confirmed that the stone had not been prepared for felling by the cutting of a notch, as had initially been supposed. Instead, the evidence suggests that the diagonal break could have once extended through the entire middle portion, reaching face A at about the height of the present base of the upper portion.9

The projections (or lugs) extending to either side of the lower portion measured 0.045m (face C) and 0.03m (face D) respectively. On face A, these protrusions corresponded with the presence of two blank, square-shaped panels. It is supposed that, originally, the protrusions extended down to the base of these square panels, just above where the slab narrows for the tenon. The protrusions appear to have been crudely shortened in order to re-set the cross-slab deeper into the ground. It is clear, however, that the width of 1.39m just below the

remaining protrusions would be too wide for the slab to have slotted through the stone (052) which was only c1.12m wide. However, the lower portion could have sat within slab (052) with the lower parts of the trimmed protrusions exposed for about 0.12m.

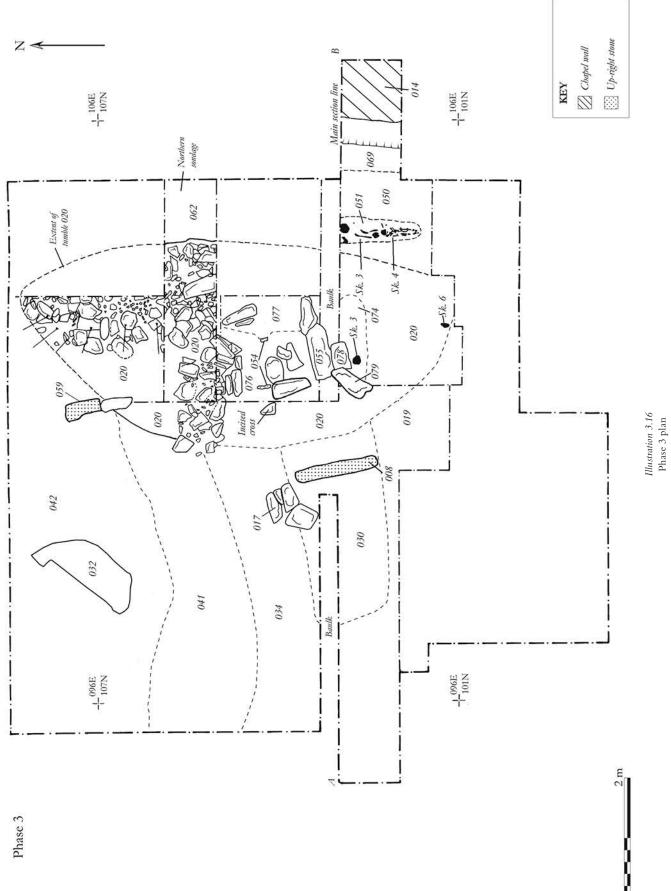
It has been considered whether the second collar stone (032) could have sat on top of (052) rather than at the same level, fitting beneath the untrimmed protrusion. However, the slot of stone (032) is possibly only 1.35m long, and the width of the lower portion beneath the trimmed protrusions is 1.39m. This would suggest that collar-stone (032) could only have sat over collar-stone (052) if the slot had already broken and was not used. This does not preclude the possible existence of other stones that have not been found serving this purpose.

The purpose of the protrusions is not entirely certain. The identification of slight remains of protrusions in the upper portion that may relate to the three arms of a cross¹⁰ would suggest that these were part of the design, the lower protrusions forming the lowest step of the cross base. These protrusions may also have served a practical purpose, in that ropes could have been attached to them to assist with the manoeuvring of the stone. The only reason that can be suggested for trimming the projections is for re-setting the cross-slab, perhaps after the tenon had broken and a re-design of the supporting structure became necessary.

The breaking of the tenon and re-design of the setting may have taken place before the completion of the sculpture. It would have been very difficult to carve face A once it was erected in the ground as the base of the cross is too close to the ground. This suggests that face A was carved when lying flat and then the stone was erected. Then face C was carved, the higher base of the decoration allowing the sculptor more room to reach the base of the design. This is reflected in the different heights of the base of the designs on either side.

Dating of Setting 2

If the interpretation of the fill (016) as a second fill of the pit contemporary with the erection of the cross-slab is correct, then the OSL date for this material dates the setting to the middle of the 12th century AD. Layer (016) also contained a single sherd of Scottish Redware, which, as indicated above, could be as early as the 12th century.



Structure of Setting 2

The upright position of the lower portion shows that at the time of the collapse of the slab it was being held in a stable vertical position by surrounding deposits. Setting 2 was clearly successful in supporting the cross-slab for a certain length of time, without it requiring to be set into a massive basal stone. So firmly was it held, that when under pressure the slab broke rather than fell over, which is what one might expect if the setting was not so secure. This perhaps reflects the natural stability of sand if it is kept damp and implies that Setting 1 could have supported the cross-slab without the need for a massive basal slab.

The height of the supporting slab (010) may give some indication of the ground level at the time. If it is assumed that these slabs were not meant to be seen, and that there was not a supporting superstructure, then the ground level could have been just above the top of slab (010). The protrusions to either side of the slab were buried within the pit fill and so have lost any significance they may have had.

To the east of Setting 2, the remains of Setting 1 are sealed by a layer (047) presumed to have been deposited in the medieval period. A layer of weathered sandstone fragments was then laid around the base of Setting 2 to provide a hard standing and to hide the earlier setting from view.

How was the slab erected?

There are two probable ways that the cross-slab was erected: it was clear-lifted into place, or it was gradually raised up into a vertical position.¹² If the cross-slab was to be placed into a pre-formed socket, then the clear-lifting option would perhaps be the most suitable. However, if a two-piece collar-stone was used, as is suggested here, then a gradual lifting could have taken place. Either solution would probably have required a timber superstructure to be erected over the spot, as was identified at Shandwick and Sueno's Stone. The possible 'trough' seen on the west side of the cross-slab, constructed of flat slabs (029) and filled with clean sand (028), may have acted in some capacity here, although it is not clear how this would have functioned. It has been suggested that the projections could have been used to assist with the lifting of the cross-slab either by the attachment of ropes to the projections or for assisting the crossslab to sit within a timber frame or box. While either of these is possible, there is no evidence from the

excavation that could help decide how the cross-slab was erected.

Phase 3 Medieval chapel, burial ground and mortar horizon (13th-15th centuries AD) (illus 3.16)

(Contexts 006, 014, 017, 020, 021, 043, 048, 050, 051, 054, 055, 058, 061, 062 063, 064, 067, 068, 069, 074, 075, 076, 077, 078, 079, 080)

Phase 3 includes the construction of the chapel, the use of the site as a cemetery and the accumulation of a mortar horizon. There are limited stratigraphical relationships between these features (Table 3.1), but they are all of a broadly medieval date. The cross-slab was presumably standing, intact, throughout this phase to the west of the chapel.

The chapel

The chapel walls are visible on the surface of the site as low grassy mounds within a roughly oval-shaped enclosure (illus 1.3 & 3.4) which would have measured about 12m long by 5m wide, aligned east/west. Only the west gable of the chapel (014) was examined within the central deep trench and its foundation trench (068) was cut from the surface of a dark brown sand (069). The sloping surface of layer (069) across the eastern half of the excavated section indicates that the chapel was built on a slight mound about 0.3m higher than the setting of the cross-slab. The relationship between the hard standing sealing Setting 2 (030) and context (069) was only investigated in a very small part of the deep central trench, and the observation that (030) appeared to lay under (069) is by no means certain. This suggests that the chapel possibly post-dates Setting 2.

The foundation trench for the chapel wall was 0.4m wide and filled with a dark brown sand (067) that contained two small fragments of human bone and other mammal bones but no pottery. The base of the chapel wall consisted of a massive sandstone block 0.3m high and at least 1m long, which extended across the whole width of the trench. The chapel wall consisted of well-coursed angular blocks, five courses high, which varied in thickness from 0.06m to 0.27m. The upper 0.4m of the chapel wall had lost its dressed face and the shelly mortar and rubble core was revealed (illus 3.17).

A single architectural fragment, possibly a 13th-century window mullion or a vaulting rib, was found in context (002) just below topsoil (Chapter

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Illustration 3.17 Elevation of the chapel wall

7.5.3 & illus 7.49). This is probably derived from the chapel and was probably left behind because it was broken. The date of this fragment would also support the chapel being of a later date than Setting 2. Local information records an oral tradition that many of the houses of Hilton were built of stones taken from the chapel site and, while this may well have taken place in the 19th century when the village expanded, the robbing of the chapel may have been taking place for many years before that.

The fact that cross-slab and the chapel wall do not share exactly the same alignment may support the suggestion that Setting 2 was not contemporary with the chapel. The distance between the chapel and Setting 2 was 6.0m and this space was occupied by at least two phases of burials, the earlier of which could be contemporary with the use of the chapel.

Burial ground (Skeletons 5 & 6)

The area between the chapel and the cross-slab was used as a burial ground in the medieval period. Two burials (Skeletons 5 & 6) were only partly revealed, as the remit of the excavation was to keep disturbance to burials to a minimum, but they could be seen cut into the sand horizon (context 069, illus 3.4 & 3.10). While these burials are stratigraphically equal to the construction of the chapel, which could indicate that they are broadly contemporary, their chronological relationship is unknown. Skeleton 5 was located to the east of the cross-slab, within the deep central trench. Only the skull was uncovered within a grave that was aligned east/west, which was at a right angle to the cross-slab. The short length of the grave cut indicates that is probably of a child. The grave fill was a midbrown loamy sand (074). Skeleton 6, also of a child, lay 1.2m to the south-east of Skeleton 5, about 0.6m nearer the chapel wall. The grave fill was a mid-brown loamy sand (context 075).

These two burials are, stratigraphically, the earliest articulated burials detected on the site. As Skeletons 5 and 6 were not excavated, they have not been radiocarbon dated and no finds were retrieved. However, they are thought to be medieval in date (probably 13th to 15th century) as they are stratigraphically earlier than the burials in Phase 5, which have been radiocarbon dated to the late medieval period.

Further burials to the north of Skeleton 5 are suggested by the presence of both flat stones, thought to be grave-slabs, and upright grave-stones. This area was only partially excavated as the priority here was to retrieve the carved fragments. A flat slab (078) partially overlay Skeleton 5 and to the north of it a larger flat slab (055) and further unnumbered stones suggested grave-slabs, also aligned east/west. To the north of this were two very small upright stones (054), 0.80m apart. These were probably further grave-markers, perhaps a headstone and footstone and, again, the short distance between them suggests they were for a child burial. These upright stones were not visible from the surface. A simple cross-incised stone (Chapter 7.5.2 & illus 7.48) was found within a layer of mottled sand among these stones (context 061, from grid square 1010E 1040N; no IB number). This stone had probably marked a grave, although, given its close proximity to the upright grave-slabs (054), it may not have been in situ. Several other flat stones lay in the vicinity and may have been further grave-slabs, but these were not investigated. The evidence so far suggests that this burial ground was used primarily for children.

Mortar bank and tumble

A bank of sand, mortar and a tumbled stones sealed Skeletons 5 and 6 as well as layer (069). Two layers of sand and mortar (058, 050) extended east from the stone (079) to within 0.7m of the chapel wall. Within the northern sondage, this mortar was excavated as context (062). These layers (excavated only in the main central trench and the northern sondage) gave the impression that they formed a low bank about 0.25m high, perhaps aligned north/south, separate from the chapel wall. It was noted that the easternmost deposits (050 & 062) had a significantly greater proportion of mortar within the sand matrix than (058) in the west. There were no finds or pottery

A spread of tumble (020) overlay the child burials as well as the sand and mortar layer (058) but was intermixed with the mortar layer (050) and with a layer of dark sand with clay flecks (043) on its east side. Context (043) contained a stone hone (illus 7.23, no 12), two nails with disc-shaped heads, four mammal bones (probable cattle, sheep and a dog bone) and three disarticulated human bones, but no pottery.

within this sand and mortar bank.

The tumble (020) consisted of small blocks and large square flat slabs, measuring 0.3m–0.4m across and 0.1m thick. Some had come to rest with a uniform angle, tipping away from the chapel. No mortar was noted between the majority of the stones suggesting that they had originated from a drystone wall, although clearly there was mortar

in the vicinity. Only the north-western extremity of this tumble was revealed; the full extent of it was not investigated as it lay beneath a later tumble bank which was not excavated. Tumble (020) contained an unidentifiable mammal bone, one sherd of Scottish Redware and a fragment of carved stone (X.IB 355.239) that has been identified as a fragment of sculpture¹³ which is not part of the Hilton cross-slab, nor from the fabric of the chapel.

Within the limited areas exposed, the tumble (020) was seen extending for about 7.0m north/south and about 3m east/west. The northern sondage confirmed that these tumbled stones did not extend east as far as

the chapel wall (014) as there was a gap of about 2.5m between it and the chapel wall.

Child burials (14th–17th centuries AD)

The space between the cross-slab and the chapel continued to be used for burials in the late medieval period. Two burials (Skeletons 3 & 4) occupied a grave (064) that had been cut into the mortar bank (050) (illus 3.16 & 3.18). This grave was aligned north/south, roughly parallel with the chapel wall, and was filled with a mixed sand, rubble and mortar (051 & 063). The grave fill contained three sherds of Scottish Redware and a pebble covered with a glassy surface, possibly a



Illustration 3.18 Skeletons 3 and 4

glaze (Table 7.24). Skeleton 4 overlay the lower limbs of Skeleton 3. Both skeletons were lifted because they lay within the deep central trench. Skeleton 3 was of a youth, 12 to 15 years of age, and Skeleton 4 was a child aged two to four years old, but the sex of neither could be determined. Both individuals suffered from severe Iron Deficiency Anaemia and other indications of malnourishment, perhaps through ill health. A 14th- to 17th-century radiocarbon date was returned for Skeleton 3 (GU-11011) and a date of the 15th to 17th centuries for Skeleton 4 (GU-11012), which confirmed that they were broadly contemporary if not buried at the same time.

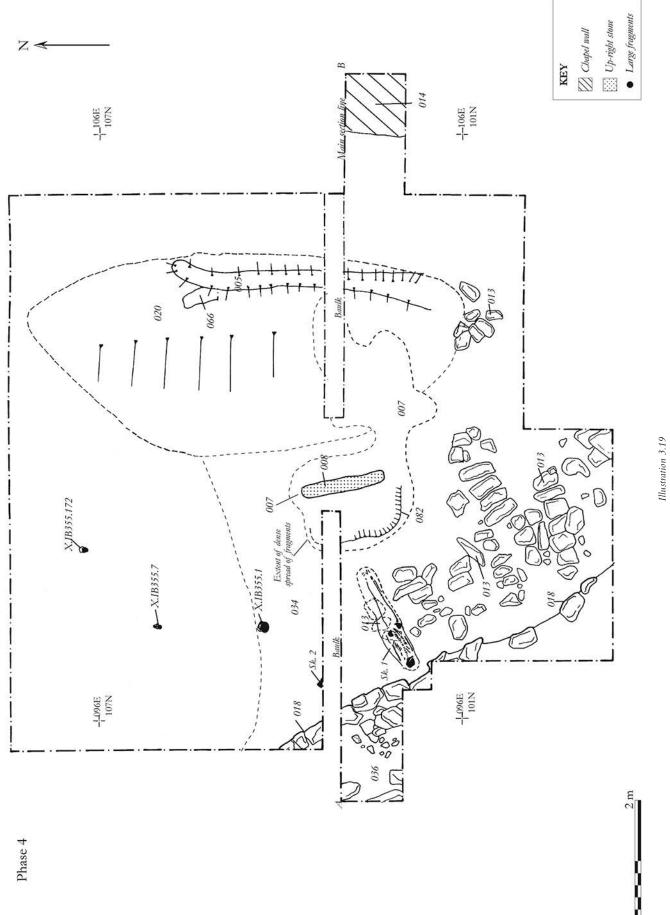


Illustration 3.19 Phase 4 plan

Layer 006

To the east of Setting 2, on a level with layer (058), was a thin layer of mid-brown sandy loam with shelly mortar (006) identified by Kirkdale between the lower portion (008) and a slab (079). Layer (006) lay over the weathered sandstone layer (030). This layer (006) contained five nails, four with wood preserved in the corrosion, an iron-stained bone, eight sherds of Scottish Redware, and a fragment of wood. No carved fragments were found within this layer. Layer (006) contained very small quantities of heather and oak charcoal, with carbonised seeds of grassland plants. To the north-west of Setting 2, the same deposit was excavated as context (021, not illustrated), which contained two sherds of Scottish Redware, with heather, alder and birch charcoal. These deposits were interpreted as re-deposited midden including hearth waste. An equivalent layer was not identified on the west side of Setting 2.

Phase 4 Late medieval robber pit, layer of carved debris, and post-medieval shed and chapel debris (illus 3.1 & 3.19)

(Contexts 005, 007, 011, 013, 015, 018, 024, 025, 027, 033, 036, 037, 038, 039, 040, 044, 045, 046, 049, 060, 065, 066, 081, 082)

Phase 4 consists of the late medieval and post-medieval use of the site. This includes the horizon of Pictish carved fragments that were derived from the defaced cross-face (face A) and middle portion (faces A & C) of the Hilton cross-slab. These fragments were found within a pit, which lay to the west of the lower portion, and also as a horizon of fragments extending up to 4m away from the lower portion. Also included here, but with no stratigraphical relationship with the carved fragments, is a post-medieval shed, further burials and the debris from the chapel wall. It was not always possible to allocate features specifically to the late



Illustration 3.20
The pit (012) to the west of Setting 2

medieval or the post-medieval periods and therefore they are included here together.

Pit (fill 011)

The pit on the west side of Setting 2 was interpreted as the cut for the setting which had later been re-cut (082) through the fill (016), leaving the surviving sloping surface of layer (016) (illus 3.5). This pit was then filled with numerous fragments of the cross-slab (011). The lower part of this fill (011a) consisted of small carved fragments, some face up and some face down, while the upper 0.3m (11b) contained a higher proportion of larger fragments of the cross-slab and other large sandstone blocks with no carved surface (illus 3.20). A comparison of the fragments between the contents of the pit with the horizon of carved fragments is difficult because Kirkdale excavated half of the pit as a continuation of context 007, while GUARD excavated the remained of the pit as a separate context 011. Neither of the two parts of fill 011 contained any pottery, but it did contain one disarticulated human bone, 13 horse bones and a few bones of pig, possible cattle, sheep/goat, an iron-encrusted bone (thought originally to be a nail), a bone toggle or winder (illus 7.51, no 9), a stone disc fragment (illus 7.52, no 11) and a glazed pebble. A horse jaw, which was found at the junction of (011a) and (011b), has been radiocarbon dated to AD 1650-1960 (SUERC-9143; GU-13809). A single sherd of 20th-century glass was found in the upper fill of this pit, indicating some late disturbance.

Horizon of carved fragments 007

The carved fragments continued beyond the pit fill as a horizon of fragments and mid-brown sand (007). The dense layer of recognisably carved fragments (007) sealed layers (006) and (030) (Phase 3) and extended for a distance of up to 4m around Setting 2. This layer (007) was generally between 0.05m and 0.15m deep (illus 3.5). The organic-rich wind-blown brown sand (007) with very small sandstone fragments that did not belong to the Hilton stone (Chapter 7.2.1) continued as far as the outer bank (018/035) to the west and to the tumble (020) in the east. However, very few carved fragments were retrieved during the excavation to the east of the D-shaped annex or mortar bank (050) (Phase 3) or beyond the fill of the pit (011) in the west. Horizon (007) was sealed only by layer (002) and both Kirkdale and GUARD noted that the character of the sand matrix of (007) was very similar to (002) (Phase 5) from which a number of carved fragments were also retrieved.

A distribution plan of all carved fragments has been generated from the database (Chapter 7.2.3 & illus 7.14). This shows that the fragments were densely packed around the setting of the lower portion with a small number of outliers spread up to 4m from the lower portion. There was a particularly noticeable gap in the distribution plot corresponding to grid square 1005 1025. This appears to be a real lack of fragments, which is explained by a small 'pile' of angular stones, beneath 007, that did not belong to the Hilton cross-slab and presumably prevented the fragments of the cross-slab from falling in a horizon as elsewhere.

The density plot (illus 7.15) reveals two particularly dense concentrations of fragments: one corresponds to the fill of the pit (011), and the other forms a band aligned east/west just south-east of Setting 2. It was suggested very early on that there may have been two phases of defacement: the initial defacement when the cross was standing with the fragments falling into the pit, and a second phase after the cross had fallen to the east. The spread of fragments (007) appears to overly the fill of the pit (011) in the main section, but, given the loose nature of the upper deposit (11b) and the evidence for disturbance in the form of modern glass within it, it is more likely that 007 is contemporary with the lower layer 011. There would therefore seem to be two phases, although there is no stratigraphical evidence for the time that may have passed between these two events. The later event, represented by 11b, probably corresponds with the collapse of the crossslab during the 17th century as it contains some large fragments of the mid-portion. The stones within the pit that are not from the Hilton of Cadboll cross-slab are probably derived from the general debris in the vicinity, perhaps from the medieval cemetery, gathered within the pit in an attempt to 'tidy up' the site after the slab has fallen or removed to the shed.

The soil thin section analysis noted that layer (007) was a wind-blown sand which had similar characteristics to layer (002) above, with the addition of a significant number of very small sandstone fragments within (007). These small sandstone fragments are not derived from the fragmentation of the Hilton cross-slab as confirmed by a comparison of the soil thin section with a thin section the upper portion (Chapter 7.3.1). The layer also contained significant amounts of burnt turf and organic matter.

Originally the spread of fragments was assumed to date to the mid-17th century when the memorial to

Alexander Duff was carved. However, the OSL dating programme has returned a date of AD 1570 ±25 for layer (007) (SUTL 1449), which is a century earlier than expected. This sample was taken from the west side of the setting, outside the pit from which very few fragments were retrieved. This was because the fragment layer to the east of the setting had already been excavated when the specialist was on site and thus was not available for sampling. The OSL analysis indicated that layer did not contain mixed deposits, which means that the OSL date can be considered to be relatively precise. The soil thin section work has identified small sandstone fragments within layer (007), indicating that, while recognisable carved fragments were restricted to the confines of the pit, smaller fragments of sandstone continued within the deposit to the west. However these are not of the same geology as the Hilton cross-slab and therefore must relate to some other depositional process, perhaps weathering of the chapel. It is not certain, therefore, that the OSL date dates the horizon of carved fragments to the post-Reformation period.

Stuart Jeffrey has produced some distribution plans of fragments per context number and per keyword (Chapter 7.2.3). Unfortunately, there seems to be very little significance in the location of the fragments in that all the keyword distribution patterns are well mixed between the pit and the south-eastern area, apart from possibly 'spiral' and 'vine scroll' which showed a slight density to the south-east of the cross-slab.

A few of the larger carved fragments from the middle portion of face A were found outside the extent of what was excavated as context (007). For example: the truncated human figure adjacent to the haunch of an animal (X.IB 355.7) was found on the surface of layer (042) near the displaced collar stone (032); a beast with its ears flung forward (X.IB 355.1) was found on the edge of layer (034); and an animal head with prominent fangs (X.IB 355.5) was found beneath later slabs (013).

A fragment of a medieval relief cross (square 10001030.001, just north of the settings) was retrieved during the Kirkdale excavations (illus 7.47) from this horizon (007). It is possible that this fragment is residual within this layer, a result of re-use for a building perhaps, but it is also possible that this cross was still extant at this time and was then broken up and the fragments dispersed at the same time as the cross-slab was defaced.

As well as the carved fragments, layer (007) also contained a small copper alloy decorative mount (illus

7.51, no 1) which is thought to date to between the 15th and 17th centuries. The finds from the layer included a small number of mammal bones (horse, sheep/goat, cattle), disarticulated adult human skull and long bones (025), a copper alloy loop fragment (illus 7.51, no 3), a copper alloy pin (illus 7.51, no 5), several nails, some with wood preserved in the corrosion, 15 sherds of Scottish Redware and one sherd of Yorkshire type ware, and a prehistoric flint core.

At its eastern edge, layer (007) was intermixed with the tumble (020, Phase 3) and with a layer of small tumble and dark soil (049) which contained a further 11 carved fragments of the Hilton cross-slab, a sherd of Scottish Redware and a disarticulated human bone. Several fragments were also found within the layer above (002) (Phase 5) which sealed (007). This would suggest that the boundary of (007) and (002) was not always clear.

D-shaped shed

A stone and clay-bonded wall (005) was located west of the chapel gable, overlying the mortar bank (050) and rubble (020) (illus 3.19 & 3.21). This structure was built on a foundation of flat stones (066, not in section) with a clay-bonded stone wall (005) that survived as a low bank of orange/brown clay with angular stones c 0.4m wide. The north and south extents of the clay-bonded wall were not fully investigated and its relationship with the chapel is not known. However, this wall lay parallel to the chapel wall (014) and could have formed an annex to the chapel measuring about 2.5m wide internally. Kirkdale noted that the southern end of the wall curved towards the chapel beneath later rubble suggesting that it represented a D-shaped structure. The dating evidence for this structure is not very precise; it post-dated the tumble (020) which contained medieval pot and was sealed by further tumble (015) which contained 18th- and 19th-century pottery. It could therefore be contemporary with the late medieval child burials in Phase 3.

Within the annex, between the wall (005) and the chapel, the ground was levelled up with a mixed deposit of clay and sandy soil (044) from which no finds were retrieved. This layer merged into a more pebbly layer which abutted the chapel wall (046, not seen in section). Layer (046) contained five nails, two disarticulated human vertebrae, and seven sherds of 18th- to 19th-century pottery. This deposit was then sealed by a layer of grey mortar (033) that extended only 0.6m from the chapel wall. It contained three



 ${\it Illustration~3.21}$ View of the whole trench with the clay-bonded wall in the foreground and flat slabs (013) to the top left

nails, a clay pipe fragment and two sherds of 18th/19th-century pottery. This may have formed the remains of a floor within the annex. Although no pottery was directly associated with the initial construction of the annex, the pottery within the floor levels indicate that it was still in use in the 19th century.

Skeletons 1 & 2

To the west of Setting 2 and the pit (012) an extended inhumation was found aligned south-west/north-east (Skeleton 1, context 024). This burial is thought to have been dug from the surface of layer (019) (cut 039) and the grave was sealed by three large stones (013). Within the grave, the fill was a mid-brown sand (040) that contained three sherds of Scottish Redware. This skeleton was recorded and lifted as it lay within the deep central trench. Skeleton 1 was a male aged about 25 to 35 years old, about 5' 7" (1.7m) tall with a healed fracture on his right forearm and some dental disease, but no other signs of ill health. Skeleton 1 produced a radiocarbon date of the mid-17th to mid-20th centuries (GU-11010). No stratigraphical relationship between the burial (Skeleton 1) and the

horizon of fragments (007) was recorded. The skull of a second, probably articulated, burial (Skeleton 2, context 081), lying parallel with Skeleton 1, was noted just on the north side of the baulk. This skeleton was neither fully revealed nor lifted because the remit was to minimise disturbance to the burials. It has not been dated, although it is likely to be broadly contemporary with Skeleton 1.

Surface of flat slabs 013

In the south-west corner of the trench, immediately beneath the turf and topsoil (001 and 002), were several large, flat blocks of stone (013, illus 3.19 & 3.21). These were not lifted except in a small area immediately south of the lower portion and over Skeleton 1 (see above). Some of these stones formed lines aligned south-west/north-east, perpendicular to the line of the enclosure wall (018). A large carved fragment from the Hilton cross-slab face A, bearing a serpent's head, had been used to level up one of these stones (X.IB 355.5). The sand matrix around the stones (013) also contained a shard of modern 20th-century bottle glass. These lines of stones are thought to be cover slabs for further post-

medieval burials, perhaps lying parallel with Skeleton 1. Other disarticulated human bones, including a jaw and vertebrae, were seen amongst these flat slabs about 2m to the south-west of Skeleton 1, indicating some disturbance to burials, probably by rabbits.

Revetment wall and bank 018, 036 and 038

To the west of Skeleton 1 was the face of a low, straight stone revetment wall (018) aligned north-west/southeast, perpendicular to Skeleton 1. Three courses of this wall survived (0.2m high) sealing an earlier wall (035). Wall (018) overlay layer (007) and revetted a bank of loose dark brown sand (036) that contained two sherds Scottish Redware, a copper alloy sheet fragment (illus 7.51, no 4), a nail, midden material, particularly periwinkles and limpets, as well as carbonised oats, hazel, and hazel nutshell, a few bones of fish, sheep/ goat, cattle and cat, a sherd of 20th-century clear glass and a prehistoric flint flake. This was interpreted as a re-deposited midden brought in to create a bank behind the revetment. To the north of the central deep trench, this midden was excavated as context (038). It had spilled over the revetment wall to the east. This material contained an iron fish hook (illus 7.51, no 7), four sherds of Scottish Redware and 10 sherds of Yorkshire type ware, a fragment of slag, a sherd of late 20th-century bottle glass and the same species of mammal bones as (036) with the addition of a horse bone and two disarticulated human bones. This revetment wall and bank is thought to have been constructed in the post-medieval period utilising a nearby deposit of medieval and modern material. This relates to the post-medieval bank, or plantation bank, that encloses the chapel in an approximately rectangular shape (illus 1.3).

Bank of debris

A bank of tumble abutted the remains of the chapel wall (see the topographic survey, illus 1.3, 3.4 & 3.5). This bank consisted of a layer, about 0.4m deep, of stones and orange clay (027) overlying the floor of the annex (044/046). This was sealed by a 0.1m thick layer of angular stones with clay (015 (and 037, not in section)). Layer (027) contained the remains of a field vole but no pottery. Layer (015) contained one sherd of 18th/19th-century pottery, seven mammal bones, including a bird bone, four shards of late 17th-century bottle glass, six nails, a fragment of a perforated roof slate and a prehistoric struck flake. Layer (037) contained two

sherds of 18th/to 19th-century pottery, six fragments from the Hilton cross-slab and a disarticulated human bone. There were a few sandstone blocks within this deposit suggesting that it was demolition debris from the chapel wall. The absence of good, faced blocks within this deposit is perhaps explained by the robbing of the chapel walls mentioned above.

Phase 5 Topsoil and turf (20th century AD)

(Contexts 001 & 002)

A mid-brown sand with angular rubble (002) was spread across the whole of the site to a depth of about 0.15m deep (illus 3.5). This contained 95 carved fragments, including a medieval architectural fragment that probably derived from the chapel (Chapter 7.5.3). The 40 pottery sherds from this context were medieval to 18th/19th century in date; there were six sherds of glass, including two shards of late 17th- to early 18thcentury wine bottle and four late 20th-century clear glass fragments; an upper rotary quern stone (illus 7.52, no 13); a copper alloy stud (illus 7.51, no 2); numerous iron nails; a prehistoric flint chunk possibly from a core; and three disarticulated human bones. The soil thin section analysis has emphasised the similarity of (002) to (007) below it and highlighted the high organic content, which included burnt turf.

The turf and topsoil (001) was up to 0.2m deep across the site and contained a single sherd of Scottish Redware, four shards of mid-20th-century clear glass, a probable prehistoric flint (Chapter 7.5.8, no 1), a bullet casing and a golf ball. There were several rabbit burrows on the surface of the chapel site, which had brought sand, human bones and other midden debris up to the surface. There were no visible rabbit burrows within the trench before the excavations began, but a rabbit burrow had disturbed layer 023 in the deep central trench. Rabbit burrows had disturbed the outer bank of the enclosure just east of the enclosure revetment (018) and just to the west of the trench edge.

3.6 Discussion

Prehistoric material

Unsurprisingly, considering the absence of excavation below the Pictish horizons, only a few residual flints that may date from the prehistoric period were retrieved by the excavation (Chapter 7.5.8).

Pictish activity on the site

The limited archaeological investigations of the presetting deposits on the site indicate that wind-blown sand was gradually accumulating during the late first millennium AD, incorporating small amounts of midden material probably from some settlement in the vicinity. The remains of a possible high-status stonebuilt structure on the site is suggested by the presence of a band of sandstone tumble, which includes at least one dressed stone. The extent and depth of the rubble were not ascertained and therefore interpretation of this feature is extremely difficult. However, the disordered nature of the stones indicates that they are tumble from a structure rather than the remains of a wall foundation that has been robbed. It is also possible that the stones in the trough (029) and the possible tenon fragment (071), both having dressed sides, are actually associated with such a building.

This tumble was sealed by a further gradual accumulation of wind-blown sand, which again incorporated small amounts of anthropogenic material, and which included disarticulated human bone. The radiocarbon dates from charcoal and the human bone are grouped within the late seventh to late eighth centuries, with one exception in the late 10th to mid-12th centuries. The birch charcoal could be derived from use as a fuel or perhaps from scrub clearance. The human bone, however, indicates that the site was in the vicinity of human burials that were already undergoing some disturbance.

Stratigraphically separate from these deposits, but at the same level as the surface of layer (026), was what could be the original setting of the cross-slab which, it is thought, was carved in the late eighth or early ninth centuries. It is proposed, therefore, that this site was chosen in the Pictish period (between the seventh and ninth centuries) for the construction of a high-status stone-built structure, possibly a chapel, human burial and the erection of a cross-slab, although we do not know if these actions were contemporary or not. The argument for Setting 1 being the original setting is strengthened by the evidence for early medieval burials in the vicinity.

Possible sequence of settings

All the evidence from the excavation of the deposits, the settings and the condition of the lower portion of the cross-slab has indicated a complex sequence of events which resulted in the setting in which the lower portion was found. There are a small number of certainties amongst this complex history:

- 1 The cross-slab was commissioned and carved during the Pictish period, probably about the end of the eighth century.
- 2 The tenon has broken.
- 3 The lower projections have been modified.
- 4 A flat slab, possibly a collar-stone, was found 0.3m to the east of the lower portion (Setting 1?).
- 5 The lower portion was found set into the ground (Setting 2?).
- 6 Dimensions of the cross tenon with and without projections.

The many uncertainties include the order these events occurred and the dimensions of the slots in slabs 032 and 052. As a result, several scenarios are possible. One suggestion has been that the original site of the cross-slab would have been up on top of the raised beach, as is the situation at Shandwick, Nigg and Portmahomack. Another is that the stones that surround the setting are one setting rather than two. The following table presents some of these possible scenarios from which the most simple explanation for all the observed factors should be the one that is the most likely to have occurred. The scenarios start at the bottom with the construction of the new cross.

Scenarios A, B, and C assume that the cross was erected at another site (either another location or in the vicinity of the chapel) before it was brought to the present site, for which there is no evidence at present. Scenarios D, E, F and G assume that the cross was erected first at the chapel site, and scenarios H, I and J assume that Settings 1 and 2 are part of one setting.

From Table 3.2 it can be seen that scenarios G, I and J are the simplest scenarios. However, scenarios G and I assume that the projections were modified as a result of the fall and yet in this form they were not used in Setting 2. They therefore do not fit the evidence satisfactorily, unless they were modified only to assist lifting the stone into place. Scenario J assumes that the projections were modified at a very early stage, before the cross was erected, perhaps during a period when some experimental work on how to support the massive slab was being carried out. This is not thought by the excavator to be a likely scenario because it assumes that the stone (052) did not act as part of a collar-stone, the slot was not

Table 3.2 Hilton of Cadboll, possible scenarios

A	В	С	D	E
	Setting 2			
	Falls			
Setting 2	Setting 1 re-used	Setting 2	Setting 2	Setting 2
Projections modified	Projections modified	Falls – tenon breaks	Projections modified	Falls
Falls – tenon breaks	Falls – tenon breaks	Setting 1	Falls	Setting 1
Setting 1	Setting 1	Projections modified	Setting 1	Projections modified
Setting 0	Setting 0	Setting 0	tenon breaks	tenon breaks
New cross	New cross	New cross	New cross	New cross
=6 events	=7 events	=6 events	=6 events	=6 events
F	G	Н	I	J
	G	Н	I	J
Setting 2	G	H Setting lower 1/2	I	J
Setting 2 Falls	G Setting 2		I Setting lower 1/2	J Setting lower 1/2
Setting 2 Falls Setting 1 re-used		Setting lower 1/2		
Setting 2 Falls Setting 1 re-used Projections modified	Setting 2	Setting lower 1/2 Setting 1/2	Setting lower 1/2	Setting lower 1/2
Setting 2 Falls Setting 1 re-used Projections modified Falls – tenon breaks	Setting 2 Projections modified	Setting lower 1/2 Setting 1/2 Projections modified	Setting lower 1/2 Projections modified	Setting lower 1/2 Falls – tenon breaks Setting 1/2
F Setting 2 Falls Setting 1 re-used Projections modified Falls – tenon breaks Setting 1 New cross	Setting 2 Projections modified Falls – tenon breaks	Setting lower 1/2 Setting 1/2 Projections modified Falls – tenon breaks	Setting lower 1/2 Projections modified Falls – tenon breaks	Setting lower 1/2 Falls – tenon breaks

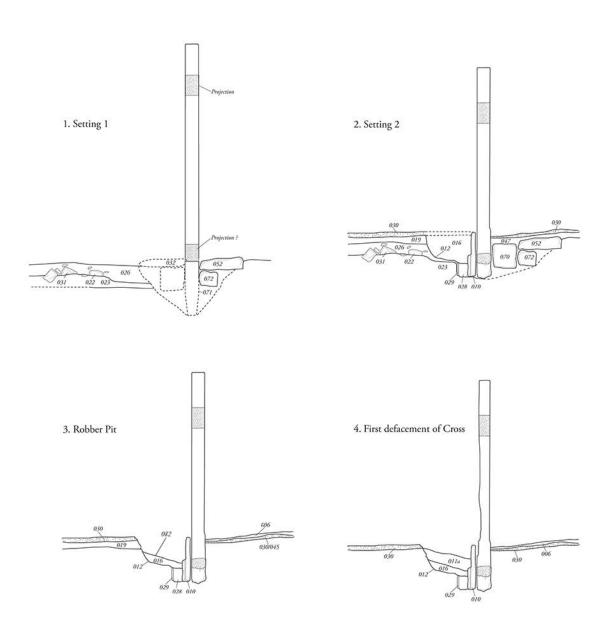
utilised, and that it was re-used here only because of its large size. The measurements of the collar-stone and the lower portion show that stone (052) could have held the lower portion in place, as long as the tenon was still in position to support it.

The next simplest scenarios consist of A, C, D, E and H. Scenario A assumes that the stone was brought down intact from another site for which, as mentioned above, there is no evidence at present. Again, the modified projections were not utilised in Setting 2. Scenario C also assumes that the stone was brought to this site and that the projections were already modified when it arrived. It might be expected that, if the effort was made to bring the cross-slab to a new site, a suitably well-fitting collar-stone would have been made, and thus this scenario is

a little unsatisfactory. Scenario D again assumes that the projections were modified before Setting 2 and is therefore rejected. Scenario E assumes that the tenon broke and the projections were modified at a very early stage before it was erected in Setting 1. This is unlikely as the cross-slab would not have stood in Setting 1 without a tenon and there is no evidence of a superstructure. Scenario H (as with J) assumes that the collar-stone (052) was re-used.

The next simplest scenario is F, which would appear to fit all the observed factors. The projections are modified, either because it fell or was found not to fit, and a failed attempt was made to re-set the stone into Setting 1, before it was re-set into Setting 2. Finally, Scenario B assumes that the stone was first at another site, but otherwise would also fit the evidence.

A FRAGMENTED MASTERPIECE



5. Second defacement of Cross-Slab Memorial carved.

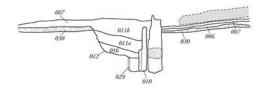




Illustration 3.22
Sequence reconstruction

Therefore, the most likely scenario is F (followed by B). This supposes that the new cross was set into Setting 1, as depicted in the reconstruction drawing, probably in the late eighth or early ninth century (illus 3.22). The wind-blown sand (019) then accumulated in the vicinity of the cross-slab on the west side. There may well be corresponding early deposits unexcavated to the east of the cross-slab. At some point between the early ninth century and the mid-12th century, the cross fell and the tenon broke. Then the projections were modified in a failed attempt to re-use Setting 1, perhaps with other collar-stones not yet identified and used above (052) in an attempt to provide a suitable superstructure. The stone fell again and was re-set into Setting 2 in the mid-12th century. A hard standing was finally laid around Setting 2, which obscured all signs of the earlier setting.

Original Pictish setting for the Hilton of Cadboll cross-slab

The evidence therefore suggests that Setting 1 dates from the late first millennium AD and could be the original setting of the Hilton of Cadboll cross-slab. A wider comparison of this setting with the settings of other Pictish cross-slabs is hampered by the fact that few are thought to be in their original positions and it is not known how much has been reconstructed over the past centuries. At Shandwick, only 3 km to the south-west of Hilton, the large cross-slab stands on the crest of a hill overlooking the sea. According to Allen and Anderson, the Shandwick stone is 9ft tall (2.74m) and 3' 3" (0.99m) wide and is thus shorter and narrower than Hilton.15 Prior to its repair and re-erection in the 1980s, the cross-slab at Shandwick sat within a rectangular socket in a massive base slab. 16 Two separate collar-stones, fixed together with iron bars, had been added above this base slab to provide extra support after it blew down and broke in 1846. The collar-stones were needed because there was little left of the stone below the decoration once the tenon broke. There were also other large slabs surrounded the setting providing extra support. The very limited excavations that took place around the setting provided no conclusive evidence that this was the original setting of the Shandwick stone,17 but, as there is no historical evidence suggesting that it has been moved to this site, it is quite possible that the large basal stone does represent the original setting.

Similarly Sueno's stone at Forres (20ft high (6.09m) and thought to date to the between the ninth and the



Illustration 3.23
Canna cross (Crown copyright RCAHMS)

11th centuries) was embedded in a massive basal stone which was estimated to weigh 10 tons. ¹⁸ Charcoal from two features near the stone was radiocarbon dated to the eighth century AD and the early 11th century AD, which would confirm that some activity was taking place on this site before and during the period that the stone is thought to have been erected. While this is not evidence that this is the original setting, it does show that there was activity on this particular site during the Pictish period. ¹⁹

The free-standing cross at Dupplin in Perthshire was found to be sitting in a massive basal slab with a large rectangular slot for the cross.²⁰ It is possible that

this cross is in its original position close to the royal palace at Forteviot, similar to Invermay on the south side of the river, although there is no evidence for it being located in the vicinity prior to 1683 as shown by a map by John Adair.²¹ Even if it was moved to this site, it is quite possible that the massive basal slab was brought with the cross to the new site and thus the basal slab could be part of the original setting.

The Canna cross (NGR NG 269055) is an eighthor ninth-century free-standing cross measuring about 1.98m high, which is thought to be sitting in its original setting. The setting consists of a 'rectangular slab of sandstone, 0.98m by 0.81m and containing a socket 0.55m by 0.23m, within a raised kerb of sandstone slabs set on edge'.²² This kerbing is embedded in the ground all around the edge of the cross providing extra horizontal support for the basal slab (illus 3.23). This is an interesting similarity with the Hilton kerbing, but at Hilton there is no evidence that the kerbing had ever been embedded in the ground in this way.

A variety of settings for free-standing crosses and cross-slabs appears to have been used in the early medieval period.²³ These include stepped plinths (perhaps representing the Mount of Calvary) as for St Martin's Cross and St Matthew's cross, Iona,²⁴ and also converted millstones.²⁵ Tall socketed blocks were also used, such as with the Barochan Cross.²⁶ Composite bases are a possibility, such as at St John's Cross, Iona,²⁷ and the Kilnave Cross, Islay,²⁸ although there has been some doubt expressed about whether these are the original settings or are medieval in date. Some carved recumbent slabs, such as Meigle no 26, had slots which may have been used for the support of a cross and for other purposes.²⁹

From the few examples where the stones are thought to be possibly in their original locations, the evidence suggests that, where bedrock was unavailable, a massive basal socket stone was often used, perhaps with some extra support added in the form of a kerb or box-like structure. The stones (072) beneath the collar-stone (052) are clearly not part of a massive basal slab and there was no indication of there being one immediately beneath them. As the tenon was clearly intended for sitting into a basal socket it is possible that Setting 1 is not the original setting and that a massive slab still lies undetected, perhaps beneath the medieval cemetery, into which the Hilton tenon once sat. The possibility that the original setting of the stone was on the hilltop, in a similar location to the Shandwick stone, is discussed below.

Cross-slab Setting 2 (mid-12th century)

The evidence suggests that the cross-slab was reerected after a catastrophic fall, but it is not known how much time passed between the fall of the cross and its re-erection. None of the Project team has noted one side of the lower portion being more weathered than the other. The mid-12th-century OSL date associated with Setting 2, the 13th-century architectural fragment probably from the chapel and the difference of alignment between the chapel and the cross support the tentative proposal of a stratigraphical relationship in which the construction of the chapel post-dated the re-erection of the cross (see Chapter 6.2.6 where the social context for this is discussed). It is possible that there was an earlier chapel on this site, perhaps beneath the 13th-century stone chapel. The patrons of this earlier chapel could have commissioned the re-erection of the cross in the mid-12th century, setting the slab deeper into the ground to allow for the loss of the tenon. While some of the decoration would thereby have been obscured, including the stepped base of the cross on face A and the bottom of the panel on face C, it could be said that the most significant elements of the slab, the cross and the female rider in the hunting scene, were still very much in evidence. The midden (047) was probably brought in to hide the remains of the earlier setting and then the whole of Setting 2 was surrounded by a hard standing of crushed sandstone. The presence within layer (047) of a single fragment of the Hilton cross-slab (X.IB 355.136), described as a fragment of band relief, presumably reflects some damage to the Hilton slab that had taken place by this time, possibly associated with the fall which perhaps involved the breakage of the lower horizontal moulding seen on face A. There is no evidence that further burials were carried out at the site at this time, although it should be remembered how little of the pre-16th-century deposits have been excavated. As a result, much evidence for this period still remains undetected beneath the surface.

There is slight evidence for an enclosure earlier than the one currently visible on the surface. This evidence consists of only a few stones (035) emerging from beneath layer (019). While it is tempting to suggest that this may relate to an early Christian oval-shaped enclosure lying partly beneath and partly within the visible banked enclosure, there is really not enough evidence yet to confirm its existence or early date. On the OS plan of 1872, which shows the 'site of standing stone', this inner enclosure is depicted as rectangular

rather than oval in shape. Whether this was an accurate depiction of the actual enclosure or perhaps a contemporary fence line is not known.

Layer 006

To the east of Setting 2, the crushed sandstone layer was sealed by a thin layer of brown sand (006), which appeared to be a redeposited midden containing Scottish Redware, but it could also have been a turf layer which has begun to accumulate after the hard surface was laid and prior to the re-dressing of the stone. This deposit was only seen to the east of the setting and there was no equivalent deposit to the west. Perhaps visitor numbers kept the west side (the cross-side) clear of accumulating deposits.

Medieval chapel

The chapel and the first of the burials (Skeletons 5 & 6) were cut into the same layer of sand (069) and could be contemporary. The sand horizon (069) formed a slight mound (illus 3.5). The depth and nature of this mound is not known, as it has not been excavated. However, the sand is described as dark brown with occasional shell inclusions, and it probably had a relatively high organic content compared to the wind-blown sand. There are several possibilities for how the mound was formed. The mound may consist of imported material, in order to raise the site above the water table, or it could be the surviving surface after a hollow has been dug or eroded to the west. It could be a turf layer over a natural accumulation of wind-blown sand around some feature that has created an obstruction to aeolian erosion, such as an earlier structure. It could also be a combination of these processes.

The chapel, measuring about 12m long by 5m, has a simple rectangular plan characteristic of parish churches and chapels after the 12th century. The excavation has produced a single architectural fragment of a window mullion, dated to the 13th century, which may relate to the construction of the chapel. The walls are at least 0.9m wide, constructed of large, squared blocks of sandstone bonded with a shelly mortar. Within the deep central trench, the west gable wall survived up to 1.2m high above a stepped foundation stone 0.3m high. The remaining walls were left undisturbed beneath the turf. A tiny fragment of possible sculpture (X.IB 355.239) was retrieved from tumble, and it perhaps derived from a sculptured figure which may have once stood in the chapel. The second second in the chapel.

Skeletons 5 and 6

Two child burials (Skeletons 5 & 6), and probably other unidentified burials, occupied the space between the cross-slab and the chapel, probably a privileged location. The distance of 1.1m between Skeletons 5 and 6 and their alignment suggest that the burial ground was well organised and not over-used. These two burials were not excavated and are undated, although the disarticulated human bones from layers (026), (019), and (034) suggest that the site had already been already in use as a burial ground for a considerable time.

Mortar bank and tumble

The burials were sealed by tumble and a mortar bank, which were difficult to interpret because so little was revealed beneath a later deposit of tumble (Phase 4). It is possible that the stones (020) are derived from a structure located to the west of the chapel rather than from the chapel itself, because the stones are significantly smaller than the stones seen in the upstanding chapel wall (014) and they do not have mortar adhering to them. They perhaps formed a structure lying to the west of the chapel, pre-dating the late medieval burials and the shed. The mortar bank may be associated with the foundations or plaster face of the shed. The shape and function of this structure is unknown although there was a suggestion that the south-west corner was rounded. It is interesting to note that the majority of the stone tumble (020) lies to the north-west of the chapel wall and does not extend south opposite its entire gable end, hence the width of the annex was less than the width of the chapel. There is no stratigraphical relationship between the chapel and the mortar bank and, therefore, while it is probably later than the chapel, this is not certain. The small fragment of sculpture found within it could be derived from a statue associated with the chapel, but it is, unfortunately, too small to provide any further evidence for its nature.

Only one pottery sherd of Scottish Redware was found within the tumble of stones (020), which is not very reliable dating evidence, considering the loose nature of the tumble in the vicinity. The mortar (050), but not necessarily the tumble (020), pre-dated two burials, Skeletons 3 and 4, radiocarbon dated to the 14th to 17th centuries.

It was considered whether the mortar layer could be derived from the chapel walls either as a construction or a destruction phase. If this was the case, some spread of mortar and sandstone would be expected around the perimeter of the walls as a result of the construction work. It could have been deposited here perhaps a result of the dismantling and re-use of the chapel stones, in which case the larger stones from the chapel could have been removed for re-use, leaving only the smaller stones on site. This does not explain, however, the gap between the mortar and rubble and the chapel wall as seen in the deep central trench, as one would expect the rubble and mortar to be abutting the wall from which it was derived. One explanation for this absence could be that, in a later phase, when the 'shed' was constructed, this mortar and rubble was cleared away from the chapel wall, although it is not easy to explain why this should have been done in such a way as to form a 'bank' of mortar, which then had to be levelled up for the floor of the shed (see Phase 4).

Skeletons 3 and 4

A youth and a child were buried in the same grave, possibly at the same time, between the chapel and the cross-slab. The burials were cut into the mortar bank (050) and were sealed by what is thought to be the floor (044) of the post-medieval shed (005) (Phase 4). The date of the burials was between the 14th and the 17th centuries, which is not inconsistent with the few sherds of medieval pottery that were found within the grave fill. Both skeletons showed evidence that they had been malnourished during their lives and suffered from iron deficiency anaemia.

The north/south alignment of the burials is unusual for a Christian burial ground and may indicate that they were not buried under the official auspices of the church. This could be consistent with the secularisation of the chapel site in the post-Reformation period, after which the tradition of burying children here continued. There was no evidence for a coffin and, given the U-shape of the grave profile, it is likely that the bodies were wrapped in shrouds and laid directly in the ground.

Thus, at the end of Phase 3, in the post-medieval period, the chapel had gone out of regular use following the Reformation and it had probably suffered some collapse. The Pictish cross was still standing and the graveyard was being used intermittently for the burial of children.

Pit and layer of carved debris

Phase 4 consists of a pit filled with carved fragments and a spread of these fragments around the cross,

presumably the collapse of the cross-slab, the construction of a D-shaped annex to the chapel and further use of the graveyard.

Pit fill

The interpretation of the pit fill (016) is problematic because of the apparent lack of evidence for the robber pit having been re-cut. The shape of the cut (012) with its flat base above the sterile sand (028) and its gently sloping sides appears from the section to be a single event. However, the interpretation of the pit fill (016) as the second fill of the pit, contemporary with Setting 2, and the presence of the carved fragments in the upper fill would require that the upper surface of fill (016) was a second re-cut of the pit. It might seem improbable for the pit to have been re-cut on exactly the same line as the earlier pit. It should perhaps be kept in mind that, if the pit fill on the west side of Setting 2 had been sealed by a collar-stone, the removal of this slab for the digging of the pit could have revealed a fairly fresh edge of the earlier pit which could have been followed by the diggers of the robber pit. The evidence from the soil analysis suggests that the fill (016) was not slump from the sides of the pit (019), and therefore the deposit had derived from elsewhere on site, brought in to back fill the pit.

The upper fill of the pit (011) could be differentiated into an upper and lower deposit by the size of the fragments. The lower fragments represent the defacement of the stone and the upper deposit perhaps represents the collapse of the cross-slab and the deposition of predominantly broken middle portion fragments. There was no build up of any deposits between these two layers or between the pit fill and layer (007), which would have supported there being some time difference between these events. Unfortunately, while the locational analysis can distinguish the distribution of different fragment types horizontally it cannot distinguish them vertically. This is because the smaller fragments were initially given a bulk small find, which related to the square in which they were found, and later attributed museum accession numbers, which do not relate to the order in which they were found and therefore do not relate to their depth within the pit. However, if the complete assemblage of fragments is considered, the larger pieces do come from the pit (Chapter 7.2.3).

Layer 007

Layer (007) is a horizon of carved fragments surrounded Setting 2. There was very little difference between the sand matrix within this horizon (007), the upper fill of the pit (011) and layer (002) above. Although there were larger stones in the upper fill of (011), they were also interspersed with carved fragments and thus there appeared to be a continuous deposition of fragments throughout (011) and into (007). Indeed, during the Kirkdale excavation, all the fragments within the pit were excavated as (007) and no distinction was noted.

Work on the distribution of fragments (Chapter 7.2.2) has demonstrated that, horizontally, there were two main concentrations of fragments: one in the pit (011) and one to the south-east of the setting. This may indicate that the cross-slab fell to the east and that the dressing of the slab took place while the slab was lying in this horizontal position. The fragments were then brushed off the surface of the slab to the south side.

Layer (007) has incorporated some midden material in the form of fragments of horse, sheep/goat and cattle bones, which suggests that there is likely to have been settlement in the vicinity. There were also several nails, which may have originated from the settlement, the chapel, or perhaps from coffins. There were also disarticulated human bones, probably from disturbed burials. The skull and other bones of a very young child may have been intrusive into this layer, although no grave cut was seen.

The dating evidence for layer (007) includes an OSL date of AD 1570 ± 25 (SUTL 1449) taken from the west side of the monument, a decorative mount (no 1) dated to the 15th to 17th centuries, five sherds of Scottish Redware and a single sherd of Yorkshire type ware. While the pottery is probably residual, the decorative mount and OSL date are not incompatible and suggest a late 16th-century date for the deposition of this layer. The soil thin section has revealed small sandstone fragments within this layer which are not the same as the Hilton cross-slab. These could be derived from the chapel either as it was dismantled or decayed in the immediate post-Reformation period.

Collapse of the cross-slab

There was no evidence that the cross-slab had been deliberately felled. Instead, the evidence is quite consistent with the slab snapping under pressure and this is further strengthened by the report of a cross-slab in a very similar location to Hilton being blown down in a storm in 1674 (Chapter 6.4). There was evidence of a smooth surface on the side face D, which suggested that it had experienced slight rocking against the collar slab (Chapter 7.2.2). There was, however, no evidence

for any great leaning of the slab and it seems to have been held fast vertically in the ground until the moment of collapse. The evidence also suggests that the cross-face had already suffered some level of defacement before it fell, with the final preparation of the memorial taking place once the slab was horizontal.

Shed

A single west wall of what is thought to be a postmedieval annex or shed lay over the tumble (020) and mortar bank (050). A floor within it had been levelled with material that contains 18th/19th-century pottery, which suggests that this annex or shed was in use in the 19th century, although when it was constructed is not clear. This structure is thought to be the remains of the structure referred to as a 'shed' in the 19th century and in which the cross-slab was housed (Stuart 1856). One could speculate that the cross-slab leant against the remaining gable wall of the chapel, with face C exposed. It could have sat on the gravel layer (033), which has become worn away elsewhere within the shed. The tumble sealing the annex floor represents the collapse of the gable end of the chapel after the cross-slab was removed.

Skeleton 1 and flat slabs

Continued use of the burial ground long after the chapel had gone out of use is indicated by the presence of Skeletons 1 and 2. Only Skeleton 1 was excavated and this has been dated to the post-medieval period. The alignment of Skeleton 1, perpendicular to the revetment bank, indicates that the burial and the bank could be broadly contemporary. The presence of lines of laid slabs (013), similar to those that sealed Skeleton 1, strongly suggests that there are further post-medieval burials sealed by these grave-slabs in the south-west corner of the excavated area on a southwest/north-east alignment, which differs from that of the medieval burials (Skeletons 5 & 6). The medieval burials may not have been entirely visible by this time as they were partially sealed by the tumble (020) and the annex (005). There would therefore have been a less clear visual reminder of the alignment of existing burials with which to align the later burials. It is not known whether the cross-slab was still standing when Skeleton 1 was buried. While the relatively young age of Skeleton 1 argues against it being the burial of Alexander Duff, it is still possible that he was buried to the west of the chapel, rather than at Fearn.

Revetment wall and midden core

A low turf-covered bank that surrounds the chapel site was examined at the far west end of the deep central trench. This revealed a low, straight stone revetment wall (018) that retained an earth-and-stone core (036), which was sealed by further tumble of stones. This bank was part of the rectangular enclosure that surrounded the chapel, as depicted on the first edition Ordnance Survey map of 1872. This loose earth core was interpreted as re-deposited medieval midden, possibly from the same source as the earlier re-deposited midden (047) that sealed the settings (Chapter 7.4.1). The discovery of an iron fish hook was compatible with the waste that one would expect from a fishing community.

The final deposits in Phase 4 represent of the collapse of the chapel gable (027 and 015), forming a substantial bank of rubble, which extended from the base of the chapel wall up to a distance of about 1.5m and up to 0.6m deep. The stones within this layer were similar to those of the rubble core with an added clay component.

Turf and topsoil

The final phase consisted of the modern accumulated deposits of 002 and 001, which sealed the debris bank, the remains of the annex, the debris horizon and the lower portion of the cross-slab. The variety of the finds, including a golf ball and a gun cartridge case, reflected the modern recreational use of the chapel site. The area has been suffering from rabbit disturbance and several burrows were visible on the surface of the chapel site, although none appeared on the surface within the area of the excavations. The burrows had brought up further disarticulated human bone and exposed subsurface stones, which could be tumble from the chapel or further unknown remains.

3.7 Conclusions

The excavations have successfully retrieved what must be the vast majority of the carved fragments from the original cross-face of the slab. They have also examined the setting in which the lower portion was discovered and revealed an earlier setting that was previously unknown. The favoured scenario F for the cross-slab settings has taken consideration of the various strands of evidence from the excavation of the deposits in the vicinity of the settings and the condition of the lower portion itself. This scenario owes much to Barry Grove, who was present throughout the excavations and took part in the daily discussions. The art historical and archaeological evidence suggests that face A was initially carved in the late eighth or early ninth centuries while it was lying in a horizontal position. At some time in the first millennium AD it was erected into Setting 1. Setting 1 probably consisted of a single collar-stone with a slot in the centre. Beneath this collar-stone, bracing either side of a long tenon, were large sandstone blocks set into wind-blown sand. It would have been possible to carve face C while the stone was upright. There is evidence of activity on the site in the Pictish period in the form of charcoal, disarticulated human bone, and dressed stones among other rubble, all within a gradually accumulating wind-blown sand.

According to Scenario F, after an unknown period of time, the cross-slab fell, breaking off the tenon and causing the collar-stone to break into two sections (052 & 032). An attempt to re-set the cross-slab into Setting 1 involved trimming the side projections and perhaps the addition of additional collar-stones. The stone may well have fallen for a second time.

A decision was made to re-erect the cross-slab probably in the mid-12th century, deeper into the ground with flat stones on either side of the decorative face. Further packing stones and sand were put in place around the cross-slab obscuring some of the decoration from view. Some local sand (re-deposited midden) was brought in to seal the setting and a hard surface of crushed sandstones was laid around the base of the cross-slab.

A chapel was built on the site, on a slightly different alignment to the cross-slab, and the date of this has been suggested by the presence of a 13th-century architectural fragment, possibly a moulded voussoir. The possible presence of a earlier structure was implied by the discovery of sandstone tumble, which included a tooled face. During the medieval period the site was used as a cemetery.

It is thought that in the post-Reformation period (about 1650) an attempt was made to dig out the cross, but when this failed the pit was abandoned and the pit was filled up with fragments from the defaced cross. The evidence suggests that the next event was the collapse of the slab during a storm in 1674, with the result that it was lying, partially defaced, on the ground to the west of the chapel when a memorial stone Alexander Duff and his three wives was commissioned. It would appear that the memorial stone was not used for its

intended purpose (as Duff is thought to have been buried at Fearn), and it lay at the chapel site, initially on its face and then moved into a lean-to shed, represented by a D-shaped foundation, abutting the chapel gable. After the cross-slab was removed from the site in the 19th century the walls of the chapel were robbed for construction work in the village, the remaining stones collapsed and the site became grassed over.

Despite the fact that little of the site was excavated, there are traces of the medieval settlement in the vicinity, perhaps from the documented 'Catboll Fisher'. This is in the form of re-deposited midden, which has been introduced to the site, as well as wind-blown sand and additional anthropogenic material, such as pottery, a quern stone and fish hooks. The process of incorporation of artefacts continued into the modern period, although these were more indicative of recreational activities than nearby settlement.

The excavation revealed that the site was used as a burial ground predominantly for children in the medieval and post-medieval period. No coffins were found and the bodies were probably laid in the ground in shrouds. The burials were aligned eastwest, apart from two that were north-south and which are thought to have been buried after the Reformation when the chapel went out of use. The east-west alignment of burials was however re-established in the post-medieval period and there is the possibility that these relate to cholera victims. The presence of small quantities of disarticulated human bone throughout the site (apart from the lowest wind-blown sand) attests to disturbance of this cemetery by rabbits. The full extent of the burial ground is not known, although the extent of the human bone visible on the surface suggests quite an extensive area around the chapel.

Over 3000 fragments of carved debris were retrieved from the excavations. In general the larger fragments come from the middle portion and the smaller ones from the defaced cross. The location of the fragments has been recorded to the nearest 0.5m in plan and by context, which provides a degree of horizontal and vertical locational information. The analysis of the location of these fragments has revealed that the fragments are generally within 4m of the lower portion, although some larger fragments have been found at even greater distances. Some of these larger fragments were found beneath later grave-covers (013) and thus the location of at least some of these stones owes as much to human action as they do to the possibly explosive effect of the snapping of the

collar-stone. The partial reconstruction of the middle portion has revealed that it is unlikely that there are significant fragments of the Hilton slab incorporated into structures in Hilton village, because there are no missing pieces big enough to have been utilised, for instance, as lintels.

One of the aims of the project was to provide a workable reference catalogue which could inform the reconstruction of the cross-slab and this has been achieved (see Chapter 7 and the archived database). Because of the large number of fragments it was not possible to complete this database until June 2005 and this proved too late in the project to be utilised to its full potential by Ian G Scott and Isabel Henderson. However, a series of distribution patterns have been produced which have fuelled further questions.

It was hoped that analysis would reveal the nature of the red colour of the carved surfaces. While Allan Hall discussed possible causes of the red colouration or 'brown staining' (see archive), this was unfortunately, not followed up with further work on the surface composition and remains a potential avenue of research for the future.

The OSL dating programme provided a series of dates which, despite the experimental nature of this method, appear to be accurate and 'in the correct order'. They could not be used to date the settings directly but have suggested that the second setting belongs to the mid-12th century AD. The layer of 'fragments' has been intriguingly dated to the mid-16th century, a century earlier than the carving of the memorial to Alexander Duff and the possible felling of the stone in a storm. Also brought into question was the dating of the introduction of Scottish Redwares, which the OSL dates suggest could be as early as the 12th century rather than the conventional 13th century. If the site were to be excavated again, it would be advisable to take many samples from each context for OSL dating, as this would provide a more detailed chronological framework for the site than could be provided by the limited scope of this programme.

Very little can be said about the archaeological significance of the rest of the chapel site as shown in illus 1.3, as such a limited area was examined. This is a great disadvantage when attempting to discuss the Pictish and later contexts of the cross-slab. Again, in the future, it would be useful to examine some of the surrounding features, including the chapel, the possible medieval enclosure, the later enclosures, and a more extensive examination of the deposits beneath the horizon of fragments. This could reveal more

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information about the landscape and activities taking place on this important site.

The archaeological investigations, despite being small in scale, have provided a complex array of sometimes contradictory evidence which has been a challenge to bring together into a coherent story. The most significant contributions of the archaeological investigations to the biography of the monument have been the confirmation of Pictish activity (including human burial) on the site, which provides a satisfactory context for the original setting of the slab, the discovery of the lower portion *in situ* by the chapel, the retrieval of the carved fragments and the successful application of the OSL dating technique.

Notes

- 1 Barry Grove and Peter Hill pers comm.
- 2 Carver 2004, 26.
- 3 Kirkdale Archaeology 1998.
- 4 Kirkdale Archaeology 2001.
- 5 Ian G Scott pers comm.
- 6 Ian G Scott pers comm.

- 7 R Will pers comm.
- 8 Stephen Watt and John Turner pers comm.
- 9 Ian G Scott pers comm.
- 10 Ian G Scott pers comm.
- 11 Barry Grove pers comm.
- 12 Stephen Watt and John Turner pers comm.
- 13 Richard Fawcett pers comm.
- 14 Carver 1998.
- 15 ECMS, pt III, 68.
- 16 James 2005, 95–6.
- 17 Gourley & Pollock undated MSS.
- 18 McCullagh 1995.
- 19 Ames 2005, 102-4.
- 20 Kirkdale 1999; Ewart et al forthcoming.
- 21 NLS Adair MSS No 2.1683.
- 22 Fisher 2001, 98-9.
- 23 Fisher 2001, 16-17.
- 24 Fisher 2001, 55.
- 25 Fisher 2005, 86, 89.
- 26 Driscoll et al 2005.
- 27 Fisher 2001, 135.
- 28 Barber 1981, 100.
- 29 Henderson & Henderson 2004, 198-200.
- 30 Fawcett 2002, 24-7.
- 31 Richard Fawcett pers comm.

Chapter 4

The cataloguing of the Hilton of Cadboll cross-slab

ISABEL HENDERSON

4.1 Terminology

For purposes of study the slab is described moving anti-clockwise round the monument: the broad face A is the front of the slab, with narrow face B, to its right; the broad face C is the back of the slab; narrow face D is to the left of face A (illus 4.3a & b). Face E is the upper edge of the slab. The slab displayed in the National Museum of Scotland comprises the defaced upper portion of face A (the face with the 17th-century memorial to Alexander Duff), and the upper portion of face C (the face with the symbols, hunting scene, and part of a spiral panel, all contained within borders of vine-scroll). The fragments of carving removed from the original upper portion of face A which were recovered in the excavations are currently housed in the National Museum of Scotland.

The lower portion is the part of the slab excavated in 2001. It is damaged at the bottom edge, and the lowest area of the carved surface and virtually all of the original tenon are lost. Modifications to faces B and D were made at some later period in order to provide a substitute tenon. The lower portion is currently displayed in the Dolphin Cafe of The Seaboard Memorial Hall, Balintore, Ross-shire. The fragments which belong to the area of the slab between the lower and upper portions are described as belonging to the mid-portion. These mid-portion fragments, as well as the fragments mentioned above as assignable to the original upper portion of face A, have been accessioned by the National Museums of Scotland. The recording and cataloguing of the fragments took place in the National Portrait Gallery in Edinburgh.

4.2 Introduction

The recovery in 2001 of the lower portion of the slab with all four faces intact provided instant information about the original thickness of the slab, the nature of the lower edge of the vine-scroll border on face C, and a dramatic sample of the dynamic carving on the previously wholly unknown original face A. In striking contrast, assessing the information implicit in the 11,252 fragments also recovered in the excavations

has involved long patient study. Some 7497 fragments considered to be from the missing parts of the cross-slab have been catalogued individually.

The fragments have varying physical characteristics, which can aid the reconstruction of the appearance of the mid-portion of the slab and the carving on the upper portion of face A. A thin slice of the upper portion of the original front face had been neatly chiselled off and dressed flat for reuse as a memorial slab. This secondary dressing no doubt accounts for many of the smaller chips of carved and uncarved fragments, while thin carved fragments can be considered for location on the upper portion of face A. In general, the carved stone, whether assaulted by a chisel or more forcefully damaged, tends to fragment either conchoidally, resulting in a convex back, or with a markedly flat back. Other fragments have fractured in such a way as to produce an uncarved sloping area. These characteristics greatly aided the reconstruction.

The severance of the upper portion from the newly recovered lower portion involved violent destruction through the entire thickness of the slab. Large fragments, some as thick as c170mm, come from this mid-portion point of severance. Some of these are carved with sections of vine-scroll and large triple spirals carved in low relief, and undoubtedly belong to face C. Other thick carved fragments display parts of animal ornament such as is found on face A of the lower portion, and thus they obviously came from face A. One such fragment, .5, with a fine animal head and animal body parts was known from the time of excavation to fit on to the lower portion, but only in May 2005 was it possible to confirm the nature of the fit, and lack of access to the lower portion has prevented building on this and other conjunctions between mid-portion fragments belonging back to back on all the faces of the mid-portion of the crossslab (see illus 5.33a & b). Some of these larger midportion fragments suffered further impairment of their carved surfaces through natural lamination that created very thin frail slivers of carving, some of them comparatively large in area. The excavation records show this process underway. Other fragments from

this mid-portion have no discernible carved surfaces and may be internal fragments. The violent severance of the upper portion from the lower portion will undoubtedly have pulverised many carved surfaces, and their nature is lost forever. Other reasons for loss of material may be the removal of larger fragments from the site, or simply that the defacer stood on small fragments as he worked with his chisel.

The process of reconstruction of the appearance of face A has frequently been described somewhat simplistically as similar to the task of completing a jig-saw. For face A this is, of course, largely a jigsaw without the assistance of the complete design. Quite apart from the chips of secondary dressing and the internal fragments described above, all the carved fragments are three-dimensional and a means of determining their orientation is rarely present. The difference in section of the narrow faces, face B (bevelled) and face D (rounded), which create the lateral edges of face C, is one of the few ways to identify the right side from the left side of the slab, thus aiding the location and orientation of fragments. Another is the crude assumption that the fragments of human figures are unlikely to have been depicted upside down. The device of sorting the carved fragments in boxes of sand was essential, for it allowed the carved faces to be set on a level plane. The methodology for sorting, drawing and classifying the fragments is fully described in Chapter 7.1. So far, it has not been possible to affirm with confidence whether or not the majority of the fragments belonging to face A when complete has been recovered. Aspects of the remnants of figure sculpture on face A suggest that some other event in the disintegration of face A led to a horizontal line of impairment in the upper area of the mid-portion. No stone or bag of chips has been left unexamined and all are retrievable for future examination.

Disappointingly, nothing of the shape of the crosshead has been revealed as yet by the fragments, but a full inspection of face C of the upper portion by staff of the National Museums of Scotland, for photography and close examination of key areas of carving, included an inspection of the upper edge, face E. This showed beyond reasonable doubt that the damage at its central area, consistently recorded in early drawings and photographs, was the result of the removal of a projection. Taken with the scars of projecting features on faces Band D at a level appropriate to the transverse arms of a cross it would seem, that like some other Pictish monuments, the cross-head was emphasised by projecting the upper and transverse arms beyond

the edges of the slab. This new perception of the contours of the Hilton of Cadboll cross-slab gives at least an outline for the cross-shape on face A, and gives a further indication of the ambitious nature of a monument which in its breadth and height is already quite exceptional.

The aim of the cataloguing is to provide descriptions and discussion of those carved fragments which with reasonable certainty can be used to reconstruct and describe significant aspects of the lay-out, subjectmatter, and decoration of the mid-portion and of the original upper portion of face A. Initially around eight hundred fragments were selected for cataloguing, either because of their probable connection with the known nature of the mid-portion of face C, or because of the apparently informative nature of the fragments and their carved surfaces. Thereafter, a further selection of carved fragments was made to retrieve smaller but potentially informative carving. Eventually a total of some 7497 fragments were given individual catalogue entries. All these entries can be interrogated on the electronic database. Had work on the fragments continued there is no doubt that other useful fragments could have been identified, for although many of the later selection of fragments for cataloguing consisted of tiny and ambiguous carved fragments, a significant number of them eventually found a place in the reconstruction.

The cataloguing process has also made it possible to characterise the physical nature of a fragment belonging to the Hilton of Cadboll cross-slab, a characterisation. which, in conjunction with the analysis of the material composition of the stone, can be used to identify more fragments from the cross-slab which may still be on the site. Cataloguing also initiated provisional identification of any fragment which was judged not to belong to the Hilton of Cadboll cross-slab. Providing a monumental context on the site for the slab was an aim of the excavation. The recovery of a substantial fragment of a plain relief carved crossslab demonstrates that the Hilton slab was not the only early medieval monument on the site (Chapter 7.5.1). The project should also provide a methodology for the examination of other defaced or fragmented monuments, and for recognising the debitage of either the original carving process or of later destruction. For the Hilton of Cadboll cross-slab some significant information was obtained on the later destructive processes, but, because of the apparent resetting of the slab, debitage from the original carving is likely to be located outwith the excavated area.

4.3 The catalogue entries

Initially it was intended to give single fragments, conjoined fragments and clusters of four or more conjoined, or associated, fragments individual catalogue numbers. This would have allowed the bringing together of fragments that displayed the same type of ornament in a consecutive numbering sequence. As work progressed it was recognised that difficulties might arise in making decisions about the appropriate renumbering of the many ambiguous fragments, and of fragments carved with two types of ornament. Because cataloguing was regarded as an aid to reconstruction, each fragment was examined with the care commensurate with the strong hope of conjoining it to other fragments, understanding its role in the original design, and generally defining characteristic traits of the sculptor. The ascription of fragments to different portions and faces, and to the original upper portion of face A in particular, is based on the considered opinions of the cataloguers but often remains open-ended. To have been content with a simple objective inventory would have failed to capitalise on cataloguing as a means of aiding present and future reconstruction. To the difficulties created by ambiguities was added the unpredictability of the timing of the finding of conjunctions, which might have changed the basis on which the renumbering depended. It would also have been necessary to substitute the new catalogue number for all the careful comparative crossreferencing made by the cataloguers using the National Museums of Scotland X.IB 355 numbers. The idea of creating new catalogue numbers was therefore set aside as impractical.

It is intended that accompanying pages of illustrations will provide, at a glance, representative examples of the individual patterns and subject-matter employed by the Hilton of Cadboll sculptor on the upper portion of the original front face of the slab. In addition to the complete catalogue of individual entries (including some entries for clusters) in the database, cataloguestyle descriptions covering the whole cross-slab as it is currently known follow this introductory text. These should give the reader a sense of the transformation of the Hilton of Cadboll slab of the 20th century to the Hilton of Cadboll cross-slab of the 21st century. The entry for the original upper portion of face A will characterise the carved fragments assignable to this face of the slab, even though nearly all of them are still free-floating in terms of their location on face A. Work by Douglas Morton, the cataloguer who has most experience of the later stages of the catalogue and of the complete database, focuses on the many fragments with edges and mouldings with the aim of identifying the lay-out of the designs on face A (Chapter 7.2.4). Although some suggestions can be made, the bringing together of the repertoire and its lay-out on the original upper face A will be work for future investigators.

The fields used in the catalogue entries are as follows:

Finds number. The finds number refers to the location of the 0.5m square in which the fragment was found. The first four numbers of the finds number is the easting and the second four numbers are the northing. The numbers after the full stop differentiate the large fragments that were found in this square and was allocated on site.

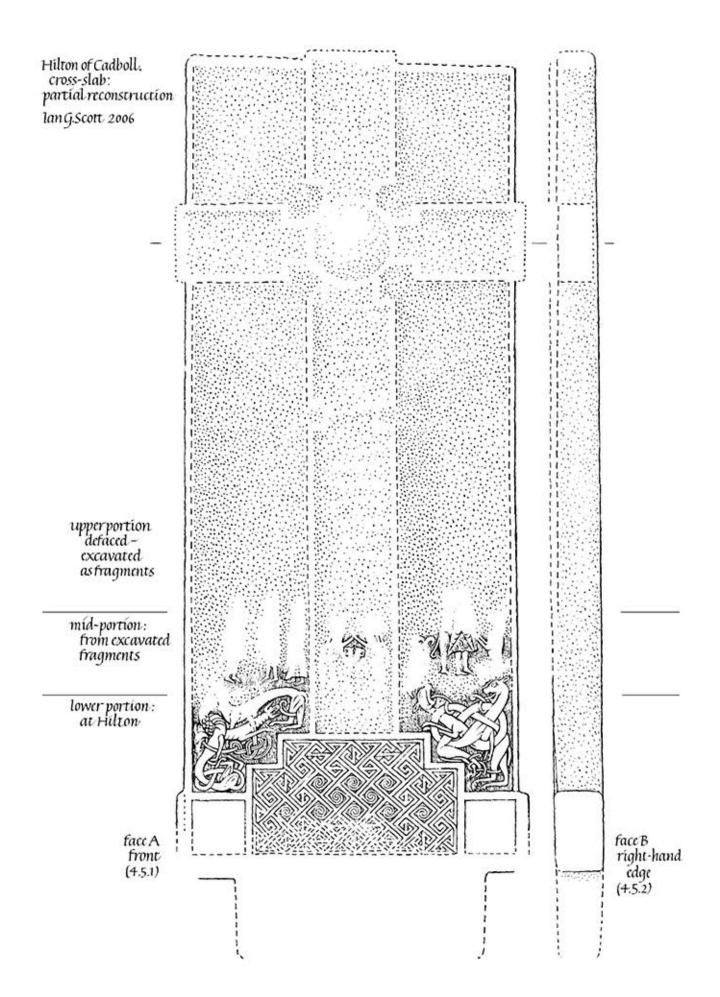
The National Museums of Scotland accession number. The number comprises four elements: X represents the Department of Archaeology; IB indicates sculpture; an accession number follows, 189 for the upper portion and 355 with a numeric sequence following a stop for all fragments associated with X.IB 189. In discussion, fragments are identified either by their full number, or by an abbreviated number giving the stop and the number following 355. There is no accession

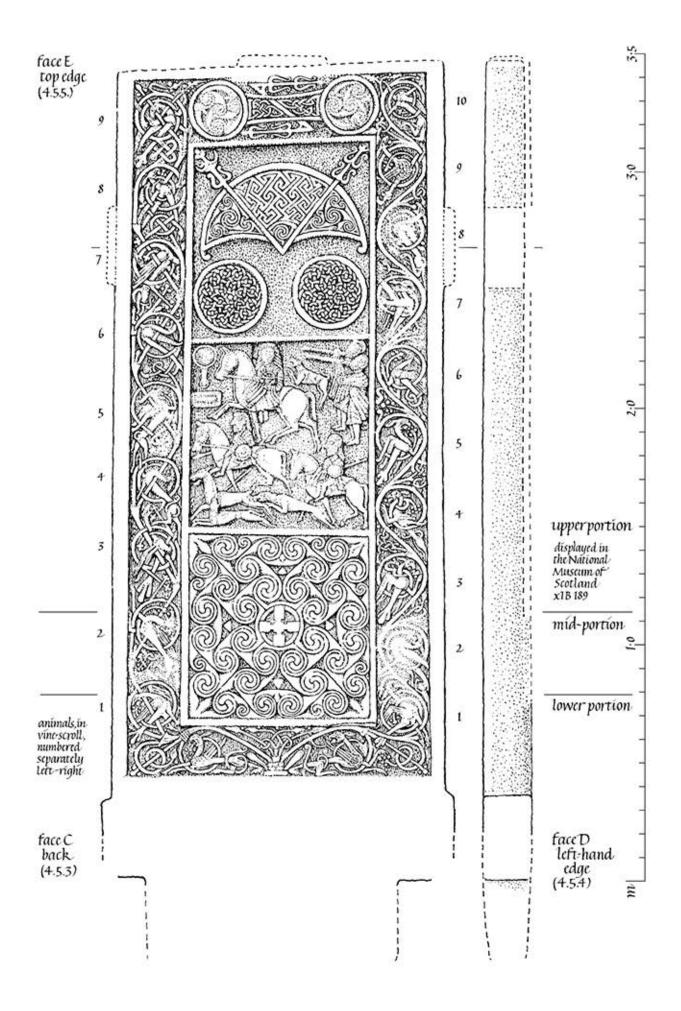
Illustration 4.3a & b Hilton of Cadboll cross-slab, partial reconstruction of the upper, middle and lower portions (scale 1:15)

Note by Ian G Scott. Although face C (with the spiral panel, midportion X.IB 355) seems to reconstruct fairly easily, following previous predictions, problems have been encountered. For example, the drawing sets the bottom left corner of the spiral panel rather lower than work with the NMS conservator (at the Seaboard Memorial Hall on 25 May 2005) suggested, because of subsequent difficulty with pattern fitting. Also, the left panel of scroll looks slightly too large, but any correction could not be reconciled with the size of the panel in the right, as reconstructed.

Locating clusters of fragments on face A (the cross) has proved more difficult. Practical problems did not allow complete bonding. The position of the left and right blocks are known but the fitting of these together will depend on more careful physical positioning on the bench. Until then the depth of the slab in the centre remains in some doubt and thus also the absolute connection between the left cluster and the central cross. The fitting of back to front seems quite possible (by measurement) and should be tested. No suggestion for the filling of gaps on this side has yet been proffered, and there remain few fragments which may be useful for this purpose.

Some of the problems encountered in the drawing of a reconstruction may well be resolved if the clusters were reversed and the backs and sides of the mid-portion observed, recorded and photographed. This would presumably require a 'workshop' layout and would be much enhanced by physical access to the lower portion, and further measurement. Faces B & D remain under-recorded owing to difficulties of access for observation and recording.





number for the lower portion, which is not part of the Museum's collections.

Measurements. The maximum length and thickness of the fragment is expressed in mm, and the weight, in gm. (In the descriptive fields 'width' is used for the width across a band, strand or strip.)

Class. This classification was devised as a result of an examination of the lithology of the fragments. Class IA, the most important group, is defined as a carved fragment which probably belongs to the Hilton of Cadboll cross-slab. For the other categories see Chapter 9.1.

Keywords. A maximum of three keywords taken from the catalogue description, to aid searches in the electronic database and for distribution analysis of the find spots of fragments carved with different types of ornament. See Chapter 7.1. Definitions of the less self-explanatory keywords appear in the Glossary.

Condition. A note on the condition and surface appearance of a fragment at the time of its examination, including wear, colour, and the presence of 'blebs', swellings the size of a nail-head, caused by oxidisation, that can result in weakening the stone structure.

Fracture. Observations are recorded which include the shape of the fragment and any signs of later destructive toolmarks. Many of the fractures resulting from the 17th-century defacement of face A have a carved front, a convex conchoidal back, and a well-defined notch made by a chisel (see illus 7.12).

Short description. This introduces the main body of the entry and provides a brief objective description.

Long description. This covers the cataloguers' observations, interpretations and reservations, and includes noting the presence of original Pictish toolmarks such as the stugging or pecking of faces B and D.

Discussion. This field is intended for free speculation, the recording of conjoined fragments, and for cross-references to analogous forms among the fragments. Suggestions are made for further study of certain distinctive types of fragment. For the more complex pieces, which were catalogued at an early stage, more general art-historical observations were included in this field. For very small fragments the use of the discussion field was not always appropriate. In the database this field is used, additionally, as the up-dating field for recording fresh observations relevant to fragments in the catalogue, and their context.

4.4 Conclusion

Much of the cataloguing was done while Ian G Scott was sorting and recording the carved fragments, or at work on the reconstruction. The cataloguing process was enriched by this juxtaposition and the arrangements in the National Portrait Gallery were ideal for maximising observations which led to the fitting together of fragments. The cataloguing process remained investigatory, and morale was thereby kept up during the cataloguing of the less obviously significant fragments. Although by far the greater part of the reconstruction was achieved by Ian G Scott, the vigilance of the cataloguers, Meggen Gondek and Douglas Morton, contributed significantly to the process. The bonding of proposed conjunctions, which involved independent vetting, was the work of the conservation department of the National Museums of Scotland. The photography of the most informative fragments and the reconstruction of the mid-portion of faces A and C is the work of Neil McLean of the Photography Department of the National Museums of Scotland, with the assistance of Douglas Morton.

From the above account it will be apparent that the fragments recovered have not yet yielded all the information that was hoped for in the early years of the Hilton of Cadboll project. It is frustrating that there is no doubt that the longer the time spent on the fragments the more significant are the results achieved, and the more apparent are the best methods of achieving them. However, an 'honourable stop' had to be made. What is certain, however, is that further study can go forward based on the project's methods of cataloguing and recording of the fragments, from the point of excavation to the post-excavation analysis. Suggestions for possible future lines of investigation are made elsewhere in this volume, for which see, in particular, Chapter 7.2.3 and 7.2.4 by Stuart Jeffrey and Douglas Morton.

4.5 Catalogue

4.5.1 Face A (illus 4.1 in pocket, illus 4.3a & b)

Face A, lower portion (illus 4.4a, 5.3)

Finds number: none Context number: 008

Measurements: max width c1420mm, max thick c210mm, max height c840mm, weight unknown

Keywords: cross-shape, animal, key

Condition: all surviving carved surfaces are well preserved, with the exception of the upper horizontal moulding of the cross-base and the lateral edges of the slab which are damaged and worn.

Fracture: the severe damage on the upper edge that severed the lower portion from the mid-portion has the appearance of being caused by a blow directed at the bottom of the cross-shaft where it meets the base. However, it is possible that a fall due to natural causes could account for its appearance. The fracture is concave, with the deepest loss in the area of the cross-shaft. The damage to the bottom edge, resulting in the loss of the carved lower edge of the slab and the original tenon, has more of the appearance of a natural arc-shaped break. The lateral projections, which are the outer edges of blank panels which flank the cross-base, have been deliberately refashioned by cutting away. Their original relationship to the design of the slab is shown better on this face than on face C where there is no carving adjacent to the projections. The lower surviving edge of the slab, now concealed by the display stand, is recorded in the reconstruction drawing.

Short description: The carved surfaces show a twostepped cross-base flanked with contoured but otherwise blank panels. The base is decorated with key pattern, with some terminals treated as triple spirals. The spirals are raised to create three lines of bosses consisting respectively of three, two, and on the lowest row five high-relief bosses. On either side of the base large-scale ornamental animals, elongated and entwined, are carved in high relief.

Long description: A trace of the return from the base up the cross-shaft has been preserved on the right-hand side. A very slightly larger return is present on fragment .3030 which was detached at the time of the excavation and remains unattached. It conjoins fragment .2998 which preserves a trace of carved surface lying within the cross-shaft. These returns give us the width of the shaft which is c390mm.

The very exact geometry of the decoration of the cross-base is fixed by the centre point of the slab, which is also the centre point of the cross-shaft. The breadth and height of the steps at $c150 \,\mathrm{mm}$ were designed to be the same size (the sides of a square) and the breadth of the blank panels is twice the breadth of the steps. The key

pattern was gridded to produce diagonally set squares where the central bosses of rows one and three were aligned vertically with the central point of the slab. The grid also controls the distances between the bosses. The bars which are juxtaposed to the bosses are made of reversed Z-shapes, set horizontally or vertically. At those parts of the design on the periphery of the centrally placed bosses, but juxtaposed to the bosses at the edges of the bottom row of five bosses, are bars bent to form an axe-like shape. These are symmetrically placed, in mirror image, to the right and left of the field. The corners of the field are mitred with the bars closed horizontally on the left and opened diagonally on the right. The distance between the outer edge moulding of the shaft of the cross and the edge of the slab was designed to be roughly four times the breadth of the steps. The translation of the design into relief sculpture would, of course, lead to some loss of exact measurement. For example, the second step on the right of the base is fractionally larger than that on the left, and the internal measurement of the blank panel to the right is fractionally smaller than that on the left. To a large degree the balance of the design would be something the sculptor could achieve by instinct. The challenge, geometrically, was to design a key pattern that filled the field and centred the spiral bosses. The alternate twist of the spiral bosses, to the right in the top and bottom rows and to the left in the middle, is standard practice.1

To the right and left of this rigidly geometric field are carved, recessed into the thickness of the slab, parts of five large-scale ornamental animals, arranged in free-style, that is, without any regard for symmetry. Only one of them, on the left margin of the slab, has survived complete on the lower portion but there is nothing in the arrangement to suggest the possibility of lost mirror-image symmetry higher up the slab. The complete animal lies on the outer edge of the group of three to the left. Its attenuated tubular body forms a reverse S-shape. Its long neck is hooked on to the body of a scaly creature, the heavy head drooping on to its slightly swollen chest. From a pear-shaped shoulder a slender foreleg hangs limply, close to its body, to end in a hoof-like foot. The body forms a wide curve. The hindquarters are slender. Both legs are shown, the haunches defined by surface marking on their edges presumably to define the contour of the muscles. The creature has an extended

tail which sweeps between the hindquarters to loop round its own body and fetter its off-side leg. The neck has well-defined twisted hanks of mane expressed by curved ridges. The naturalistic head is the most powerful part of the design. The skull and brow are rounded. A well-defined leafshaped ear lies along the back of the neck. A round eye socket is set within the brow. The muzzle is separated from the brow and skull. The jaws have a modelled contour line and are wide open. The top jaw has a fang. From the mouth emerges an extended tongue which passes over the animal's body and under its foreleg to end within a loop of interlaced band marked with a median-incised line. The interlace has one end free, while the other end passes between the extended forelegs of a scaly creature whose body interlocks with the complete S-shaped animal. A stick-like leg passes behind the shoulders of the scaly creature and must belong to a largely lost third animal. (The mid-portion fragment .1 was found to preserve the hinder part of the body of this third animal and the head of the scaly creature which was biting its tail.)

Although as described the arrangement of the animals seems crowded, in fact the bodies are clearly differentiated by surface marking, and the spaces between the interlaced forms are generous. The motif produces a design contrast between fleshy bodies and mats of interlaced forms.

The two animals to the right are of the same general type although they are larger in scale and more distorted in form. A large pair of hindquarters with rounded haunches lies on the outer edge of the slab, occupying the lower right corner of the field. Like the S-shaped animal to the left of the cross-base, the haunches have surface marking and the legs bend sharply at the hock. The offside leg ends in a neat ball-and-claw foot. The nearside foot droops and is fringe-like. The narrow body stretches up in the manner of a rampant animal. Its extended tail passes under its offside leg and over its nearside leg to pass between and loop round the small-scale hind legs of a similar animal. These small hind legs do not bend but are extended over the corner of the second step of the base, curving slightly to end in small hooves. The tail of the creature with smaller hind legs passes through its own lower legs. Its narrow tubular body passes over the tubular body of a larger creature of the same species. It then passes under its own shoulders to loop round the body of this second creature. Its

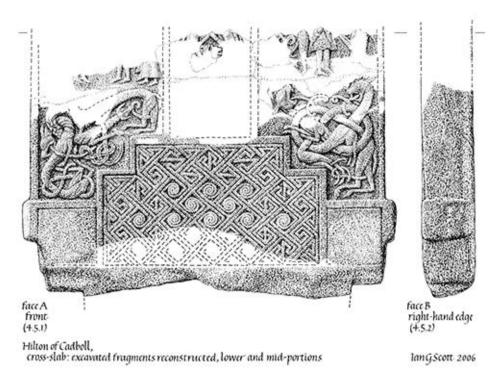
forelegs rest on the corner of the first step of the base and nip the body of the second creature. This second creature has a curved body and its slender forelegs grip the body of the creature with the diminutive hind legs.

The device whereby animals grip each other's bodies between their forelegs is not present in the animal ornament to the left of the cross-base. (The interpretation of the animal motif on the right of the slab was not obvious until the large midportion fragment .5 and mid-portion conjoined fragments .11/.265 were found to fit on to the lower portion. It then became clear that two large elongated animals with naturalistic heads made up the motif.) The surface condition of the two blank panels flanking the base varies (see Chapter 7.2.2). The panel to the left is carefully worked, the panel to the right much less so. It is possible that the panel to the right has been damaged, but perhaps, more probably, a decision not to carve these fields was taken and the need for further preparation regarded as unnecessary. Enough of the laying out of the panels survives to make it clear that the projections were part of the all over design of face A. They extend the stability and grandeur of the cross-base and in their plainness heighten, perhaps fortuitously, the dramatic impact of the densely carved bossed base and disturbingly unshapely tangled animals.

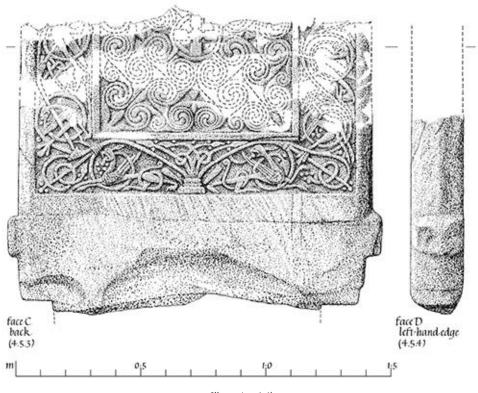
Discussion: As yet no key pattern of the type that fills the cross-base has been located among the fragments of key pattern assignable to face A. Animal heads, bodies, appendages and extensions similar to those described above occur on a number of carved fragments thought to belong to face A. Some have been located within the mid-portion associated with figure sculpture and within the cross-shaft. Others can with confidence be assigned to the upper portion of face A but are so far unlocated. The art-historical importance of face A of the lower portion lies in the unique nature of the base and its decoration, and in its animal ornament, which can be shown to have close connections with the local Nigg cross-slab, the St Andrews Sarcophagus, south of the Grampians on the east coast, and with other works of Insular art of the later eighth century. For the implications of these connections see Chapter 5.

Note

1 ECMS, pt II, 376-7.



 ${\it Illustration~4.4a}$ Hilton of Cadboll cross-slab faces A and B, lower and mid-portions (scale 1:15)



 ${\it Illustration~4.4b} \\$ Hilton of Cadboll cross-slab faces C and D, lower and mid-portions (scale 1:15)

Face A, mid-portion (illus 4.4a & b, 5.35)

NMS Number: X.IB 355

Measurements: max height c400mm, including c200mm known to have been attached to the lower portion, max width c1420mm

Keywords: animal, human, toolmark

Condition: some of the carved surfaces are in good condition preserving high relief and surface detail, but many of the fragments have large areas of lost surface.

Fracture: the mid-portion of face A comprises 16 fragments. The fracture at the upper edge of the lower portion presents as a curved convexity with the lowest point in the area where the cross-shaft would have met the cross-base. Three large fragments of large-scale, high-relief animal ornament, .1 to the left of the cross-shaft, and .265 and .5 to the right, were found in May 2005 to attach to the surface of the concave fracture (see illus 5.33a & b).

The fragments in the mid-portion above these animal motifs have some large components, for example .268 on the left and .6, .7, .8, and .11 on the right. Characteristic of the fragments to the right is the way in which uncarved surfaces interlayer. Both sides share the feature of the fracture of human figures so that nothing of their anatomy above the waist survives. The presence of the destructive toolmarks of a chisel on .7 and on the adjoining fragment on the right edge raises the possibility that these fragments were chiselled off the surface of the slab in the 17th century. There are no signs of such destructive toolmarks on the upper edges of .21 and .268, on .8, or on .9, the large fragment from the cross-shaft decoration. The Pictish sculptor's characteristic shaping and stugged tooling of the right edge of the slab played a crucial part in the location of fragments.

Short description: The area occupied by the cross-shaft is defined by features on the upper moulding of the cross-base on face A of the lower portion (see above). The shaft decoration survives on three conjoined fragments of animal ornament. The animal motif to the left of the base on the lower portion is completed on the mid-portion by a fragment showing an animal biting the tail of another animal. The animal motif of two confronted animals to the right of the base is completed on the mid-portion. Above the animal motif on the left is the remnant of a scene originally

involving at least three figures. Above the motif to the right is a truncated figure with the haunch of a leonine naturalistic animal at his right and part of an ornamental animal of the scale and type of the motifs on either side of the cross-base on his left.

Long description: The conjunction of .8 (which links with fragments that extend to the right edge) and .9 requires .9 to be located in the central area of the slab, that is, on the cross-shaft. What survives of the carved surface of .9 consists of parts of a pair of confronted animals, of the same scale and type of those flanking the cross-base, with their forelegs stretched out to meet and cross. Two small fragments, .47 and .737, were found to conjoin to produce the upper part of a motif of addorsed animals both with the rounded brow and open fanged jaws typical of Hilton animal heads. This conjunction was found to belong to the surface of .9 in the area immediately below the crossed forelimbs of the larger animals (see illus 5.14).

The animal motif on .1 conjoins with .268 and .294 which itself joins to .2l. Immediately adjacent to the left side of the cross-shaft, the lower anatomy of a figure with feet facing to the left wears an anklelength robe that clings to his limbs and tapers at the hem. He stands behind the legs and feet of a figure that also faces to the left. The offside toe of this figure is on .2l. This fragment has a significantly large area of uncarved but dressed surface. At its edge a pair of feet at the same level of the other figures faces to the right.

To the right of the shaft a scene is focused on the truncated body of a single figure. The body is expressed in rounded high relief. The scale of the figure with his short patterned tunic and long legs is somewhat larger than that of the robed figure to the left of the shaft. On the figure's right is a naturalistic haunch of a large lion-like animal, possibly with a tufted tail and a prominent dew claw. Behind the haunch, on conjoined fragment .8, is a small section of two interlaced high-relief tubular bands, one of which appears to have an animal head. This could be part of serpentine ornament, but the confined location would not allow it to be part of a panel with structural serpentine ornament such as is found on other Easter Ross cross-slabs. To the left of the figure, with forelegs stretched out towards him, is part of an animal of the scale and type of the animal motifs on either side of the cross-base (see illus 5.35c).

Discussion: There is no indication that panel mouldings separated either of the figure scenes from the animal motifs below. The head of one of the confronted animals on the left, .265, looks up, rather than towards the animal it confronts on the lower portion. This positioning may suggest that the scene with the single figure relates in some way to the tangle of distorted animals beneath it. There is no such indication surviving on the left side but there would have been an animal head somewhere in the area of carving missing to the upper left of the motif and it is possible that it too looked up towards the figures above. The presence of figure sculpture on the cross-face A is of great importance for it extends the number of instances of potentially scriptural iconography on Pictish sculpture.

The evident interaction between the three figures on the left and the unusually ornate tunic of the single figure on the right are rare in Pictish sculpture. In spite of the indications of the importance set on these figural scenes the iconography is very difficult to establish not least because of the truncation of the figures. There was certainly at least one other figure on face A, for a human leg and foot survives on .340. The leg is roughly similar in scale to the other figures but is carved in a different way from the truncated figures currently located in the mid-portion of face A. There are also five fragments (.16, .37, .48, .54, .28) each of which may represent a human head but none is certainly so (see illus 4.16). The possibilities of their location on the slab are raised below in the description of the fragmented original upper portion of face A, and their relationship to other Pictish representations of the human head discussed.

The reconstruction of the mid-portion of face A although involving a small area of carved surface has been rewarding. Here we are in wholly unknown territory, but what has been recovered relates closely to what has survived on the lower portion, thus extending its significance, and has given us a precious glimpse of the cross-shaft and its decoration. The figure with the patterned tunic, albeit truncated, must rate as a rare representation of fine garments such as appears more often in contemporary literature than in contemporary art. It was with something like disbelief that the conjunction to the right of the figure was found to involve a large-scale decorative animal. The earlier, more obvious, suggestions for the identification of an important figure associated with lions, such as David, King of Israel, or the prophet Daniel, had therefore to be discarded. The case for reading the figure sculpture as having to do with 'the four last things: death, judgement, heaven and hell' is made in Chapter 5.

Face A, defaced upper portion (illus 4.1 in pocket)

NMS Number: X.IB 189

Measurements: max height c2340mm, max width c1404mm at the bottom and c1394mm at the top, max thickness c190mm

Condition: the lettering is clear and the surface, though pitted, seems unimpaired, except for a hollow slightly to the left of the date in the last line of the memorial inscription, and some breaks on the edges. Both Campbell-Kease and Thomson (see Chapter 7.2.6) are of the opinion that the letters T B and N, incised on the banner in the second quarter of the heraldic shield, are an example of early graffiti.1 If so, like the initials on the upper portion of face C, they are neatly cut and unobtrusive. What remains surprising is that, if the story of the abandonment of the memorial, by whoever commissioned it, is true in any respect (its physical size can scarcely have been an adequate reason), one would have expected the name of Duff and the initials of his wives to have been obliterated, or at least for the slab to be turned back again so that their resting place was not recorded in two nearby churchyards. The inscribed face is in comparatively good condition. Had the slab been turned in the 17th century in such a way that the reused front face was hidden, and the back face exposed, and then turned again to expose the defaced front (perhaps by some other hopeful recycler who was sorry to discover an inscription) before Cordiner detected the carving on the back in the 1780s? The simplest, if unprovable, solution is that Duff and his wives were in fact buried in the cemetery at Hilton of Cadboll. The story of the slab's abandonment could then have been contrived to explain the shameful removal of a gravestone from a grave out of antiquarian interest in the carving discovered on the other side.

Fracture: it is now known that a thin slice of around 20mm was removed from this face in order to dress it flat for reuse as a memorial slab. The defacement may also have removed some areas of higher relief. The appearance of the cast made by the National Museums of Scotland of the lower edge for the redisplay of the slab in the Museum of Scotland in 1998 suggests that the lower edge was comparatively

irregular. One would have expected the lower edge to have been worked neatly at the edge had the slab been planned in the 17th century as a table-top memorial. Was it then unfinished? If it was intended to be set upright in the ground, or sunk at ground level then the irregularity would not have mattered, for only its bordered edge would have been visible. It is possible, of course, that the irregularity was the result of the display at Invergordon Castle.

Long description: The face, cleared of all trace of eighthcentury carving, has been dressed flat to create a memorial slab with an inscription, dated to 1676, incised on the upper half of the slab. Immediately below the inscription, a recessed heraldic shield allows the heraldry to be expressed in relief. The shield is flanked by four sets of incised letters, which read right to left: A Duff followed by the initials of his wives.

Two incised parallel lines, 70mm apart, create a blank border round the edge of the slab. The inscription and the shield occupy only slightly more than half of the enclosed area. This may be a usual positioning on a slab, enabling the shield to have a more or less central position, but the space left below would allow for further inscriptions.

The inscription reads

VEIL
HE THAT LEIVES VEIL DOOES
SAYETH SOLOMON THE WYSE
HEIR LYES ALEXANDER DUFF
AND HIS THREE WYVES 1676

The lettering style and the lay-out of the inscription are discussed by Thomson (Chapter 7.2.6). For the interpretation of the heraldry and the identification of the initials of the wives, see Chapter 6.4. Campbell-Kease and Thomson point to mistakes in both the inscription and the heraldry. Could it have been that when the Duff family, and evidently also the Urquhart families, saw the reversed couped heads in the third and fourth quarters and the conspicuously floating VEIL omitted from the first line of the inscription they decided it was unworthy and decided to commission another slab?

Discussion: The biblical-seeming source of the epitaph has not been identified and it is possible that it too contains a mistake. The saying attributed to Solomon the Wise is difficult to understand. It reads HE THAT LEIVES VEIL DOOES VEIL. In *The Book of the Duffs* compiled by Alistair and Henrietta Tayler is

included, in a section devoted to 'Duffs unconnected or unidentified', a reference to the inscription on the Hilton of Cadboll slab, but it gives a different version of Solomon's saying as 'Live well and die well', a natural amendment of the Hilton epitaph.2 Careful searching in Proverbs and Ecclesiastes in the King James Authorised Version of the Bible, and in The Wisdom of Solomon and Ecclesiasticus in the 1611 edition of the Old Testament Apocrypha has identified nothing that fits the sentiment 'He lives well who does [charitable acts?] well'. Whereas the constant refrain of all these sententious texts is indeed 'who lives well, dies well'. For example, in The Wisdom of Solomon 3.1, 'The righteous are in the hand of God, no torment shall touch them' and 4.7, 'a righteous man, though he die before his time shall be at rest'. The rich collection of 17thcentury inscribed post-reformation tombstones in St Andrews Cathedral Museum includes epitaphs in Scots and Latin from 'Sap', Wisdom [of Solomon], and express sentiments such as 'Death cannot be evil to him who has lived righteously'. The Hilton epitaph would make much better sense if 'Live well and die well', the Taylers' silent amendment, was what had been originally intended. Did the inscriber misunderstand an oral instruction to write 'dees well' (dies well), meaning to suffer death well, as 'dees well ' meaning to do well?4 Even if there had been three mistakes in the memorial would they have mattered? In Thomson's view the 'client' for such inscriptions had low expectations.⁵

The question also arises whether the form of the inscription has literary integrity to the extent that it may have been intended as a rhymed epitaph, a rhythmic couplet with 'wyse' and 'wyves' as a nearrhyme such as occurs in informal verse. If so, then it is an individual epitaph particular to the marital circumstances of Alexander Duff, composed for him, and likely therefore to involve a paraphrase of Solomon's alleged saying. If the first two lines are a quotation, not a paraphrase, however erroneous, it ought to be possible to find a source with vocabulary closer to the inscription.

The specialist analyses of the heraldry and inscription suggests that the memorial slab is for its time not a very polished performance. In comparison with the memorial slabs at St Andrews, and indeed with a reused medieval slab dated 1659 in Nigg churchyard in memory of Alexander Gair and his wife K McC, with its recessed circular panel, heraldic shield between two branches of laurel, and

Latin motto, it is certainly very plain. To modern taste the plainness of the Duff inscription gives it a dignified, handsome appearance well suited to the classical lettering style. In spite of the mistakes and the somewhat risible number of wives the Duff memorial does not altogether detract from the general appearance of the slab. However, the removal of what was a masterpiece of early medieval sculpture cannot be regarded as anything but a cultural catastrophe. Research on Duff for this project has to some extent lessened his responsibility for the vandalism. Even if we do not know all the circumstances, this looks like a case of to know all would be to understand all.

Notes

- 1 Campbell-Kease 2002, 98.
- 2 Tayler & Tayler 1914, 2, 586.
- 3 Hay Fleming 1931, no 53, 154-5.
- 4 Chambers The Concise Scots Dictionary (1996).
- 5 Thomson 2001, 368.
- 6 Macdonald 1902, fig 3, 693-4.

Face A, original upper portion (illus 4.3 and 4.5-4.16)

NMS Number: X.IB 355

Measurements: max height c2340mm, max width c1404mm at the bottom and c1394mm at the top, max thickness after defacement, c190mm (to which compare c210mm for the thickness of the lower portion)

Short description: The number of fragments which can probably be assigned to the original face of the upper portion is 3287. They consist of fragments carved with the standard ornamental repertoire of Insular art in all media, key pattern, spiral, interlace, key pattern, animal ornament, plant ornament and a few fragments of human body parts. For a description of the physical nature of these fragments, see Chapter 7.2.3.

Discussion: A characterisation of a selected number of fragments assignable to face A of the original upper portion

Among the conclusions resulting from the application of the technique of Optically Stimulated Luminescence dating to the Hilton of Cadboll site was the possibility that the cross-slab had been subjected to a degree of damage at the time of the Reformation (Chapter 7.3.2). This suggestion has yet to be fully absorbed into the analysis of the fragments. If there was Reformation damage then

its prime target would have been the face A original upper portion, particularly the cross-head. Had a zealous reformer delivered blows to the cross-head area, or indeed had a natural destructive event led to the fall and smashing of this area of the slab, then the chances are that a degree of reconstruction similar to that achieved for the broken up mid-portion would have been possible, for such events produce large fragments. In contrast it was the systematic chiselling off of the carving on the upper portion of face A to produce a flat surface for use as a memorial slab which presumably accounts for the greater part of the damage. The nature of this work involved taking off the top level of relief, followed by the removal of what was left beneath, and then the final dressing flat. The difficulties created by this staged removal of carving for the reconstruction process are obvious.

The earlier stages of the sorting of fragments for visual inspection and cataloguing produced between 750 and 800 fragments with sufficient carved surface to allow a realistic prospect of finding conjunctions. Those responsible for recording, reconstructing and cataloguing were aware that among them there was a good representation of mouldings of different section and width which ought to belong to the edges of the slab, the contour of the cross-shape, or be panel dividers for the decoration of the background of the cross (Chapter 7.2.4). If carving is damaged carved mouldings tend to drop off the surface in a strip and to snap across when they fall. A number of such fragments were joined together by visual inspection, and there were examples of mouldings at right angles suggestive of panelling and the occasional heavy edge which could be reasonably assigned to the edge of the slab or to the contour of the cross. Measurements for these mouldings could be extrapolated from the lower portion.

In reconstructing the upper portion of face A, a priority was to discover some evidence for the shape of the cross-head. Was it the very common type, with rounded arm-pits, as on the full-length cross at Edderton, or the slightly less common one with stepped arm-pits as on the Nigg slab? Were the arms encircled by a ring? In spite of some promising conjunctions, no single fragment or conjunction of fragments give satisfactory evidence for an armpit shape. Nor was there clear evidence for the shape or decoration of the central field where the arms of the cross intersected, whether it was rounded or stepped. The failure to make any progress in defining the

cross-head led to speculation, still sustainable, that substantial deposits of fragments remain to be found on the site. Another explanation might be that the cross-head, and not the sculpture on the rest of the face, was chipped off systematically rather than destroyed violently at an earlier period, and that in the years intervening the chippings of the crosshead were dispersed differently from those of the later systematic defacement and re-dressing. It was unsatisfactory to have recourse to such speculations to account for the failure to reconstruct the crosshead and therefore a serious attempt was made, quite late in the project, to harness the search capacity of the electronic database (Chapter 7.2.5). Although it too failed to produce the shape of the cross, much was learned by the study and some useful observations and joins made. Undoubtedly there is scope for further focused searches in the database and this first attempt is in the nature of a pilot study which will provide useful guidelines.

The account given here of the characteristics of the fragments is based on a sample of those fragments thought to belong to the upper portion which were selected for visual and manual inspection on the basis that they preserved significant amounts of carved surface. The fragments belonging to the midportion of face A are described in Chapter 7.2.4. The account here will be largely descriptive and factual. The evidence they provide has art-historical implications which are discussed in Chapter 5.

Within this selection the number of fragments in each category of ornament is as follows: key pattern 206, animal ornament 133, interlace 121, spiral pattern 73, plant ornament 33, human parts 10. Because these numbers contain fragments of diverse size, including larger fragments with small amounts of carving preserved on them, the numbers do not reflect accurately the area of the slab covered by a particular category. There was, however, a clear impression that in the sample selected solely on the basis of the potentially informative nature of the surviving carved surfaces, there was more key pattern and less interlace than one might have expected. The small number of interlace fragments may be due to the way interlace fractures, for its narrow strands can easily be wrongly allocated to plant or animal ornament. Fragmented animal and plant ornament can themselves easily be confused, for parts of bodies and stems can be of similar width, and strands can be foliate tendrils or animal extensions. The numbers in these categories may

also therefore be deceptive. Key pattern has the advantage of being comparatively flat and readily recognisable, although small fragments can easily be confused with narrow strips of mouldings. Cataloguers use the terms 'bar' or 'strip' to describe the straight elements of key pattern indiscriminately but with a tendency to use the latter term when the identification of key pattern was less certain. Nonetheless, key pattern does seem to dominate this group of fragments that have survived with a significant amount of carved surface.

For this purpose those parts of the repertoire possibly more likely to have decorated the cross will be described first: they are key pattern, spiral ornament and interlace. There follows animal and plant ornament which one could expect to find either on the cross or its background, and finally, human parts, which almost certainly belong to the background of the cross. Fragments are referred to by the consecutive numbers following the full stop in the NMS accession number X.IB 355. Conjoined fragments are expressed by a forward slash between fragment numbers. Allen pattern numbers are those given in ECMS, part II, chapter VIII, 129-403. The brief descriptions and measurements of motif elements are for the most part taken from the catalogue entries prepared by Meggen Gondek. Using fine measurement to establish connections proved difficult because of differential wear and the chiselling off of top surfaces. It is hoped that the level of detail supplied here and the accompanying photographs do justice to the surviving fragments of the original upper portion of face A, and will enable those with a special knowledge of the ornamental repertoire of Insular art to contribute to their understanding. Every fragment carved with a particular pattern has an individual description and illustration in the digital database.

Fragments with key pattern (illus 4.5 and 4.6)

SPECIAL ASPECTS

Many fragments of key pattern have 'key' as the only keyword in the catalogue entry and thus they are readily searchable in the database. Other relatively common keywords associated with fragments with key pattern are 'edge' and 'margin'. This alone presupposes that somewhere on the slab there were stretches of key pattern in panels either on the cross-shape or its background. A number of fragments of key pattern, usually thin in fracture, have a distinctive rusty brown

appearance suggesting that they came from the same area of the slab.

PRESENTATION ON THE SLAB

The key pattern carved on the Hilton of Cadboll cross-slab is carved in a middle grade of relief, neither the exceptionally high relief of the Tarbat fragment NMS X.IB 284, or the flat strap style of a fragment of later sculpture found in the recent excavations at Portmahomack. The nature of key pattern allows for different styles of presentation: some patterns have straight edges in order that a containing pseudomargin can be created by the edges of the pattern units; in other stretches of key pattern, part of the structure of the units can run into what are true mouldings, whether of a straight-edged field or a curved field. In other instances the complete key pattern may be set within wholly independent mouldings. All these possibilities contribute to the difficulties of identifying stretches of key pattern.

Those in the project involved with the reconstruction and with cataloguing detected a significant number of instances where the key pattern was raised on a pad of relief, there being a drop down to a lower surface on one side, which may or may not have then met a moulding. This trait suggests that some stretches of key pattern were carved on a surface at a higher level than the dressed surface. Examples are:

.652/.307: Carved with key pattern which on one side drops down to a lower background surface on one edge.

.651: key pattern with adjacent carved surface. One strip drops to a lower dressed surface.

.345/.625: Key pattern with one edge dropping on one side ϵ 7mm, and on the other to a shallow incised line.

.669: An outer strip of key pattern drops down c6mm to a dressed surface.

The most obvious location for the emphasis achieved by such marginless raised areas would be on the cross-shape. This would not, of course, preclude the use of unpanelled key pattern in the background of the cross-shape uniformly level with the dressed surface, in the manner of, for example, the key pattern on either side of the cross-shaft of Aberlemno no 3, dividing the angels under the transverse arms of the cross from the scenes of animal combat at the bottom of the slab (illus 5.17). On the other hand, there are fragments of key pattern within independent mouldings of a width

appropriate for the cross-shaft. It is possible therefore that there were two methods of presenting key pattern on the cross-shape. If so one would expect the patterns to be differentiated.

IDENTIFYING PANELS

Identifying panels or stretches of key pattern can be made through the survival of parts of key pattern adjacent to mouldings. Examples are:

.372: a 20–5mm moulding with an unambiguous trace of key pattern on one side and a dressed surface on the other. The moulding appears to be independent of the pattern edge.

.368: a 22mm moulding with adjacent key pattern.

.38: a corner of a panel of key pattern within an adjacent moulding of ϵ 22mm width.

Another way of identifying panels of key pattern is through the survival of parts of the distinctive methods of treating the corners of panels. If, for example, key pattern decorated the arms of the cross then one would expect to find evidence for a considerable number of mitred corners, although the areas where the pattern met the crossing might have been modified to fit the shape of the arm-pit. Even though the complete corner mitre has not survived the presence of an irregular arrow- or T-shape is enough to suspect that a fragment is part of a corner of a panel. If there was a panel of the size appropriate to decorating parts of the cross-shaft, then obviously there should be a set of four mitred corners, but such a set has not as yet been identified. Examples of such corners are:

.38: corner of a panel of key pattern with adjacent moulding

.203/.328/.616: corner of a panel with adjacent dressed surface

.343/.215/.937: the corner of a panel of key pattern within a corner of moulding, set on two levels of dressed surface

.373: a distinctive corner treatment with a T-shape within a triangular shape.

SCALES AND TYPES OF KEY PATTERN

The fragments contain examples of the two main types of key pattern: diagonally set, and those with the elements set at right angles to each other. There are also examples of straight-line spirals. All three could not appear in the same panel, but Pictish sculptors regularly liked to vary the design even if the panels

themselves were arranged symmetrically. An example is Aberlemno no 3 where the panels beneath the angels have Allen no 958 on the left of the shaft, and Allen no 980 on the right. Cataloguers were aware of instances of no 958, but there were no certain identifications of the common pattern Allen no 974 which is used prominently on the Shandwick crossslab and partially survives on the Nigg cross-slab. In spite of the identification of types of pattern on individual fragments and conjunctions of fragments, no framework was built up which completed a significant part of a panel containing a particular pattern type. Examples of types of key pattern identified are:

diagonally set: .204, .328, .368, .174, .278 square set: .391 single straight-line spiral: .177, .203, .217 double straight-line spiral: .220/.170 (an example of Allen no 958, found also on the shaft of the Nigg cross-slab).

There appear to be groupings of fragments with patterns of the same type but carved on different scales, although often such differences which seemed obvious to the eye could not be substantiated by measurement. One of the larger scales of key pattern, on .628, has bars \$\epsilon 10 \text{mm}\$ wide. One recurring difficulty in identifying similarities of scale is the degree of differential wear, but in the majority of the catalogue descriptions similarities and differences of scale of key pattern are recorded.

KEY PATTERN MERGING WITH OTHER TYPES OF ORNAMENT

The trait of running one pattern into another represents a departure from the earlier convention in Insular art of each panel containing only one type of ornament. Such merging can take place in small fields such as the turn of the frame on the top right corner of the Nigg cross-slab, or between larger panel-sized stretches of pattern. For example, on the shaft of the cross on Meigle no 4, key pattern no 974 runs into a panel of interlace. Examples of such merging of patterns evident on the fragments from face A are:

.70: angular interlace adjacent to key pattern

.31: interlace strands adjacent to key pattern

.29: interlace and key pattern running into each other

.559: interlace and key pattern merging.

In Pictish sculpture such merging is often found on shafts, and in the area where the ornament at the crossing meets the ornament on the arms. None of the fragments with this trait is large enough to tell with certainty how the device was used on the Hilton of Cadboll slab.

FINDINGS

There seems little doubt that stretches of key pattern were located somewhere on the cross-shape, perhaps most probably on the cross-head, balancing the dynamic use of the pattern on the cross-base. These could have been of different types or differently presented, panelled or unpanelled. Although no example of key pattern adjacent to faces B and D has been detected, key pattern might well also have been part of the decoration of the background of the cross, aesthetically bridging the two main areas of its deployment.

OTHER LINES OF INVESTIGATION THAT COULD BE PURSUED

The considerable quantity of key pattern among the fragments selected for visual and manual inspection can be separated and categorised in the ways described above. The varied thicknesses, the differential wear, and for some fragments, the characteristic rusty-brown colouration should all help to establish connections within the groups of fragments exemplified above. It is probable that with more man-power, time, and physical space to layout the fragments, visual inspection might have produced more conjunctions. It is, however, now possible to search the database in such a way that the chains of similarities recorded in the catalogue, including pattern type, scale, and surface levels, can be collected together and analysed. A single study concentrating on key pattern fragments, using both the catalogue and the database is the strategy most likely to produce the reconstruction of more substantial areas of key pattern and to identify their probable location on the original face A.

Fragments with spiral patterns (illus 4.7 and 4.8)

SPECIAL ASPECTS

Pictish sculptors generally used higher relief on the front of the slab and lower relief on the reverse. The recovered lower portion of X.IB 355 shows that this convention was observed by the sculptor of the Hilton of Cadboll cross-slab. Any of the components of the ornamental repertoire can be laid over domed projections, such as bosses, but spiral pattern can

raise its own central design elements to create a boss projecting from a background network of expanding bands and connecting curves in shallower relief. Because of this characteristic it is possible to assign with confidence the majority of fragments with knoblike bosses, usually made up of triple spirals, to the original face A.

Key pattern can also produce bosses by coiling and raising a double straightline spiral. This is how the bosses on the cross-base on the lower portion of face A are produced. All these lower portion double spiral bosses are approximately the same size, 60–70mm in diameter and projecting 16mm from the background key pattern. Among the selected fragments there is no positive evidence for spiral bosses rising from a bed of key pattern. Even if such bosses had been chipped off cleanly from a background of key pattern, fragments of key pattern with traces of a circular scar would be expected. Theoretically, some of the decapitated bosses such as .434, which is approximately 55mm in diameter and projects 15mm from the dressed surface, could have belonged to a bed of key pattern. While there is no evidence to support this, the recurrence somewhere on the cross-shape of the design scheme used for the base remains a reasonable supposition.

PRESENTATION

No surviving fragments of spiral pattern are associated with a margin or edge. This contrasts strongly with the fragments of key pattern. However, the destruction of spiral-boss ornament by knocking off the summit of the boss followed by the finer chipping off of the curvilinear background might not preserve any adjacent mouldings. Generally the removal of the boss summit makes the reconstruction of the structure of panels of spiral ornament difficult to achieve.

DIFFER ENT PATTER NS

Differences in fragments of spiral pattern are confined to the diameter size of the raised boss, whether the boss is made up of double or triple spirals, and whether or not any of the curvilinear pattern from which the boss is developed has survived.

Diameter size varies from ϵ 55mm to 25mm, with examples occurring at 5–10mm intervals within the range. For example:

.455: described as part of one of the largest bosses judging from the scale of what survives of the lobed spirals

.434: 55mm

.113: 45mm

.379: 35mm

.26, .130, .131: 25mm.

There are a few examples of what appear to be double spirals including:

.123: 40mm in diameter

.430/.453: 35mm in diameter.

Examples of spiral bosses with some traces of their lower reaches surviving are:

.109 where the top of the boss has been lost, .337,

.113, .118, .436, .704

.112: either the lower reaches of a boss or low relief spiral ornament

.353/.437: conjoined fragments which show the extent of the space between bossed elements

.431: the boss is 30mm in diameter and projects c10mm from its surface background

.379: a well-preserved example of triple spiral pattern culminating in a boss.

Only two examples of spirals adjacent to other ornament have been identified: .279: a raised spiral pattern adjacent to what is probably interlace

.432: a raised boss adjacent to a curled relief strip which could be part of animal or plant ornament.

Both of these examples are ambiguous. Raised spirals run into interlace on the sophisticated spiral panel to the left of the Nigg cross-shaft. If the curled strip on .432 is a remnant of animal or plant elements, this merging with spiral pattern would be very unusual and cannot be discounted. Nonetheless, the interpretation of this curl of relief should include the possibility that it is part of a hooked connection between spirals.

FINDINGS

Raised boss spiral patterns were defaced in the form of firm nodules and their survival rate is likely to be comparatively high. Spiral pattern with raised bosses is suitable for emphasising a cross-shape but it is also found decorating the background of a cross. It would be expected that the raised bosses on the cross-base would be replicated somewhere else on the cross-shape. The number of surviving culminations of spiral bosses appears small, but the bosses are a relatively small

area of the total pattern from which they emerge, and their effective use on the cross-shape could have been achieved by generous spacing, a trait of the sculptor of the Hilton of Cadboll cross-slab. The well-spaced spiral pattern at the bottom right of the Nigg cross-slab when complete would have required 26 spiral bosses of differing sizes. The 70 or so unambiguous spiral bosses surviving from the Hilton slab could therefore notionally come from at least two such panels, leaving a number suitable for emphasising the four arms of the cross.

OTHER LINES OF INVESTIGATION THAT COULD BE PURSUED

An important aim of those involved with the reconstruction was to find examples of the cross-base ornament, key pattern rising into regularly placed bosses. Visual inspection, to this end, of the fragments of key pattern and the fragments of spiral bosses produced nothing comparable to the cross-base decoration. A consideration of the find context of the spiral bosses as recorded in the electronic database should be undertaken to see if any relationship with fragments bearing key pattern could be established.

Interlace (illus 4.9 and 4.10)

SPECIAL ASPECTS

Face A has no interlace on its lower portion, and interlace is confined to the symbol designs on face C. On the basis of the principles of selection of ornamental repertoire on other Pictish sculpture this would suggest that interlace would have played a significant role on face A. Although interlace is comparatively well represented among the selected fragments one would have expected rather more to have survived. As mentioned earlier a complete piece of interlace is easily recognised but elements of plant and animal ornament also interlace, and it may be that some fragments with interlace strands have been assigned the wrong keyword. On the other hand, there is no hint of interlace being made up of serpentine bodies such as are found on other Easter Ross crossslabs in both high and low relief. Some of the interlace fragments are very worn, leading to the perforation of the structural hole-points. Other fragments have well-preserved strands with rounded profiles. There is no evidence for patterns created out of double strand interlace. Open loops of band are sometimes medianincised, but there are not parts of interlace patterns with this feature surviving on their surfaces.

PRESENTATION

The fragments with interlace rarely retain parts of possibly associated mouldings although .344 may be an example and .29, which has unusually thick strands, does preserve evidence for interlace adjacent to margins but not necessarily contained by them. Some fragments of interlace, for example, .686, drop down on to a lower surface which may result in a pseudo-margin, or border. One of the conjoined clusters centred on .395/.396 was found, when drawn in section, to create a gently rising dome creating a form similar to the shallow bosses in the arm-pits of Aberlemno no 3.

DIFFERENT PATTERNS

The catalogue entries for fragments with interlace regularly record the scale of the interlace. There are clearly distinguishable examples of tightly knit interlace and looser interlace with thick strands, and these patterns must have come from different areas of the slab. Some of the fragments show meshed interlace, others symmetrical or asymmetrical loops with diagonal strands passing through the loops.

Examples of these differences are:

.165 and .166: tightly knit meshed interlace, with strands 7mm wide and similar in scale to the domed element centred on .395/.396, which includes .397./.398/.399

.30 could be a section of circular interlace

.161, .33 and .156: Strands of 10mm wide comparable to .163, .157, .714, .717, with loosely constructed interlace made up of thick strands

.144, .148, .152: symmetrical or asymmetrical loops .34, .155, .143, .146: asymmetrical loops with diagonal strand.

There is a considerable number of fragments where interlace is found adjacent to key pattern, some of which have been mentioned above. A clear example is .70.

FINDINGS

Although at a superficial glance the fragments with interlace look very similar, close scrutiny reveals at least two types, the fine mesh and the thick stranded, loosely constructed. No substantial area of interlace within a defined field has been reconstructed but the domeshape gives a rare glimpse of ornament functioning on the slab as a point of emphasis. That it is a survivor of a set of four mesh-covered domes located in the armpits of the cross-head, or a single dome at the crossing,

are at least possibilities. The natural location for fine meshed interlace would be the cross-shape, placed in between more dynamic patterns, such as raised spiral or animal ornament. Unlike key pattern interlace is less suitable for use as a section of 'wall-papering' on the background of the cross. On the other hand the observed merging of key pattern with interlace could take place on either the cross-shape or its background. The domed interlace could also be the sole survivor of a boss made up of the meshed bodies of serpents, a dominant theme of Easter Ross sculpture.

FURTHER INVESTIGATIONS

The fragments with interlace divide into different patterns and scales more obviously than do the fragments with key pattern. They were more straightforward to catalogue than key pattern and the detailed work on interlace which is part of *The Corpus of Anglo-Saxon Stone Sculpture* provided cataloguers with some useful perceptions. While it is acknowledged that within Insular art Pictish sculpture displays uniquely complex interlace, the patterns surviving at Hilton seem to have been reasonably straightforward. The evidence for panelled interlace has eluded identification, but the structure of some of the loops, particularly in the way they appear to fit into corners, raises the hope that further consideration might produce a pattern within a panel shape.

Plant ornament (illus 4.11 and 4.12)

SPECIAL ASPECTS

Cataloguers chose the keyword 'plant' for a carved fragment when the character of the carved strips or bands showed no affinity with the geometrically constructed repertoires of key pattern, spiral or interlace, or were inappropriate in width for attribution to interlaced extensions of animal anatomy, such as tails, tongues and lappets, but which were appropriate for stems and tendrils. There are, as yet, very few examples of other more positive attributes of plant growth, such as leaves, fruits, or nodes. The keyword 'vine-scroll' is reserved for plants with unambiguous evidence for plant growth such as is found in the plants growing up the left and right sides of the frame on face C. The scrolls growing from the stems of these plants contain birds and winged quadrupeds, and this 'inhabited vine-scroll' has direct relevance for defining animal styles. Nonetheless 'inhabited vine-scroll' is part of plant repertoire and so the evidence for the possible

occurrence of this motif on the upper portion of face A is included here.

PRESENTATION

As yet no fragments have been found carved with foliate ornament adjacent to slab edges or set within panel mouldings.

Foliate ornament can have asymmetric growth but its stems have to give the motif some direction and articulation. None of the fragments of potentially plant ornament attributable to face A upper portion has provided clear evidence of this nature. What has been observed by cataloguers sufficiently often to suggest a trace of an underlying recurring framework, is the juxtaposition of animal ornament adjacent to a curving, substantially wide, band. Examples of this feature are:

.371/.571/.108: animal hindquarters and the forelegs of a second animal adjacent to a curving tubular band

.269: with keyword 'animal', (now joined with .1115 which extends the band or margin adjacent to the animal head)

.360/.86: the head of an animal possibly biting a plant shoot

.404/.405: part of an animal neck with attached coiled extension adjacent to a curved band.

DIFFERENT PATTERNS

Foliate ornament without associated animal ornament or separated from associated animal ornament is represented on fragments carved with two curving bands, one branching from the other to create a Y-shape. This form is the most positive evidence as yet available for plant growth, for it does not belong to interlace patterns or to the anatomy of animals with tubular bodies, such as are typical of the animal style elsewhere on the monument. The stem widths and curvature are comparable to those associated with animals as described above.

Examples of such branching stems are .311, .488, .593.

Examples of single related stems may be .55, .408.

Varying widths of strands suggestive of plant ornament are .87, .488, .541.

Examples of possible berries or fruits, seemingly on a larger scale than those on the vine-scrolls on face C, are .327, .600, .350, .732. These rounded forms could

be rounded leaves rather than berries. Leaf-shapes are found on .300, .378.

FINDINGS

The evidence for plant ornament on the original face A of the upper portion depends largely on the detection of curved or branched tubular stems. Other evidence is ambiguous: animal extensions can be misread as tendrils and shoots and leaves may be leafshaped ears. The lively animal ornament associated with the strips or bands suggests a typically Pictish virtuoso performance similar to the more disciplined and purely animal ornament on the cross-head of the Nigg cross-slab. Inhabited plant-scrolls do not need to have the botanical growth associated with inhabited vine-scroll where there is a growth point and a single meandering stem. The fragments of strongly curved stems look as though they belonged either to twostemmed plant organisations that create a medallion shape (possibly the interlaced variety, with its tighter Y-shaped juxtapositions) or to bush scroll, where the side growth is, in botanical terms, opposite, and wider spreading.

FURTHER INVESTIGATIONS

Fragments with substantial, single, curved tubular bands deserve further analysis. One result might be to identify a foliate design framework, whether or not associated with animals, belonging to the original face A. It is desirable that the geometry of the curved bands associated with animals be analysed in order to establish implications for the nature of the framework. A small beginning is the recognition of a series of conjunctions and similarities centred on .371 involving plant stem and tubular band. The catalogue entry for fragment .371, based on visual inspection, records carved surfaces with profile hindquarters and adjacent strand on two levels of surface. Its later conjunction with .571 and .108, and its association with .404/.405, is an example of how visual inspection and interrogation of the data base can work together.

Animal ornament (illus 4.13 and 4.14)

SPECIAL ASPECTS

A significant number of the selected fragments preserve parts of animal bodies, particularly heads and hindquarters. Other fragments were assigned the

keyword 'animal' when the relief, often a tubular band or rounded form, was of a scale unsuited to plant ornament. Face A of the lower and mid-portions has a dramatic range of animal ornament. On either side of the cross-base are loose arrangements of largescale animals in high relief, on the cross-shaft are the scars of a pair of affronted animals on the same scale, within whose outstretched forelegs are an addorsed pair of the heads of two small-scale animals. The animal fragments on the upper portion of the original face A provide evidence for the same range of animal ornament both in variety of scale, and in the variety of arrangement, whether symmetrical and asymmetrical. More particularly, the style of the heads most vividly expressed in the mid-portion fragments 355.1 and .265, both now known to be conjoined with the lower portion, is replicated in fragments from the original upper portion. It is a type of head also used for creatures in the inhabited vine-scroll on face C with the important difference that face A creatures, instead of being winged and eating fruit, have wide open jaws from which emerge long sinuous tongues, dropping down from their mouths to end in a coil. The animal head type, with its rounded cranium, separated by a change of relief height from its snubby snout and wide-open fanged jaws, is the trademark of the Hilton of Cadboll animal style. The other features of the surviving fragments of animals are tubular bodies with slim almond-shaped hindquarters, and stick-like forelimbs, both traits found in other Pictish monuments. The high survival rate of haunches is probably because these rounded forms were chiselled off more or less intact rather in the manner of the spiral bosses.

PRESENTATION

There is evidence that some of the animal ornament was in panels and located on the background of the cross. Examples are:

.421: the upper part of a profile head with a pricked up ear similar to the animals on the lower portion of face A, and to many of the creatures in the vine-scroll on face B. It is adjacent to a broad band

.15: a well-preserved substantial fragment of flat band moulding with adjacent legs of confronted creatures, one of which cuts into the moulding

.46: A piece of flat band moulding with relief forms adjacent, which are probably animal parts. The

pocking of an edge of the flat band suggests that the fragment preserves part of face B or D

.49/.50: claws cutting into an edge, as in .15

.320: a snake-like head conjoined to mouldings at right angles made up of fragments, .741/ .3082/.742

.108/.571/.371: the hindquarters of one animal and a pair of outstretched limbs adjacent to a curved band which could be either a curved panel margin or, as listed above with plant ornament, a curved plant stem or tendril.

DIFFERENT TYPES OF MOTIF

On the cross-shaft in the mid-portion large scale animals on fragment .9 contain small animals, .47/.737. This mid-portion motif is found on other Pictish sculpture and the differing scales of heads found among the fragments of animals could be part of a similar motif. As described above parts of animals are adjacent to curved bands and it is possible that animals are enclosed in foliage formally arranged as medallion or bush scroll. Other animals seem more enmeshed with each other in a way appropriate neither to an inhabited foliate scroll motif nor to a symmetrically constructed pattern. The species most represented among the selected fragments has a mastiff-like head and slim hindquarters. There are two fragments, .8 and .320, with possible snake ornament such as found in Easter Ross sculpture and there are some fragments with attributes more suitable to birds than quadrupeds. One pair of unlinked animals is adjacent to a curved moulding which could be a margin. Examples of these motifs and single animal parts are:

.269, .360/.86, .423, .308, .376: typical heads of varying scales

.354/.358: a typical small-scale animal uniquely looking back over its shoulders Adjacent to it is a slim pair of hindquarters, and the animals appear tightly enmeshed in their own extensions.

.62/.63: a tangle of animal parts very similar in scale and composition to .354/.358: and may be part of the same composition. Compare also possible animal ornament on .352/.722

.338/.585/.283: A tangle of parts of large-scale animals

.61, .65, .67, .529: typical almond-shaped hindquarters with possible body marking on .61 and

.529, such as is preserved on the thighs of animals flanking the cross-base on the lower portion

.80/.322, .609: haunches of large-scale animals

.78, .342: a haunch or shoulder with the upper limb bent. The typical sharply angled upper limb found elsewhere on the cross-slab is not well represented in the fragments.

.371: bent forelegs carved above the hindquarters of a second animal

.320, .607/.90: fragments with snake-like heads, one seen from above in high relief and the other profile in low relief

.310, .349, .244, .749: possibly wings. The fragment .244 is more like a fin. There are fins on some of the extended bodies of birds in the face C vine-scroll. The evidence for winged creatures on the original upper portion of face A is meagre, but relief forms, with a superimposed pad of relief, as on fragment .745, could well be the remains of the level of relief used to carve, for example, the wings of birds, or quadrupeds.

FINDINGS

There is little doubt that there was a lively display of ingeniously varied animal ornament on the original face A, including static large-scale motifs, and intricately interlaced small- and large-scale animals. It is of great interest that the fragments of animal ornament from the original upper face A are commensurate with the dramatic display of the complete motifs of this ornament which flank the cross-base, and that some of them were also located in the background of the cross. The under representation of serpent ornament, which contrasts strongly with the rest of Easter Ross sculpture, taken with the certain location of one of the two examples within a panel, either supports the view that some significant quantity of carved fragments of animal ornament have yet to be retrieved, or raises the suspicion that these fragments do not in fact represent serpents.

FURTHER INVESTIGATIONS

While it would obviously be desirable to determine more closely the diverse compositional organisation of the stylistically homogeneous animal ornament on the original face of the upper portion of the Hilton of Cadboll cross-slab, it is fortunate that sufficient evidence has survived to establish that there was a

consistent animal style in use, albeit on different scales, and in different contexts, on both broad faces of the cross-slab, and that it is a style which is susceptible to specific art-historical investigation (see Chapter 5).

Fragments with figurative carving (illus 4.15, 4.16 and 5.35)

SPECIAL ASPECTS

The fragments with figurative carving, a group of three figures, focusing on .21/.268 to the left of the midportion of face A, and a single figure focusing on .7 to the right, are an important indicator of the function of the cross-slab. That all four figures were cut off at the waist, one indeed with only feet surviving, is the result of their being located at the point of severance between the mid- and upper portions. It was to be hoped that some of the recovered fragments of the original upper portion of face A would supply some aspects of the bodies, heads and upper limbs of the four figures. However, there are only eight fragments that were assigned, tentatively, the keyword 'human', and two or three which in catalogue descriptions were referred to as possibly parts of drapery rather than wings.

PRESENTATION

None of the upper portion fragments recovered was adjacent to margins or edges. One, .340, a leg, carved on a pad of relief is on a different scale from the other four figures suggesting that it was part of a different scene. The group of figures and the single figure in the mid-portion have been located, at approximately the same level, immediately above the animal motifs flanking the cross-base without any panel division.

Fragments carved with parts of human figures are:

.16, .28, .37, .48, .54: heads

.340: a well shaped leg and foot, with possibly, traces of a second leg

.594 : a part of a limb, perhaps an upper limb, approaching the elbow

.602: what may be a foot

.59: possibly a piece of drapery. There may be a human foot above the brow of the animal head on the mid-portion fragment .265, which is now attached to mid-portion fragments .11/.7, and to the lower portion.

That there is a total of five headless figures and five possible heads surviving is probably a coincidence.

None of the heads is in good condition but they are all similar in shape, ovoid, with a well-rounded crown. Three, .28, .48, and .54, have the knobbly hair found elsewhere in Pictish sculpture. One of the heads, .48, is probably shown in three-quarter view, with hair falling on the shoulder in the manner of the rider at the bottom left-hand corner of the hunting-scene panel on face C. One head, fragment .28, has a fillet confining his hair over the brow. The hair of the largest head, .54, is organised in two rows giving it the most elaborate hairstyle. These differences suggest that the figures represented individuals with distinctive appearances rather than a group of members of the same class. The most worn of the heads, .16 and .37, preserve more traces of facial features than do the better preserved fragments. However, the nature of the features is uncertain and it must be stressed that none of the heads is sufficiently well preserved to give an idea of facial types. Nonetheless, on balance, the conventional depiction of the hair on three of them is convincing, and the contours of all five heads are similar to each other, and to human heads on face C. The fact that they all have the same fracture as a result of having been knocked off more or less intact, in the manner of the spiral bosses and the animal hindquarters, also justifies giving these five ovoid-shaped fragments the same identification.

The fragment .340 with the leg, or legs, is more difficult to interpret. The pad of relief on which the complete leg sits could be a broad horse-cloth as depicted, for example, on Meigle no 5, but if both legs are present then a striding figure is more probable. Striding figures with widely separated legs, one of which is raised, are found in other Pictish sculpture, but the function of the pad of relief remains problematic and the leg, and its presentation, is not sufficient evidence to suppose that figure sculpture appeared at a raised level somewhere on the cross-shape.

FINDINGS

Figure sculpture on the cross-face is not unusual but the evidence of the mid-portion face A suggests that on the Hilton of Cadboll cross-slab it had a more than usual significance. If, as seems possible, there were five other figures somewhere on the original upper portion of face A, then the iconographic programme was ambitious, reducing to some extent the emphasis on the hunting scene on face C, which for so long has been regarded as of unique social importance.

FURTHER INVESTIGATIONS

Further study is necessary to identify a context for the figure with the richly decorated tunic shown adjacent to animals of different scales and styles to the right of the cross-shaft. The reconstruction has if anything increased the impenetrability of this iconography. Latterly, reconstruction work in this area of face A of the mid-portion was gaining momentum, but clarification of the significance of the figure remains elusive. The identification among the fragments of face A, of parts of the rest of this figure must be high in the list of priorities for further study. That the elaborate hairstyle of .54 may belong to the figure, and that .59 is part of his drapery is a start, but there is no means of proving that these fragments belong to the figure with the decorated tunic. What is required is the reconstruction, based on conjunctions, of the upper halves of all the figures in the mid-portion, particularly, of the all-important upper limbs which convey action and interaction. The possibility that the heads and shoulders of all the figure sculpture on face A were specially targeted for destruction, quite apart from damage by the elements and the 17th-century defacement, may make such additional reconstruction a vain hope. If so, the iconography, undoubtedly of great, possibly unique, interest, may have to remain a matter for speculation.

Conclusion

It is evident from the above review that as yet the carved fragments assignable to the original face A of the upper portion have revealed little about its overall design and lay-out. An impression, for what it is worth, of what the lay-out and its ornament might have consisted is attempted in Chapter 5. Nonetheless this rich harvest of fragments of the Pictish ornamental repertoire can, without speculation, help to place the cross-face in the context of other Pictish sculpture and to perceive the overall aims of the sculptor of the cross-slab. Taken with the evidence of the lower portion, and to some degree, that of the mid-portion, the fragments of the original face A of the upper portion undoubtedly play their part in providing a greatly enriched assessment of the totality of the achievement of the Pictish sculptor, his individual responses to a variety sources of imagery, and in the case of animal ornament, both his place in the Easter Ross/St Andrews, Fife, style, and within animal styles in Insular art generally. These matters, and the extent to which all the fragments, whether or not conjoined or located on the slab, contribute to

the reunification of this work of art are discussed in Chapter 5.

Note to accompany illus 4.5 to 4.16

The following pages of illustrations are representative examples, surviving as carved fragments, of the ornamental repertoire and subject-matter employed by the sculptor of the Hilton of Cadboll cross-slab when carving the original upper portion of the cross-bearing face A. Many of the fragments selected for illustration are mentioned in the foregoing text, under the appropriate sections.

The paired pages of illustrations appear in the following order:

Key pattern

Spiral pattern

Interlace

Plant ornament

Animal ornament

Figurative carving (includes comparative fragments from the mid-portion of face A)

The photographs were taken by Neil McLean of the National Museums of Scotland photography department. All the fragments laid out in the sand trays in the Queen Street gallery were photographed by him, with the assistance of one of the cataloguers, Douglas Morton, during the period January to May 2005. They show conjunctions made between fragments by that date. It was not practicable to photograph conjunctions or additions to existing conjunctions found subsequently, although the catalogue entries were updated. The numbers under each image refer to the running number of X.IB 355. The divisions on the scale within each image represent 10mm. The diversity of scale of reproduction was felt to be justifiable because using this format for reproduction and showing each fragment at the same scale would have involved a significant loss of detail.

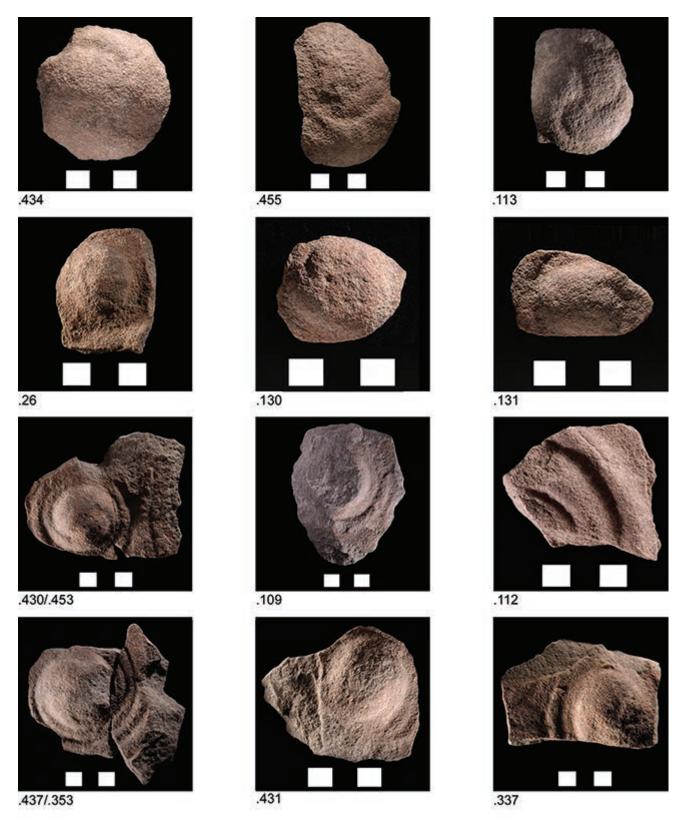
It is hope that, in general, the illustrations reproduced here will give some idea of the physical appearance of the fragments that were chiselled off face A and the nature of their carving and designs.



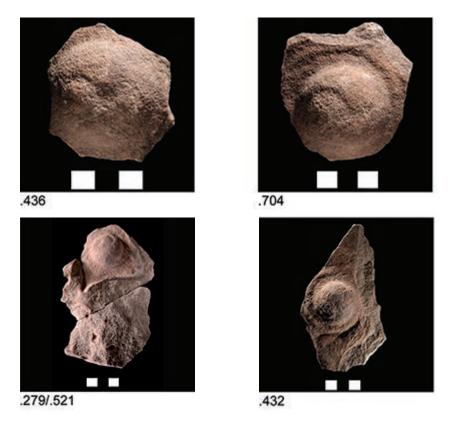
 ${\it Illustration~4.5}$ Fragments with key pattern (© Trustees of the National Museums of Scotland)



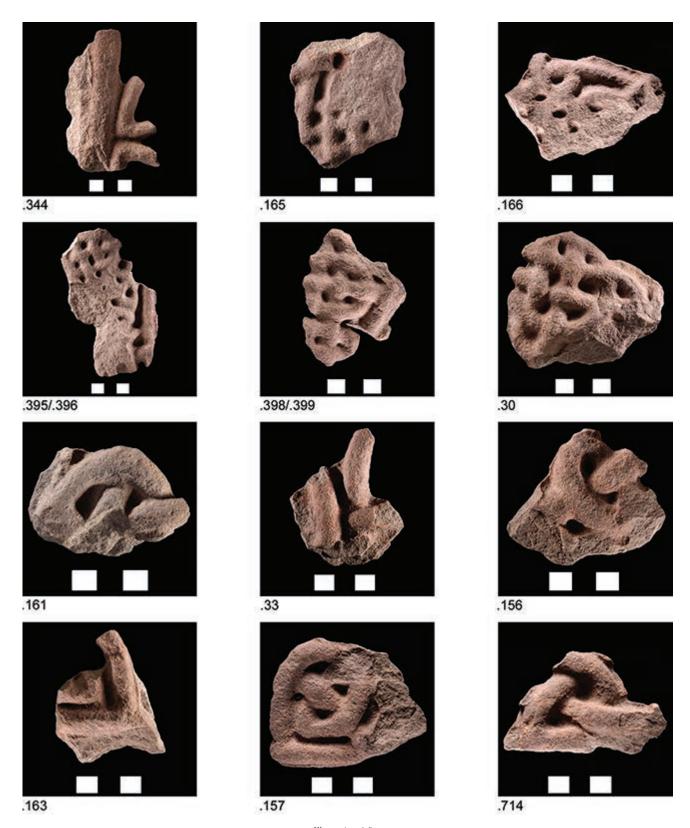
 ${\it Illustration~4.6}$ Fragments with key pattern (© Trustees of the National Museums of Scotland)



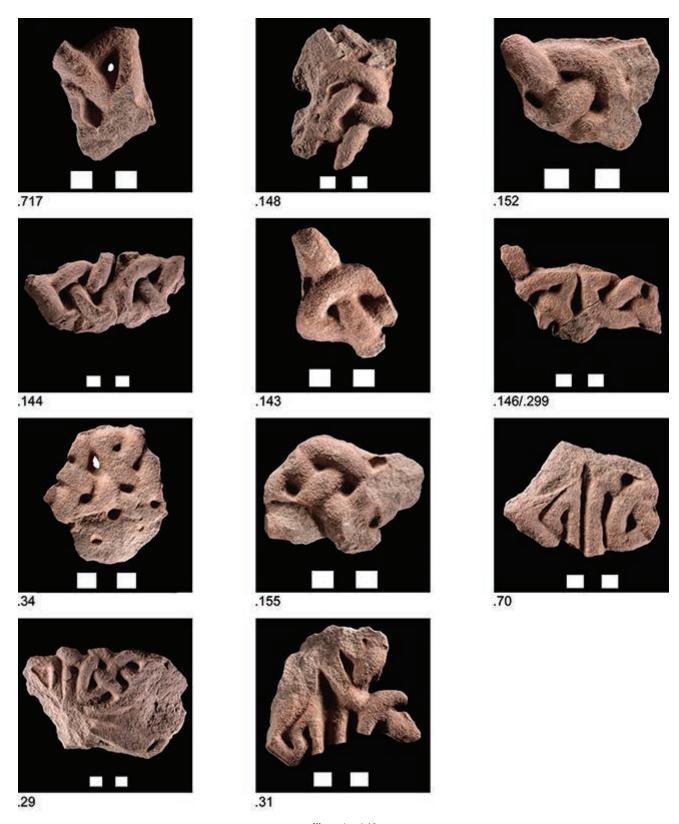
 ${\it Illustration~4.7}$ Fragments with spiral pattern (© Trustees of the National Museums of Scotland)



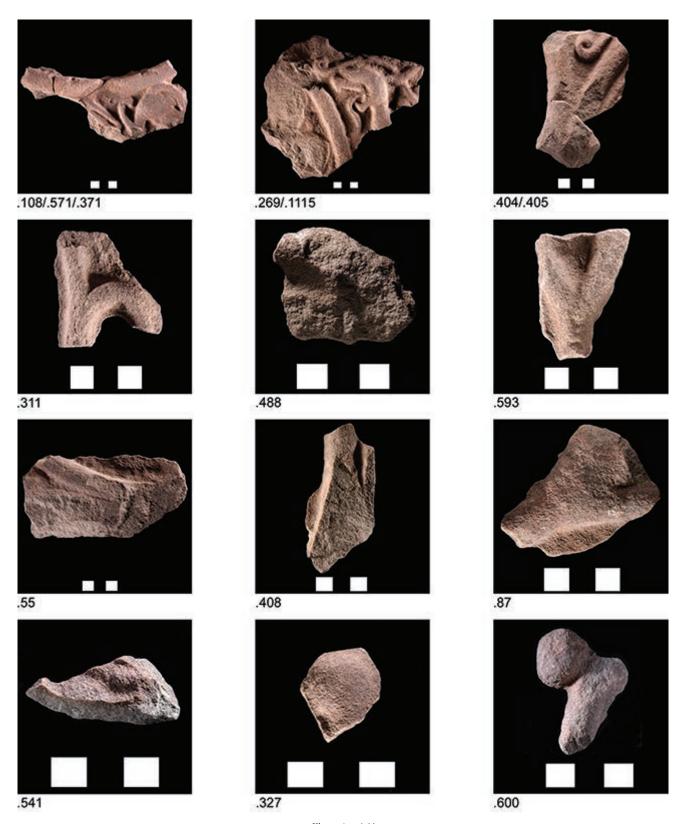
 ${\it Illustration~4.8}$ Fragments with spiral pattern (© Trustees of the National Museums of Scotland)



 ${\it Illustration~4.9}$ Fragments with interlace (© Trustees of the National Museums of Scotland)



 ${\it Illustration~4.10}$ Fragments with interlace (© Trustees of the National Museums of Scotland)



 ${\it Illustration~4.11}$ Fragments with plant ornament (© Trustees of the National Museums of Scotland)

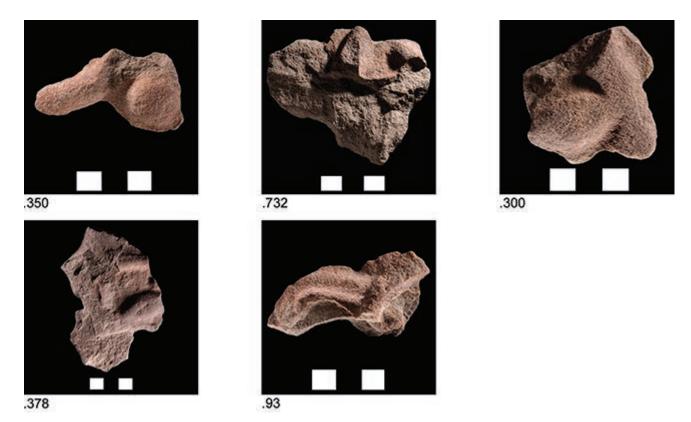
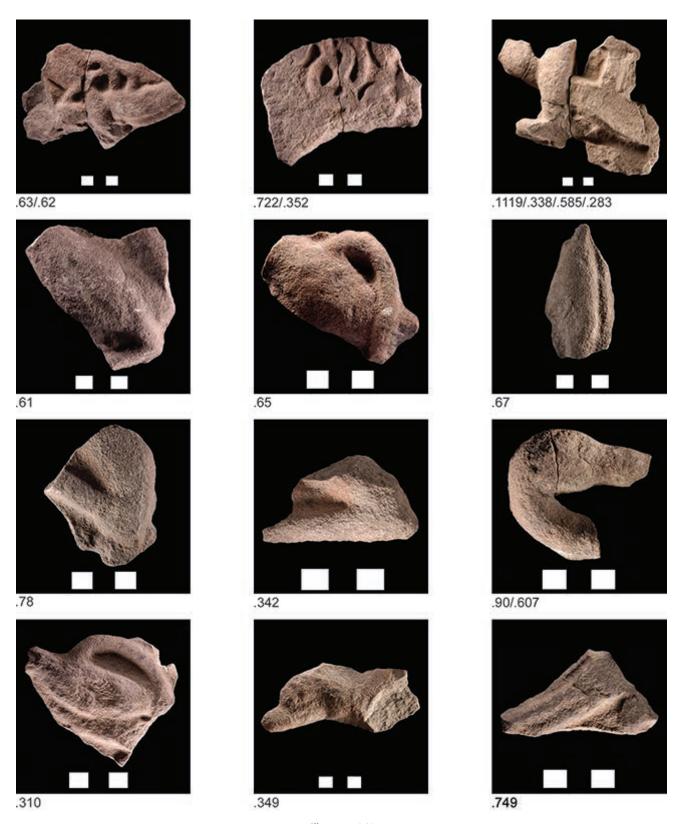


Illustration 4.12
Fragments with plant ornament (© Trustees of the National Museums of Scotland)



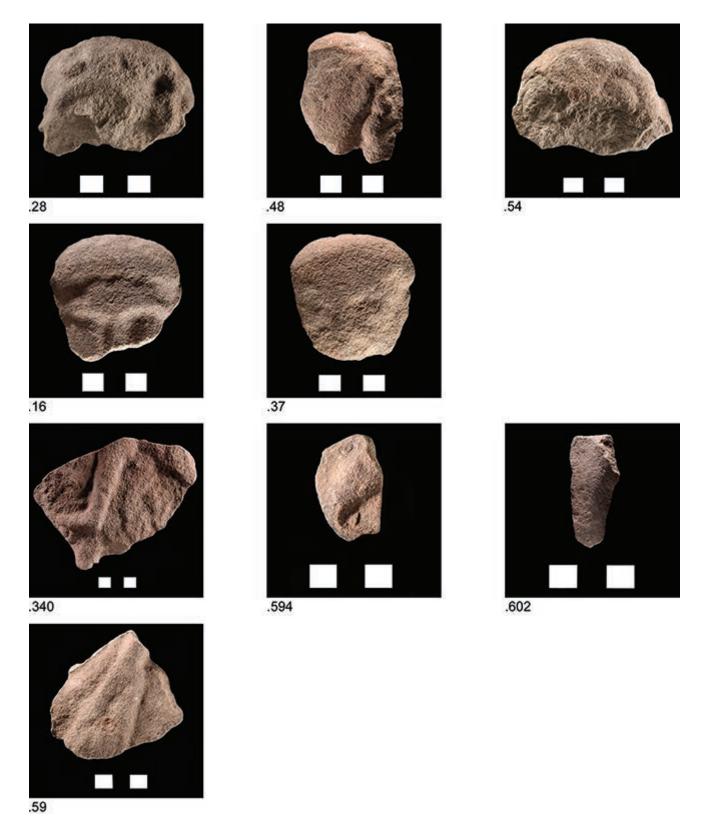
 ${\it Illustration~4.13}$ Fragments with animal ornament (© Trustees of the National Museums of Scotland)



 ${\it Illustration~4.14}$ Fragments with animal ornament (© Trustees of the National Museums of Scotland)



 ${\it Illustration~4.15} \\ {\rm Examples~of~fragments~of~figurative~carving~from~the~mid-portion~of~face~A,~with~relevant~adjacent~animal~carving~} \\ {\rm (©~Trustees~of~the~National~Museums~of~Scotland)}$



 ${\it Illustration~4.16}$ Possible fragments of figurative carving on the upper portion of the original face A (\odot Trustees of the National Museums of Scotland)

4.5.2 The right-hand edge, face B (narrow) (illus 4.3a)

The whole length of the slab

NMS number: none (lower portion), X.IB 355 (midportion), X.IB 189 (upper portion)

Measurements: height c3550mm, max thickness c210mm (lower portion) c190mm (defaced upper portion)

Keywords: edge, toolmark, cross-shape

Condition: the mid-portion edges of face B survive only as fragments. The projection on face B of the lower portion has been refashioned, but much of the original surface of both the lower and defaced upper portion remains. The projection on the lower portion preserves its original top edge (a ledge of c50mm) and just over a half of the edge abutting face A. The surviving surface is pitted and damaged. In modern times the surface of face B has been slightly impaired by the pressure of a display stand visible at the bottom of the defaced upper portion. Further up the slab there was a hole around 40mm in diameter which was still visible as a hole in the 1970s. This hole and its partner on face D were made by the support system at Invergordon Castle, and these are now repaired.

Fracture: face B of the lower portion shows, at the top right, the crack caused by the lamination which resulted in face C of the lower portion having to be reattached after excavation. The projection which relates to the design of the blank panel to the right of the lower step of the cross-base has been mechanically cut away but not so as to obscure the contours of the blank panel. There is evidence, below where the original projection would have been, for a smoothed band running horizontally across the edge at the point where the original shaped tenon would have met the socket stone (illus 4.4a).

Description: Face B is bevelled on the side that abuts on the left side of face C. On the lower portion part of a projection with a maximum projection of 50mm survives. The projection presumably originally extended vertically to the level of the bottom of the blank panel, possibly including a moulding. Its original height would then have been around 300mm. At a point approximately adjacent to the middle section of the symbol panel on face C, there is a scar measuring 325mm in height and 140mm in breadth. There is a similarly located scar of approximately the same dimensions on face D. It

appears that there were projections at this point on the edges of the slab, and that the scar on face B may therefore have been where the projecting end of the right cross-arm met the edge of the slab. The height of the arm would have been only 25mm greater than the projection at the bottom of the slab, and this would conform to the 25mm standard width of fragmented mouldings.

Discussion: Measuring face B is made difficult by the extent of the shaping of the side abutting on face C. Nevertheless, to attempt approximate measurement is worthwhile, given that in the lower portion we now have, for the first time, the thickness of the whole slab before the defacement of the upper portion. The measured difference between the two thicknesses, 210mm for the newly recovered lower portion and 190mm for the defaced upper portion, representing approximately the slice taken off the upper portion, is, at 20mm, very small. In fact this measurement is consistent with the height of relief of many fragments assigned to the original upper portion face A.

High relief on Pictish slabs was often achieved by cutting into the slab. The animal ornament on either side of the cross-base on face A is an example of this. On the other hand, there are Pictish monuments where the cross, cross-head or other features are carved in such high relief that the height of their relief above a background plain or carved surface can be appreciated when the slab is seen in strict profile. On the evidence of the cross-base, the surface of the cross was set higher than the carving on its background, and it appears that the raised spirals on the cross-base were in fractionally higher relief than its mouldings. Fundamental to determining how the height of relief has been achieved on a slab is the height of the enclosing moulding, if present and if intact, at the edges of the slab. Close analysis of the dimensions of some of the moulding fragments assigned to the original upper face A can provide some evidence for the nature of the relief carving of the cross on face A. The breadth of the unbevelled surface on face B of the defaced upper portion is 148mm at the bottom and 131mm at the top. Such differences in handling make it difficult to determine whether the edge tapers or whether the slab has been cut back to a greater extent in the upper reaches.

If the scars represent a truncation of the crossarms, their height might be expected to match the width of the lower arm of the cross-head. If this were the case then the shaft tapered from 390mm where it met the base, to 325mm where it met the lower arm. The lower arm is frequently distinguished physically or decoratively from the shaft on Pictish cross-heads. Although the loss of the original tenon means that we cannot estimate the total height of the slab, we can now say that there is evidence that the height of the slab, carved on the broad faces and shaped on the narrow faces, was around 3550mm. This makes its height almost as exceptional as its breadth. For further discussion see Chapter 5. The shaping and tooling of the edges of the slab are discussed in detail in Chapter 7.2.2.

4.5.3 Face C (illus 4.2 in pocket, illus 4.3b)

Face C, lower portion (illus 4.4b, 4.17 & 5.1)

Finds number: none Context number: 008

Measurements: max width c1420mm, max thickness

c210mm, height c840mm

Keywords: vine-scroll, animal, spiral

Condition: the surviving carved surfaces within the lower edge of the vine-scroll frame are well preserved in spite of the fact that the extent of the internal lamination required this face to be lifted off and resecured by Historic Scotland's conservators immediately after excavation. Damage at the upper edge has resulted in loss of carving but where it has survived it is in good condition.

Fracture: the fracture at the upper edge is flat until it meets a bedding plane. Beyond the bedding plane it becomes irregular expressing the contours of the upper edge as preserved above face A. Below the flat edge, which has the appearance of trimming, the remnants of the spiral panel appear battered, perhaps the result of the damage to face A. Some of the carved surfaces in this area scaled off, to be found where it fell at the time of the excavation (see illus 3.6). The fracture at the lower edge, now partially concealed by the display stand, has the same arc-like shape visible on face A, but it has a deeper curve and is more centrally placed. The damage to the tenon is recorded in the reconstruction drawing.

Short description: The carved surfaces consist of the lower horizontal edge of a frame containing an inhabited vine-scroll. The upper edge preserves

parts of the first scrolls of the vine-scroll stems ascending the right and left sides of the frame. It also shows traces of the bottom edge of the spiral panel.

Long description: The lay-out of the lower horizontal edge is centred on the growing point of the vine, which itself lies on the horizontal centre point of the carved area. The growth emerges from a plinth of three tiers. The lowest tier has sloping sides. Two widely arching stems reach out to the corners of the frame. The broad spandrel thus created between them encloses a complex, but carefully designed, growing point motif. From a centrally placed node secondary stems curve out to right and left to end in spear-shaped leaves with unattached basal lobes which are probably intended to be berries. Between these secondary stems, on a stalk, a further centralised node produces stems which loop round the secondary stems to cross over each other and lie horizontally along the upper moulding of the frame. They too have unattached berries. A central unattached berry at their crossing point lies on the mid-point of the moulding. From the lowest tier of the plinth single spatulate leaves not found elsewhere in the vine-scroll, grow to left and right.

This fountain-like growing point occupies almost half the breadth of the spiral panel. The growth from the nodes of the main stems starts exactly at the left-hand corner of the spiral panel. At the right it starts just before the corner and somewhat higher up the frame so that the thickening of the node lies against the inner moulding of the frame which in this section has an invasive, curving, incised line.

The growth from the main stem nodes marks the end of geometrical symmetry. From the node on the right (the one close to the invasive incised line) three stems emerge. The central stem is straight and stretches out to the bottom right-hand corner of the frame to end in a trilobed berry bunch. The lower stem coils round to end in a broad spear-shaped leaf with basal berries. The upper stem moves towards the edge of the slab. It develops a rounded bud from which two further shoots emerge, the upper to form the undulating main stem of the right-hand vine and the lower to loop round the straight stem to end in a triangular bunch of six berries. Within this foliage is a winged quadruped with a rounded chest and a raised wing. The wing is carved on a pad of relief. The covert feathers are expressed by small bosses, the primary tail feathers by deep incisions. The quadruped has a long neck with the head looking

over its back in the direction of the growing point. The head has a rounded skull from which emerges a long ear extending horizontally. The muzzle is separated off from the skull, and the jaws are opened wide to feed from a single berry which grows on a small shoot from the main stem. The offside foreleg is elegantly bent in a saluting posture to clutch at the berry bunch outside the coiled scroll. The nearside foreleg lies along the lower edge of the frame. The nearside hind leg is at full stretch, the foot braced against the lowest tier of the plinth. The offside hind leg is bent at the hock and lies along the lower edge of the frame. An extended tail loops round the body and between the hind legs. The tail is raised to end in a lobed coil. Haunches and neck are contoured, presumably to define muscles.

The growth at the end of the ridged node to the left, immediately under the bottom left corner of the spiral panel, develops, like the right-hand node, three points of growth. As on the right, the central growth is straight and reaches to the corner of the frame to end in a trilobed berry bunch. The lower stem coils round to enclose the forequarters of a winged quadruped. Here, the creature looks forward, away from the growing point, towards the left side of the frame. It bites at the enclosing coiled stem, rather than feeding on the triangular sixberry bunch which ends the stem. The head, ear, wing, and hind legs are designed in the same way as those of the creature to the right. The front legs, however, are treated differently, being stretched out in parallel to grip the coiled stem. Also the tail makes a more generous loop, more in keeping with the series of curved forms to the left of the growing point.

The upper growth from the ridged node has a very short stem and a wide mouth. Almost at once it produces three stems of its own. The lower one loops round the straight stem, as in the design on the right, but here it ends on a spear-shaped leaf with basal berries not in a triangular berry bunch. The central stem starts the coiled hook-like scrolls which enclose the creatures in the left frame. The uppermost stem is straight, the first growth of the zig-zag organisation that moves from side to side of the left hand frame and is its dominant characteristic.

There are traces of the ascending inhabited scrolls to the right and to the left. The first creature in the ascending scroll on the right is a bird with heavy tripartite tail feathers which pass over the straight

stem that ends in the corner of the frame. Its wings, of which only one is completely visible, appear to have been displayed. The angled incisions which form the principal feathers of the wing are well preserved whereas the surface of its scapular feathers and the neck and head of the bird are lost. Beneath the wing is the end of the enclosing scroll which ends in a trilobed berry bunch. The bird's legs are stretched forward, drooping down in space, but interlacing with the coils of the scroll. A similar bird has occupied the first enclosing coiled tendril on the left. Its loss of carved surface is comparable but with the addition of the loss of the carved surface of both wings. Its legs have a wider splay as it straddles the coil. Unlike the bird on the right it has fully expressed powerful claws. One claw lies above the productive ridged node, and the other rests upon the corner of the frame. The head of this bird, eating a five-berry bunch, and other details have been retrieved among fragments clustered around fragment .246 of the mid-portion.

The bevelling of the sides and top of the whole slab provides an external moulding for the vinescroll frame, and it is in this context that the lack of a lower moulding for the part of the frame on the lower portion should be viewed. The area beneath the recessed carving is roughly and irregularly worked. An incised horizontal line runs from the right of the slab starting at the level of the projection on face D but it wavers upwards as it moves towards the left edge to meet the level of the projection on face B. Two parallel vertical draughting lines, c50mm apart, cross the horizontal line at the righthand side of the slab. An interpretation of the function of these lines has been proposed in Chapter 5. Both projections have been refashioned in order to create a secondary tenon to replace the damaged original tenon, traces of which are recorded in the reconstruction drawing.

Discussion: Quite apart from the elegance and ingenuity of the design in the lower edge of the frame, its condition allows a much better appreciation of the impaired vine-scroll on the upper portion of face C. The ascending scrolls afford the clearest guide to the carving in the fragmented mid-portion. However, the fragmented mid-portion on the left is a particularly difficult area to reconstruct because of the complexities and irregularities of the design at this point. The simpler organisation of the scroll on the right made reconstruction somewhat easier to

achieve, although some of the fragments from this area, for example .14, displayed ambiguous forms which took time to fall into place. Vine-scroll is a motif which permeates Insular art of the late eighth century, and its presence on the Hilton of Cadboll slab has always been the main line of argument for its date and origin. The version of the vinescroll used at Hilton has always been recognised as having some distinctive qualities. The evidence for its complete design recovered in the lower portion of face C which includes, a three-sided frame filled with inhabited vine-scroll, a novel treatment for the relationship of the growing point to the flanking animals, and details of the depiction of the winged creatures, provides a wholly new perspective on the use of vine-scroll by Pictish sculptors. The implications of this new evidence are discussed in Chapter 5. The damage to the original tenon, and the refashioning of the projections mean that we do not know exactly where the slab was first erected. For full discussion of these issues see Chapter 3.5.

Face C, mid-portion (illus 4.17)

NMS number: X.IB 355

Measurements: max height *c*330mm + 110mm of carved surface known to have been attached to the lower portion, max width *c*1420mm

Keywords: vine-scroll, spiral, cross

Condition: some of the carved surfaces of the fragments are in remarkably good condition suggesting comparatively short exposure to the elements, but there are also areas of total loss caused by destruction.

Fracture: the fragments belonging to the mid-portion of face C include thin skims of carved surface which fell off the lower portion either when it was worked to form a straight edge across the upper edge, or when it was impaired by destruction. The shattering of the heavy edge to the right of the face C mid-portion, adjacent to the narrow

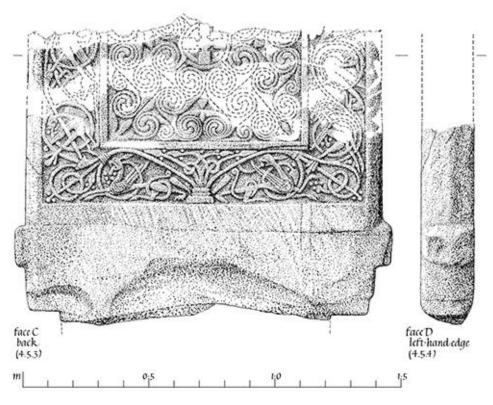


Illustration 4.17
Hilton of Cadboll cross-slab faces C and D, lower and mid-portions (scale 1:15)

edge, face D, indicates the radical nature of the damage. The comparatively uniform nature of the long narrow thick fragments produced by the destruction greatly aided the reconstruction, although some of the fragments had very little carved surface, or even indication of lost carved surfaces in the form of scars. Smaller fragments of carved surfaces were found to have lain on top of the larger ones which themselves mesh with each other in layers. The reconstruction drawing shows only carved surfaces, not the physical appearance of this interlayering of fragments with large areas of lost surface. No through-stone, with carving on both faces A and C, has been found and there is no specific evidence for hammer marks to help define more closely the nature of the destruction.

Toolmarks: the shaping of the narrow edges of the slab is different. The right edge of face C, abutting on face D, is gently rounded, whereas the left edge, abutting on face B, is heavier and bevelled. This distinction was useful to those involved in the reconstruction. Both edges have been stugged by the Pictish sculptor, and this distinctive tooling was also useful in assigning fragments to the edges of the slab.

Short description: The mid-portion of face C comprises fragments from the area of carved surface between the lower edge of the upper portion in Edinburgh and the upper edge of the lower portion currently at Hilton. Both edges show signs of trimming. The mid-portion survives as approximately 75 fragments comprising slightly more than half the complete design of the spiral panel, the upper part of which survives on the upper portion, together with adjacent sections of inhabited vine-scroll in the borders to the right and left. All the fragments are catalogued individually, with cross-references to their location within the most significant clusters of joined fragments or to their proximity to them. There is currently a discernible gap, which can be seen in the reconstruction drawing, in the restoration of the carving between the fragments belonging to the lowest section of the spiral panel and those from below the middle of the panel. The gap was probably due to the trimming of the lower edge of the upper portion in modern times and to the destructive events experienced by the upper edge of the lower portion some centuries before.

Long description

THE SPIRAL PANEL

It has been assumed by previous writers that the design of the spiral panel, when complete, was symmetrical, and this has been confirmed by the recovery of the three missing space-filling triangular shapes. The complete set of four are placed around the innermost tier of triple spirals at the cardinal points: on .254/.255 located towards the bottom edge, on .277 located towards the right edge, and, vestigially, on .276 to the left. The recovery of most of the bottom left corner on .247/.256 and .252/.253 replicated the corner motifs in the design on the upper portion, further confirming the symmetry of the complete design. The upper part of the design on the upper portion shows double spirals lying on the margins of the panel. One of these has survived on the upper edge of the lower portion and another, on the right margin, was located in the mid-portion on

It has always been known that the spiral panel design was centred on a circular motif, for a small segment of a circular moulding survived on the upper portion. The typically shaped fragment, X.IB 355.4, shows that the circle contained a ringed cross with the lower arm, carved on a higher level, superimposed on the ring. The ringed cross is within a circular moulding, to which the innermost spirals attach. Bonding of fragments has now shown that the equal-armed cross has double square angles at the crossing. The evidence for this completion of the design of the cross roundel is found on .276 (an area of the right arm and armpit), on .4 (the lower arm superimposed on the connecting ring, with a section of the circular moulding), and on .18 (a section of connecting ring and arm-pit) (illus 5.38). In the catalogue all the individual fragments in this area of the mid-portion are referred back to the cluster description centred on 355.4. This detailed description was the work of Meggen Gondek in August 2003. Since then there have been additions to the reconstruction of the mid-portion, most of which are listed in this overview of what has been reconstructed of the mid-portion since that date. It should be noted, however, that all suggested conjunctions have to be agreed with the conservator of the National Museums of Scotland and that some of the joins have still to go through this process before being bonded.

THE BORDERS WITH INHABITED VINE-SCROLL

To the left, a skim of carved surface broken into ten fragments has been reassembled so as to recover the complete design of the bird inhabiting the first scroll whose tail and legs survive on the lower portion. The ten fragments centred on .246 have been bonded and were part of a very limited exercise to refit fragments on to the lower portion in May 2005. Above this scroll the second node of the zig-zag stem that fills the left border has been recovered, along with some sections of interlacing tendrils belonging to the first and second scrolls (.317 which joins with .334, .13, and .314). Sections of the body and wing of the winged quadruped inhabiting the second scroll have also been found. This scroll is completed on the upper portion where the creature's head is seen eating a berry bunch. The hindquarters, which would have been placed outside the second scroll, have not been located. They would have been within the missing stretch of the mid-portion. A length of the edge of the slab, where face C meets the narrow face B, has been retrieved, but it does not join the upper to the lower portion.

To the right, a fragment carved with the hindquarters of a winged quadruped has been located outside the second scroll of the undulating stem that fills the right-hand border. The tip of its wing and, inside the scroll, its head have been recovered. The fragment, .14, with the hindquarters and raised tail, is adjacent both to the main stem and to the growth point between the first and second scrolls, presenting, initially, a dauntingly ambiguous set of forms well described in the individual entry for the fragment. The reconstruction of this area was aided by evidence for the left edge of the slab, where face C meets the narrow face D, with its characteristic stugging mentioned above. A substantial stretch of this edge has been reassembled, which as can be seen on the reconstruction drawing, approaches very closely the edges of the upper and lower portion.

Discussion: The reconstruction of fragments on face C of the mid-portion has clarified the organisation of the vine-scroll in the left border, confirming that it had nine scrolls only, in contrast with the ten scrolls on the right. One early proposal was that there might have been a smaller scroll in this area to balance the design on either side. The completion of the spiral pattern not only physically confirmed its design symmetry but most importantly has revealed that

its central motif contained an encircled relief ringed cross of a typically Pictish design. Suggestions for the treatment of this area have included a raised boss or a flat disc. We now know from the recovered lower portion that fountain-like sprays of inhabited foliage, centred on a growth point, fill a lower border for the vine-scroll frame. Although the growth point is not precisely centred on the cross-design in the spiral panel, they are obviously intended to relate to each other spatially. The major implications of these new perceptions of the completed spiral panel and the vine-scroll frame for the reappraisal of the iconographic programme of face C are discussed in Chapter 5, and attention is drawn to the need for a closer look at the designs of some other Insular spiral patterns, including those on Pictish cross-slabs.

Appendix

This guide to the more locationally significant fragments recognised as belonging to the mid-portion of face C can be used in conjunction with the individual entries in the digital catalogue, which sometimes represent work at a different stage. The reconstruction of this area was an early priority because of the size of the fragments, and knowledge of the nature of the designs provided by the upper and lower portions.

The upper horizon of carved surface

left edge of face C: .317; .334

left section of vine-scroll: .314 (wing of winged quadruped); .317 node of second stretch of zig-zag stem)

left area of spiral panel: .315 (panel margin); .316 Centralised cross roundel described clockwise: .4; .276; .275; .18

right area of the spiral panel: .277 (triangular space filler); .267 (spiral and panel margin)

right section of vine-scroll: .267 tail of bird; .351 (head of winged quadruped)

right edge of face C: .351; .42; .44

The lower horizon of carved surface

left edge of face C: not recovered

left section of vine-scroll: .246 (head of bird) focus of a joined cluster of 10 fragments now fitting on to the lower portion

left corner of spiral panel reading from the lower edge: .252; .253; . 247 (with corner motif); .256 centre of lower edge: .257 (pair of spirals with centralised almond-shaped motif); .255/.244 (triangular space filler)

right area of spiral; .40 with .361 from its surface lying on top

right section of vine-scroll: .14 (hindquarters of winged quadruped with adjacent growth)

right edge of face C: .296

Face C, upper portion (illus 4.2 in pocket, illus 4.18)

NMS number: X.IB 189; donated by R W MacLeod of Cadboll, 1921

Measurements: max height c2340mm, max width c1404mm at bottom and 1394mm at the top (including bevels), max thickness c190mm (to which compare the approximate thickness of the lower portion which is c210mm)

Keywords: vine-scroll, figural, spiral

Condition: the carved surfaces are much impaired. Many have simply fallen off, apparently through lamination and contour scaling.1 See, for example, the total loss of surface of the carving of the volutes at the ends of the horns of the crescent, and the wear and lamination of the left terminal of the crescent rod, in comparison with the reasonable state of preservation of the surface of the right-hand terminal. The location of wear is reversed for the two disc symbols, where the one to the left is virtually complete and that to the right much impaired. J R Allen notes that the sculpture is 'weathering rapidly in its present exposed condition'. He was aware that Cordiner and Petley had recorded details that had almost entirely disappeared. He had himself noticed deterioration of the spirals carved within the discs of the doubledisc symbol over an interval between two visits to Invergordon Castle. Within the hunting scene both mirror and comb have lost surfaces. The arms and heads of the trumpeters have been damaged and only a scar of their trumpets remains. The facial features of the female rider are worn, with more serious loss from damage over the brow. The vinescroll on the left has lost almost all of the surfaces to the immediate left of the hunting scene. When Allen made a rubbing and later published a photograph, the surface of the area immediately adjacent to the

mirror and comb was still intact. On the vine-scroll to the right the areas of greatest loss are farther up the slab, running from the right horn of the crescent down to the upper level of the hunting scene.

There are at least three graffiti on the slab. In the space between the left horn of the crescent and the disc below, the initials D S and B F are neatly incised within an incised rectangular frame. The F appears to have serifs and the points after the letters are drilled. Between the apex of the V-rod and the right-hand disc is a well formed capital D apparently cut with a chisel. The down stroke has serifs. The horse at the bottom right-hand corner of the hunting scene has been given an eye formed by a drilled hole surrounded by an incised saltire cross joined to a V-shape. There are some other incised lines, for example the short parallel lines on the haunch of the female rider's horse, one of which ends in a hole, which may also be the work of vandals.

Fracture: although a cast of the lower edge of the upper portion is available for study it is not possible to make deductions from it as to the nature of the original fracture or possible later trimming.

Short description: A framework containing inhabited vine-scroll on its lateral edges and a double disc and Z-rod symbol on the upper edge, encloses three panels divided by horizontal mouldings. The upper panel contains a crescent and V-rod symbol and two examples of the single-disc symbol. The central panel shows a hunting scene with a small-scale mirror and comb symbol-pair in the top left-hand corner. The bottom panel is filled with spiral ornament organised round traces of a circular moulding.

Long description

THE FRAME (ILLUS 4.18)

1 The right side

The creature at the bottom of the upper portion we now know to be the third in the ascending vine-scroll when the slab was complete. It is a bird, facing to the right, whose forequarters are enclosed by the scroll. Its long neck is lassoed by one strand of the bifurcated growth at the end of the scroll which terminates in trilobed berry bunches. The bird has its beak wide open as it feeds on the berry bunch nearer the outer edge of the frame. The bird has a

rounded cranium with an ear-like crest flying out from the back. Its raised wings grip on to the scroll, and its legs straddle it with the front nearside leg bent and the other stretched out. There are traces of trilobate tail feathers, but the tip of the tail is lost. (It was eventually recovered on the mid-portion fragment .267.)

The fourth creature is a winged quadruped looking left. It has its long neck lassoed in exactly the manner of the bird below but it feeds at the berry bunch nearer the inner frame. Its wings grip the outer edge of the scroll and its forelegs are parallel, bent at the hock and stretched forward. The body is tubular, and the slim hindquarters lie outside the scroll against the outer edge of the frame. The tail rises up to bend under the body to end in a lobed scroll.

The fifth creature is a bird facing right, very similar in design to the third bird but without the lassoing device.

The sixth creature is also a bird but faces left. It has the standard head type. Its forelegs grip the scroll in an 'Anglo-Saxon' lock, where the offside leg comes forward over the scroll. The claws are comparatively large and both rest on the main stem. The scroll is gripped between the wings and the body. The body of the bird is extended to loop round a tendril from the scroll. Both body and scroll end in rounded forms. This extended body creates a distinctive type of bird that has something of the appearance of a winged bipedal creature.

The seventh creature is a bird facing right. The surfaces are very worn. A standard head is discernible, but the arrangement of the wings and legs is unclear.

The eighth creature, a winged quadruped facing left, is equally worn. Its hindquarters can just be discerned, but how they are arranged is unclear. Its lobed tail appears to pass under a hindleg.

The ninth creature is a bird facing right but with its head tilted upwards looking towards the corner of the frame. It is of standard design except in two respects: it does not eat a berry bunch within the scroll, rather its head is outside the scroll and it eats a bud growing from the main stem, and its tail feathers are an odd shape, for the basal feathers are the usual heart shape, but the central feathers have a hook-like curve.

The tenth and uppermost creature is a winged quadruped with its head in the corner of the frame looking in the direction of the upper edge of the slab. Most of its carved surfaces are lost. It has a standard head but like the ninth creature eats outside the scroll. Its hindquarters are also outside the scroll, as is usual for winged quadrupeds. Its forelegs widely straddle the scroll. Both the ninth and tenth creatures sit within double-spun scrolls.

THE SPANDREL GROWTH IN THE RIGHT STEM

Undulating vine-scrolls regularly have growth in the spandrels formed between the main stem and the outgrowth of the scroll. The growth takes various forms.

The upper area of the spandrel survives under the third creature (the first surviving on the upper portion). A shoot from the main stem curls upwards to end in a spear-shaped leaf with basal lobes. It may also loop under a shoot from the scroll below. Within the spandrel between the bird and the quadruped on the inner margin the growth comes from a node which produces a central stem which divides into two. The shoots cross, and each loops round a shoot from the main stem. All the shoots end in lobes.

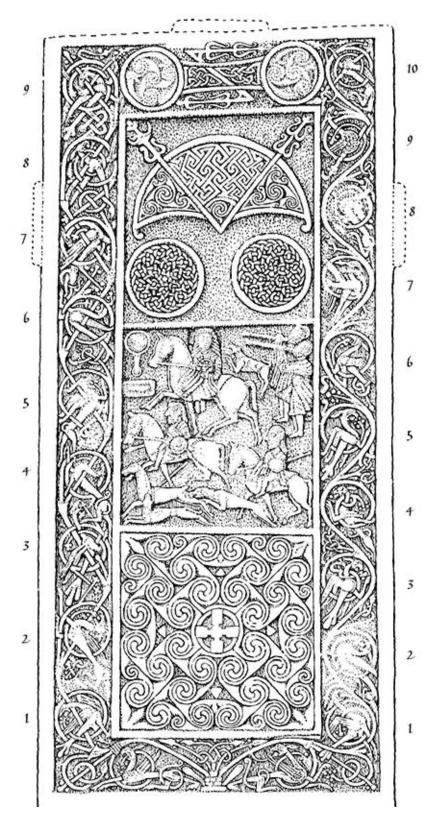
The next spandrel lies on the outer margin between the quadruped and a bird. A central shoot divides into two stems which reach out to the edges of the spandrel to end in standard spear-shaped leaves. Single shoots from the main stem loop round each of these stems to end in leaves which flank the central shoot. These shoots themselves develop shootlets which loop round just below the spear-shaped leaves at the outer edge of the margin. Spandrel growth of this complexity echoes the organisation of the growing point on the lower portion.

The next spandrel lies on the inner margin between two birds. The growth consists of a central stem which ends in a bunch of five berries. Shootlets emerge from the scroll below and the main stem above to enclose the berry bunch.

The next two spandrels are too worn to determine the design of the growth.

The next legible spandrel lies on the outer margin between a quadruped and a bird. The growth consists of a central stem which ends in a leaf which lies along the outer margin. A shootlet from the main stem loops round it to end in a lobe.

The final spandrel between a bird and a quadruped lies on the inner side of the margin. It is very worn. The growth appears to consist of two shoots. One ends in a single berry which is being eaten by the



 ${\it Illustration~4.18} \\ {\it Hilton~of~Cadboll~cross-slab~face~C~with~numbered~vine-scroll~(scale~1:15)}$

bird. The second stem is looped round by a shootlet, possibly two, produced from the main stem. The spear-shaped leaves of the shootlets lie on either side of the corner of the mouldings of the frame.

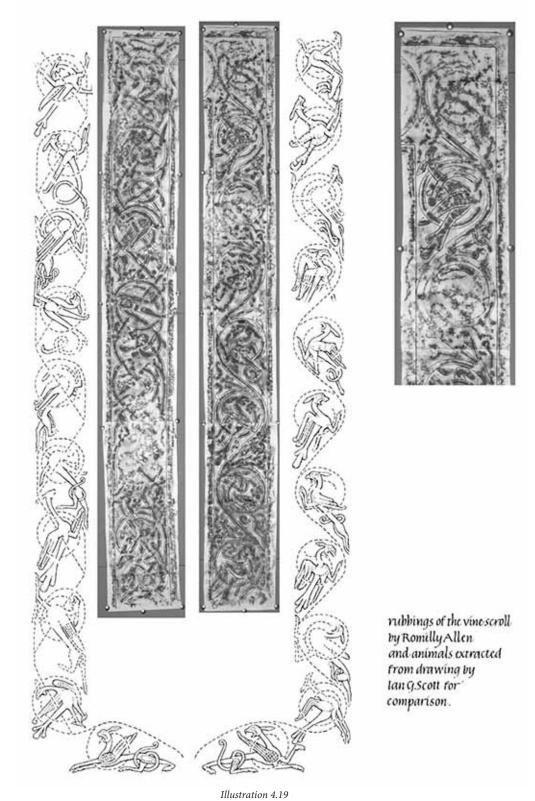
The top left of the vine fills the space between the uppermost scroll and the right disc of the double-disc symbol in spandrel fashion. The details are very worn: a shoot from the scroll divides into two, the growth to the right ends in a standard leaf. It is not clear how the growth to the left develops.

2 The left side

The basic organisation of the vine-scroll to the left consists of alternate nodal points which can be clearly seen at the edges of the frame. The nodes produce a central bud and two side growths. One of these produces the straight sections of a zig-zag main stem. The other side growth produces, in hook-like fashion, the scroll which encloses the inhabiting creatures. Each section of the zig-zag stem, from alternate node to node, runs diagonally through the scroll. This arrangement eliminates the spandrel growth present in the undulating vine-scroll on the right side. The space to be filled lies adjacent to the nodes and between the scrolls.

The first node visible on the upper portion is probably the third node of the complete design. (The first node is on the lower portion and the second node was recovered on mid-portion fragment .217.) It lies to the right of the frame. It produces the hooklike scroll as described above, its first stretches lying along the inner margin. The main stem, the zig-zag element, runs through it. The hooked scrolls from above and below, the latter only partially surviving, produce straight shoots ending in trilobate forms which intersect between them. This is a recurring feature of the left-hand scroll organisation. To the left of the intersecting shoots the heavy tripartite tail feathers of the enclosed bird fills the space. The bird's wings and outstretched legs grip the scroll. It feeds outside the scroll on berries produced by one of the next pair of intersecting straight shoots. There is a difficulty with the depiction of the legs: a third 'leg' appears to belong to a forgotten intention to straddle the legs of the bird. When Allen drew over his unpublished rubbing of the carved surface, he interpreted this 'leg' as a central strand growing from the node and disappearing into the body of the bird (illus 4.19). This is an unlikely arrangement. When Ian G Scott made his drawing in 2001 he retained the third leg, accepting it as a mistake. (A similarly anomalous third leg may account for the difficulty of interpreting the arrangement of the hindquarters in the eighth scroll of the right-hand stem.) The next node lies to the left of the margin. Adjacent to it on the right is the intersecting shoot motif with the bird feeding to the left, as described above, and to the right, the elegantly arranged hindquarters of a quadruped with a tail that curves between its legs and over its back to end in a lobed coil. Its tubular body passes into the scroll interlacing with it and the diagonal section of the zig-zag stem. Thereafter the surface detail of the arrangement of its forequarters is worn away. Similar hindquarters are all that is left of the next creature. They are positioned outside the scroll on the left margin, and opposite the fifth node on the right of the margin.

The sixth node is on the left side of the margin. It has a central bud and the usual outer strand that forms the hooked scroll and the inner strand that is the straight section of the main stem. The inhabiting bird feeds within the scroll. It is oddly positioned with its long neck, the head with the typical flying crest, lying horizontally across the frame. The single wing is similarly erect. The forelegs lie vertically along the left margin. When Allen made his rubbing, the surface to the right of the node was still intact, and he was able to draw the forms between the scrolls which are now scaled off. His drawing shows that the bird had an extended body that looped round standard intersecting shoots to end in a hook shape which still survives. This treatment of a bird is found among the creatures in the undulating vinescroll on the right. However Allen misinterpreted his rubbing in two respects when he came to draw over it. The scroll end, in fact, goes straight into the bird's beak whereas he interpreted it as the end of the scroll, located outside the coil, and performing the function of one of the intersecting shoots. What misled him was his failure to realise that the bird had the usual crest, the carved surface of which is well preserved. Allen's fin-like form on the lower reaches of the extended body requires explanation. There was obviously something of the sort carved there. In spite of his misinterpretations, Allen's rubbing does preserve accurately a substantial part of this now missing part of the design. The complete bird is also clearly visible on the photograph commissioned for publication in ECMS by Allen from D Whyte of Inverness.² The quadruped immediately above the oddly positioned bird probably preserves the design



Face C animals: Allen's rubbings (© British Library Board, Addl MS 375.62) are aligned with outline drawings of the animals as they are now known (1:15). To the right is a detail (1:10) of the top three animals in the right-hand panel

of the forequarters missing for the quadrupeds lower in the vine-scroll. The creature's neck swings back over its body, parallel to the curve of the scroll, to feed awkwardly on the berries at the end of the scroll. The long straight wings lie across its body. The drooping hindquarters lie to the left of the intersecting shoots opposite the seventh node on the inner margin. For the first time the shoots have a bud at the point that they emerge from the scrolls.

The eighth node lies on the outer margin. Its hooked scroll is double spun. Within it is another example of a bird with an extended body. It feeds on the terminal berries within the scroll. The intersecting stems are longer than usual. The point of intersection lies within the loop formed by the extended body. A narrow wing interlaces with the scroll and one of the intersecting shoots. The head has an usually large crest. The tail feathers end in a hooked form. The forelegs stretch forwards to rest on the inner frame.

The corner design at the top of the frame is difficult to interpret. It has to achieve a termination of the design and there is considerable loss of surface. The node is on the inner edge just at the corner of the frame. The outer strand creates a double-spun scroll, while the inner forms the final diagonal of the zig-zag main stem. The diagonal passes through the scroll to end, not this time in a node, but in a pearshaped leaf with basal berries. A further growth is produced at the top of the uppermost section of the tendril in order to fill the remaining horizontal space at the very top of the slab. The neck of the bird swings back, in the manner of the quadrupeds, to bite at the diagonal main stem. To the left of the node the usual shoots intersect, but bend back to intersect again. They end, not in the usual trilobate leaves, but in rounded forms. To the left, touching the outer frame, are the bird's tail feathers made up of a central element and two pairs of flanking projections. The wings, unusually, are spread apart. The upper interlaces with the scroll and the lower extends beyond it. The legs appear to straddle the scroll to lie between a shootlet from the scroll and the tail feathers. One part of the design is particularly difficult to understand. A substantial spear-shaped leaf with four basal berries lies at the top right of the vine-scroll, close to the left side of the double-disc symbol. The offside leg of the bird may reach out to touch the berry bunch. This shoot interlaces with the scroll and meets the diagonal stem at right angles. It may be that it was intended to branch out from the

stem but if so, unusually, there is no indication on the stem that there is growth at this point.

It will be noted that for some reason the sculptor's design became more complex in its upper reaches. On both sides the two scrolls at the top are double spun. Discussion of this trait will be found in Chapter 5.

3 The upper edge of the frame

The upper edge of the frame is designed to be slightly deeper than the other sides, including the lower edge on face C of the lower portion, presumably to accommodate and give prominence to the doubledisc and Z-rod symbol which it fills. Although there is no absolute standard, the proportions of the symbol are, in this case, necessarily unusual. The juncture between the discs is long and the diagonal section of the rod is short. These traits allow the discs to be positioned on the corners of the central panel and the Z-rod to be compressed within the frame. The discs are filled with an arrangement of triple spirals described by Allen as 'the most effective spiral pattern for filling a circle' and the one that is used for this purpose 'with greater frequency than any other'. Allen cites examples in all media.3 The juncture is decorated with interlace with an arrangement of loops tailored free-hand to fit the spaces on either side of the middle section of the rod. The rod passes behind the juncture with the illusionistic open interlace occupying the fields on either side. The terminals of the Z-rod are very worn but both have their curvilinear flourishes arranged in opposite pairs. The two terminals are differentiated to the extent that the pair of flourishes on the upper section of the rod face the same way, to the right, while the lower section has them facing each other. Whether the Z-rod terminates in the standard blunt and sharp ends cannot now be determined.

THE CENTRAL PANEL

The central panel is created by the inner margin of the vine-scroll frame. It is further divided into three panels by two transverse mouldings. The upper panel displays the crescent and V-rod symbol set above two single disc symbols.

1 The symbols

Allen fully analysed the geometry of the shape of the crescent and V-rod.⁴ He demonstrated that it was designed on the framework of a wreath-like annular

space. Uniquely, the spandrel-shaped angle where the arms of the V-rod meet is superimposed on the crescent shape instead of being, as is usual, outside it. The Hilton spandrel is a segment of the centre of the ring and is decorated with a triple spiral.⁵ The horns of the crescent are decorated with Allen's spiral pattern no 1119, which is an arrangement of triple spirals similar to that used for the double disc symbol. The central section of the crescent, between the V-shape made by the rod, consists of a key pattern tailored to fit the segment of the annular ring. At its centre two of the bars are treated as spirals. Allen did not describe another peculiarity of the basic shape of the Hilton crescent: the carved surfaces at the tips of the horn have scaled off but the scars of the volutes that end them can still be seen. They appear in the drawing made by Petley at the beginning of the 19th century.

The two disc symbols positioned under the crescent are generously spaced with their frames touching the inner sides of the frame. They appear to be decorated in the same way. The disc to the right is very worn but the complete design has survived on the disc to the left. The method of filling the circular field is the common one of making two concentric circles of loops, in this case twelve tighter in construction for the outer circle, and six looser loops for the inner one. The concentric circles used for the discs is also a wreath, albeit a tight one, with the centre being expressed by a stud-like feature.

2 The hunting scene

In spite of the heavy loss of carved surfaces the firm designing of the scene allows its impact to remain to a remarkable degree. A mirror and comb symbolpair fills the top left corner immediately adjacent to the two riders at the top of the panel who are moving from right to left. They ride abreast. The rider closer to the viewer sits facing forward but holds reins to control the horse. There is a horse-cloth on the back of the horse and probably a crupper backstrap. The horse's head is very damaged but there are traces of a snaffle bit, a noseband and a browband. The rider facing forwards is a female wearing a draped cloak and a full-length undertunic, both with folds expressed by ridges. The cloak appears to be fastened by a large penannular brooch worn on the breast. Other suggestions for the interpretation of this ambiguous area of carving have been made, but recent close scrutiny supports the view that a brooch

is intended. The female rider's head is ovoid with ridged hair falling to the shoulder. All traces of the facial features have been lost. There is no indication of any headgear. The accompanying rider's horse is conveyed largely by doubling the outline of that of the female rider. There is no indication that this second rider carries a spear, although there is space sufficient to show a spear's tip above the comb. The difficulty of conveying the second rider's face when the figure riding with him abreast was depicted facing forwards and with flowing shoulder length hair is solved by cutting a recessed panel on either side of the female rider's head, thus allowing a bearded male head to be glimpsed above the female's right shoulder. Above the haunches of the horses a small quadruped leaps up. Behind the quadruped two figures stand, their feet close together, blowing long trumpets. They too are abreast but their spatial relationship is clearly conveyed by the fact that they stand on different ground lines. The trumpeters' heads fit neatly into the top right corner of the panel. The proportion of their heads to their bodies is more naturalistic than that of the riders below, but whether their faces are in profile or in three-quarter view cannot be determined because of lamination. Their arms are raised, bent at the elbows, but these details survive as scars only. They wear cloaks draped over their arms, and tunics with short skirts that cling to their legs.

Below, two riders advance from the right in a diagonal line. The horse of the leading rider has a harness similar to that of the horse of the female rider. His horse's back cloth may be fringed. The horse's nearside foreleg passes behind the head of the deer below. His spear appears from behind his horse and the spear that has been thrown to kill the deer passes under his horse's offside foreleg. The rider's head and shoulders fit comfortably between the forelegs of the horses above. His profile head, with shoulder length hair drawn back to show the ear, has a clear space of uncarved surface in front of it. He wears a draped cloak with tight-fitting trousers. In his left hand he carries a small hunting shield. The tip of his sword can be seen emerging from behind it. The rider in the bottom right corner of the panel has a smaller mount but otherwise has a similar appearance, except for the position of his horse's forelegs which are in a walking position rather than in the stepping gait of the mounts of the other riders. These traits are presumably due to design rather than narrative requirements. He

has the same small shield but there is no sign of his having a sword and the tip of his spear is not shown. The bottom left corner contains a spirited scene of a deer at full stretch attacked by two equally straining hounds. One leaps up at the deer's throat while the other bites at its hindquarters. The offside foreleg of the rider in the bottom right-hand corner passes behind the hound that grabs the deer's hindquarters. The open mouth of the deer and the fact that it has been speared suggest that the deer has been brought down and that the hunt is over.

3 The spiral panel (illus 4.3b)

According to Allen the spiral panel when complete would have consisted of thirty-two triple spirals and eight double spirals arranged round 'a central boss'. There is no evidence for there having been a bossed form at the centre, but enough of the upper half of the design survives on the upper portion to show that there was a framed circular field at the centre of the panel, and more information about its nature has been identified centred on the mid-portion fragment .4. After all the relevant fragments had been bounded it was evident that the circular field contained an equal-armed cross with a square at the crossing. This is a very common type of Pictish cross-head (see illus 5.25 and 5.45).

The upper portion preserves four of the triple spirals immediately adjacent to the central field and eight of the triple spirals which surround them. It also shows in the upper left- and right-hand corners a pair of triple spirals. This adds up to sixteen triple spirals. On the upper edge of the panel two small double spirals fill the spaces between the triple spirals and two others, one to the right and one to the left, perform the same function. C-shaped curves expanding at their centre link all the spirals. At the corners these expand to fill the angle producing the effect of two leaves enclosing a central, pendant, almond-shape. The linked pair of spirals at the centre of the top edge has the apex of a decorative triangular shape touching the C-shaped connection at its expansion point. Such unattached shapes, frequently pellets, are often randomly placed within spiral work in Insular art. Other triangular shapes belonging to the spiral design have been recovered among mid-portion fragments.

Discussion: Although the importance of face C of the lower portion, with the completion of the vine-scroll frame on the lower edge, is of major significance for the understanding of face C of the upper portion, the fact that the pre-eminent figure sculpture on face C of the upper portion is now matched by narrative figural scenes on face A has considerable significance for the interpretation of the iconographical programme of the Hilton of Cadboll cross-slab as a whole. Full consideration of the detail of the inhabited vine-scroll on face C not only reveals the workings of the sculptor's mind but also makes it possible to relate the animal and figure styles of the upper portion of face C, hitherto appreciated only in a general way, to this ornament on face A, thus restoring the artistic integrity of the monument. The discovery amidst the fragments of the mid-portion of the nature of the cruciform design at the centre of the spiral panel reinforces the need to give full weight to what has scarcely been remarked, that the entire central panel of face C of the upper portion, with its symbols, hunt, and spirals, is presented within the Eucharistic symbol of the true vine. This sacramental symbol can now be seen as a commentary on the historical Calvary symbolism of the newly recovered lower portion of face A.

Notes

- 1 Maxwell 1994, 5-19.
- 2 BL Additional MS 37562–7 (Hilton of Cadboll). Part of the Romilly Allen Collection, BL Additional MSS 37539– 37628; ECMS, pt III, 61, fig 59.
- 3 ECMS, pt II, 398, where Hilton of Cadboll is omitted in error. Cp pt III, 62.
- 4 ECMS, pt II, 362.
- 5 ECMS, pt II, 402, where it is described mistakenly as a double spiral.
- 6 ECMS, pt II, 395; pt III, 62-3.

4.5.4 The left-hand edge, face D (narrow) (illus 4.3b)

The whole length of the slab

NMS number: none (lower portion), X.IB 355 (midportion), X.IB 189 (upper portion)

Measurements: height c3550mm, max thick c210mm (lower portion), c190mm (defaced upper portion)

Keywords: edge, toolmark, cross-shape

Condition: the mid-portion edges of face D survive only as fragments. The projection on face D of the lower portion has been refashioned for the same purpose as that on face B, but what survives is in better condition than the projection on face B, with much of the original tooling surviving on the right side. Face D has the same impairments on the defaced upper portion, caused by support systems at the bottom, and farther up the face, as described for face B.

Fracture: face D of the lower portion shows the lamination crack on face C on the left side (illus 4.4b). There is some damage to the right of the crack in the form of hollows and gouges. The mechanical cutting away of the lower half of the projection has resulted in the loss of the bottom left-corner of the blank panel to the left of the cross-base on face A. This degree of damage did not occur when refashioning the projection on face B. Below what remains of the projection on face D the surface reduction is similar to that on face B. Thereafter, immediately below, the face would have become part of the original tenon.

Description: The right edge of face C abutting on face D is gently rounded whereas the left edge of face C abutting on face B has a heavier bevel. Impressively thick fragments of this rounded face D have been reconstructed in the mid-portion. The projection on face D may preserve more of the original appearance of the projections. It certainly presents a somewhat different appearance from that on face B. The part of the face D projection that survives on the right side curves smoothly round as an extension of the upper moulding of the blank panel to the left of the crossbase on face A. The effect is similar to a column base. Towards the centre of the face the surface of the projection is hacked away. Most of the upper edge survives although it falls away towards face C. The present appearance of the face D projection shows it narrowing as it approaches the back of the slab. This is unlikely to be of design significance. Although the projection on face B lacks the curved feature, both respond, and indeed are essential to, the design of the cross-base on face A.

Discussion: The narrow faces B and D of the Hilton of Cadboll slab, although not decorated, were very much part of the conception of the total design of the slab and they preserve many clues not only to the modern history of the slab but to its later history in antiquity. These faces on the upper and lower portions functioned in a number of ways: to create a moulding for the vine-scroll frame on face C, to bring the design of the cross-base with

flanking panels round to the edge of the slab, and probably to emphasise the cross-head by projecting the transverse cross arms beyond the slab edges. The extent to which these devices are paralleled in other Pictish sculpture is discussed in Chapter 5. In the event of the recovery of the fragments, the distinctive shaping of the edges abutting on face C, that on face D rounded and that on face B heavily bevelled, proved enormously useful in the work of reconstructing the middle portion. The tooling and refashioning of faces B and D of the lower and upper portions are discussed in detail in Chapter 7.2.2.

4.5.5 The top edge, face E (narrow) (illus 4.20)

NMS number: X.IB 189

Measurements: width c1390mm, thickness c150mm

Note. This account is based on photographs of face E, taken by the NMS, from the viewpoint of face C in October 2005, and a brief inspection, on that occasion, by NMS staff.

Condition: the condition of the surviving surfaces of the face appears to be good. There is no sign of internal separation of the bedding planes. There is a broken area at the centre of the face affecting a third of its breadth. The area of damage has affected the upper moulding of the frame on face C, with loss of carved surface and subsequent wear along the edge abutting face C immediately above the double disc with Z-rod symbol within the frame. The upper section of the Z-rod has been impaired by the damage.

Fracture: the area of damage at the centre of the front edge abutting face C has jagged peaks reminiscent of areas of the fractured top of the lower portion. Damage of this nature is not due to dripping trees, although water ingress may have affected the relief surfaces of face C after the edge was broken. The fracture suggests a rough separation from the face of a central feature by hammer blows.

Description: The face divides into three sections. Those to the right and left are dressed and stugged. The central area is similarly dressed on the edge abutting on face A. The edge abutting on face C is badly broken.

Discussion: Clearly some feature was knocked off the upper face of the cross-slab. Similar damage occurs on the cross-slab from St Madoes, now in Perth



Illustration 4.20 Hilton of Cadboll cross-slab face E

Museum, and on the slab in the grounds of Elgin Cathedral, and in both these cases a human head may have been removed. The placing high of heads is a usual design feature of Insular art. The design on face C is complete on its upper edge, and thus it is unlikely that there was any similar target for such an action relevant to that side of the slab. We know that the lateral edges of the Hilton of Cadboll cross-slab had projecting features. At the bottom of the slab they had an architectural function relating to the design of the two-stepped base, and possibly they had a practical one, connected with the raising of the slab. The function of the projections, surviving as scars, higher up the lateral edges adjacent to the symbol panel, is conjectural, but since they occur at a level that would be appropriate to the arms of a cross they may well be projections of the transverse arms, a device known elsewhere in Pictish sculpture. Such projections need not have been any larger than the lower ones, indeed they would probably be rather smaller so as not to disturb the strong emphasis on the base of the cross. For a full discussion see Chapter 5.

The observable damage to the top edge could have been caused by the removal of a projecting top arm, but this proposal is not immediately confirmed by the inspection of face E. Certainly this projection, if it was such, was not removed in the discreet and careful fashion of the removal of the

upper projections on faces B and D. The damaged area of the face is centred but is broader than would be required for the removal of an emergent top arm. The rough nature of the work, or later damage to face E, could account for this spread of damage. In the recent inspection no photographs were taken obliquely from the viewpoint of face A, and seen from face C the edge abutting on face A appears undamaged. However, we know that face E was damaged on this edge, for the defacement of face A would have necessitated the trimming of the front edge of the face. The apparent flatness and stugging of this area could be the result.

Several options could account for the damage on face E. It appears on Petley's drawing, and thus it belongs to the period before the removal of the slab to Invergordon Castle. Such damage could perhaps have been caused by a crowbar inserted between the ground and face C in order to assist the turning of the slab so that face C lay upwards. This could have been done when the Duff family ordered the slab to be turned over in order that the superfluous inscription and heraldry now on face A was hidden. If, as suggested in the catalogue entry for the defaced upper portion, the slab was turned face A upwards again, perhaps by another agent who hoped to be able to reuse a slab which, by feel, appeared to be blank, then Cordiner, feeling carved surfaces on the face next to the ground, had the slab turned over,

the crow bar again being inserted under face C in such a way as to increase the damage on the back edge of face C. In these circumstances the damage to face E could have been due simply to the turning of the slab to expose face A, not to the removal of a projection of the top arm. It might be argued, however, that leverage under a narrow side of the slab would not have been so effective as leverage at two points on a long side, and that the damage cannot be accounted for by the use of a crowbar.

A simpler scenario, and one endorsed by Ian G Scott, would be that after Duff's mason had removed the lateral projections and the relief carving from face A, which included the upper arm of the cross, he removed its projection by carefully dressing along

its length. When the half-way mark was reached the remainder was simply knocked off from the face C side without regard to the damage that would be caused to its carved surfaces. The top level of face E would then be lowered a little and tidied up with the aim of producing a neat top edge for face A in a manner similar to the treatment of the sides, faces B and D. It is certainly the case that comparison with the recovered lower portion, which provides the original dimensions of the cross-slab, makes it clear that all the refashioning of the cross-slab in the 17th century was done with economy of effort, in terms of the amount of stone removed to create a memorial slab with a flat surface and straight edges suitable for re-use.

Chapter 5

The art-historical context of the Hilton of Cadboll cross-slab

ISABEL HENDERSON

5.1 Introduction

As a result of the recovery of its lower portion, with all four sides preserved, and of a high proportion of fragments of carving from its front face, the Pictish slab from Hilton of Cadboll has become in effect a new monument. The new evidence is not something to add on to the familiar truncated and defaced monument on display in Edinburgh, but is sufficient to restore its context within its original conception. The cross-slab can now contribute to the better understanding of Pictish sculpture locally, nationally, and within the totality of the corpus, in all media, of Insular art.

The Hilton of Cadboll cross-slab is broadly typical of the tall, ambitious monuments which employ the full range of the Insular decorative repertoire in a carving style that exploits different levels of relief. These tall slabs, like Hilton, also display the distinctive Pictish symbols, figural scenes and animal motifs. This homogeneity of repertoire has allowed Pictish cross-slabs in general to be treated as one class of monument, obscuring the extent to which each is a unique work of art. For example, the shape of the cross and its scheme of decoration is never repeated in a total of around one hundred cross-slabs or fragments of cross-slabs, something true even of the allegedly, mechanical mass-produced small slabs in the collection at St Andrews.1 This artistic phenomenon of difference within a defined programme and repertoire is exactly paralleled in the decorative scheme for Insular Gospel-books.2 The scope for adaptation and assimilation is one of the glories of the Insular art style in all media. There is no way of discerning, 'the genius of the sculptor', to borrow a phrase of Françoise Henry, without detailed description. Aspiring to the level of detail provided in the Corpus of Anglo-Saxon Stone Sculpture, catalogue style descriptions of the carving on all four faces of the monument are provided after an account of the method of cataloguing used by the project (Chapter 4). They provide the evidence for this and future assessments of the art-historical context of the slab.

5.2 The whole monument

5.2.1 The sculptor's brief for the quarry-men

Very little is known about the mechanisms of patronage or of the practicalities of procuring stone for ambitious early medieval monuments. The discovery that the stone for St Martin's Cross and the exceptionally widespanned St John's Cross on Iona came from a quarry on the mainland of Argyll is however a clear indication that stone could be chosen and imported from quarries distant from the intended place of erection.3 It seems that there was a quarry source in Easter Ross which provided stone for some at least of its monuments (Chapter 7.2.1). The presence of ambitious monuments is sometimes explained by the availability of stone suitable for carving, but in itself the presence of good cutting stone cannot produce a school of sculpture, although it might contribute to its development. Nor can patrons have included considerations of stone type when they set up their administrative centres. Patrons were unlikely to be aware of all the artistic possibilities for the monuments they commissioned, although their travels and their treasuries will have given them an idea of what they wanted from the sculptor.4 On such matters the sculptor would have had a clear idea of what he wanted to achieve and what type of stone he required. In the case of Hilton of Cadboll both patron and sculptor were obviously committed to producing an exceptionally large monument. The sculptor's concept will almost certainly have been driven by his plans for the cross-shape, something wholly unknown prior to the recovery of the lower portion. The width of the slab was always known to be exceptional, but the projections flanking the cross-base add another 100mm giving it a known width of 1420mm. On the other hand, the Hilton slab is narrower than the widest dressed slab of all, the early Glamis no 2 (Angus), which has a maximum width of 1680mm. The design lay-out of Glamis no 2 is obviously much less ambitious than that of the Hilton slab, but it has always to be remembered that the Picts had a great deal of experience in the



handling of large pieces of stone. The widest symbol stone from Knocknagael (Inverness) is 2180mm. Even so, the erection of the Hilton of Cadboll cross-slab was obviously at the extreme end of the technology in so far as we now know that the height of the carved area of the front face was around 3300mm. When complete the slab with its tenon and projection on the upper edge will have been significantly larger. The scale tells us something about the function of the slab: it was obviously a major project for both the patron and the sculptor.

5.2.2 Planning for the lay-out of the front and the back

Viewers of the lower portion frequently remark that the carving on the front face goes further down the slab than the carving on the reverse. This discrepancy and the planning lines in the uncarved area on the reverse have led to the suggestion that carving originally planned for below the horizontal border of vine-scroll has been abandoned (illus 5.1). It has also been suggested that the carving on the reverse is inferior to that of the front and that two sculptors, one a master and the other with inferior skills, worked on the slab. First it must be said that discrepancy is an integral part of the art of the early medieval period. The Book of Kells has been described as the 'work of an angel' but this does not mean that it is perfect; it is full of errors textual and visual. Discrepancy in sculpture is also common. For example, the Kildalton Cross on Islay has side-arms of different sizes. It is the combination of the achievement of extreme intricacy of design with such 'mistakes' which makes the modern observer begin to think in terms of a master and an apprentice. In fact, the more brilliant the execution the more probable that mistakes will occur, either as a result of the confident use of free-style or of indifference to minor discrepancies unimportant to the overall effect. Pictish sculpture has many instances where parts of the surface have not been dressed off, where patterns have simply gone wrong, or there have been false starts which remain incomplete. Even the superlative carving of the St Andrews Sarcophagus has a number of irregularities.⁵ Some discrepancies are mistakes or oversights but

Illustration 5.1
Hilton of Cadboll: the reverse of the lower portion as

discrepancy between the levels of carving on the two broad faces is a matter of choice. There are at least twenty examples of this type of discrepancy; two wellknown examples are the cross-slab at Aberlemno no 2 (Angus), where the levels of the cross on the front and the battle-scene on the reverse are different, and Meigle no 5 (Perthshire), where a complex cross design on the front is carved much lower on the slab than the rider on the reverse.⁶ Both monuments are of exceptional design quality. There are good reasons why the carving on the reverse of Hilton of Cadboll stops where it does. Not only would carving in the blank area have distracted from the frame with its carefully balanced three panels but the projections, as the wandering horizontal guideline demonstrates, would have meant that additional sculpture, presumably panelled, could not have been aligned with them. Nor is the front of the slab free of what the modern eye regards as 'mistakes', for the second steps of the stepped base are of different breadths, as are the flanking blank panels. These particular discrepancies, obvious to the eye when they are pointed out, are probably due to the necessary accommodation of the strict geometrical requirements of the internal decoration of the base, which had to be laid out so that the units of key pattern expressing the raised bosses occurred in the right places, together with a degree of discrepancy that must inevitably occur in the transference of a design to a slab. In general, where something about a monument looks wrong to modern eyes, recourse to explanations involving inferior sculptors or abandoned plans must be arguments of last resort.

If, however, it is believed that the breaking of the tenon and the consequent resetting of the slab took place before the carving of face C had begun, then a case can be made for arguing that the carving on face C was located further up the slab in order to make the sculptor's work on the lowest reaches of his design somewhat easier (see Chapter 3.5). The fact that there has yet to be a systematic study of how Pictish crossslabs were carved and erected means that there is no adequate context to aid understanding of what happened at Hilton. Indeed for Insular sculpture generally, it is not known whether, normally, carving was done at the quarry, or at the site selected for erection, or whether it was done with the monument lying flat or erected. It is often asserted that if Pictish slabs were carved before being erected then the reverses would have been carved first because of their lower, and therefore less vulnerable. relief. There is a considerable amount of information on the logistics of the erection of large slabs available



for interpretations a result of the excavations at Hilton. What might have happened there will no doubt inform future work. For the present, the perceptible rationale for placing the lower edge of the vine-scroll frame clear of the projections, the internal balance of the three panels within the frame, and the many instances of discrepancy of the levels of carving between the fronts and reverses of other Pictish slabs, do not support the view that accidental damage might have caused changes to be made to the lay-out of face C.

As we have seen, early writers on the slab in Edinburgh were full of admiration for the balance of its design, even in its incomplete state. The frame admirably controls the depiction of the symbols, the hunting scene and the square of spirals, each within its own panel, but with unifying circular elements within the frame, the symbol panel and the spiral panel. This is a different approach from the one used for the reverse of Aberlemno no 3, where the symbols and riders occupy the same space (in spite of an aborted lower margin) and two small panels of oddly diverse imagery are placed at the lower edge (see illus 5.46). Both the designer of Nigg and Hilton of Cadboll realised that a frame would help them to organise the large space on the back of the slab. For the carving within his frame the Nigg sculptor opted for the traditionally Pictish aesthetic principle of tiered motifs called by Curle and Henry 'floating composition', an art which Henry later described as 'of infinite skill' capable of producing 'perfectly balanced compositions' (illus 5.2).7 This method of composition is also found in classical art, notably in low-relief ivory carving, but for Pictish sculptors it ultimately conformed to the tiered presentation of symbols on the symbol stones.8 The Hilton of Cadboll sculptor chose to frame his subject-matter, retaining the floating composition of the hunting scene within bounds. This radical decision led Cecil Curle to suggest, not altogether convincingly, that the Hilton sculptor had a new model for such scenes.

Vine-scroll in a frame, is found on early medieval ivories and it is probable that knowledge of framed ivories inspired the Hilton of Cadboll sculptor, just as manuscript lay-out inspired the frame on the reverse of the Nigg cross-slab.⁹ The subject-matter within the frames remained essentially Pictish. There is evidence

Illustration 5.2

Nigg, Ross and Cromarty: the lay-out of the reverse of the cross-slab before restoration (Crown copyright RCAHMS)

among the fragments of carving from the front of the Hilton slab for the use of panels to aid lay-out, both on the cross-shape and the background of the cross. But there was no panel margin dividing the animals in the lower portion from the figure sculpture in the mid-portion, and it has to be decided whether this is an example of floating composition or depicts related parts of a narrative. On the front of the slab different types of ornament were merged, but whether this represented an abandonment of a dividing margin, or came from a single panel with merged ornament cannot be determined. Certainly the sculptor was not obsessed with the constraints of edges, for he was quite happy, as were many Insular sculptors, to allow limbs of animals to overstep a margin. Some of the ornament, particularly key pattern, was set on a higher pad or platform of relief with the dressed surface beyond the edges of the design dropping to a lower leve1. This device defined and gave prominence to a pattern without recourse to a moulding. Something similar is found defining a cruciform shape in recession on the broad face of a corner slab (stone 6) of the St Andrews Sarcophagus, and on the multi-levelled cross on the back of the tall Rosemarkie symbol-bearing cross-slab, but is difficult to parallel exactly.¹⁰ Pictish sculpture of this period produced many of its most brilliant effects by exploiting different levels of relief. The cross-shape on the Hilton slab was probably on a higher level than the ornament in the background, which like other Pictish sculpture used recessed panels, cutting into the stone, to get the height of relief required.¹¹ The Nigg cross-slab is the best known exponent of this device which is enhanced by keeping the decoration of its cross uniformly flat. From the treatment of the decoration of the cross-base on the Hilton slab we know that there were high-relief elements on the cross-shape. Although the depth of the relief spirals on the base is only slightly greater than the perimeter mouldings (measured by the best surviving surfaces), they do require a level of relief above that of the cross surface and the evidence of the fragments suggests, although this is not certain, that there were other bosses on the cross-head. Like most other Pictish slabs the cross-bearing side of the slab is carved in higher relief than the back, but it is possible that in terms of planning for different levels of relief the Hilton sculptor showed exceptional ingenuity. Like the Nigg sculptor he could achieve any effect he wanted. Such preoccupation with surface levels, perhaps a compensation for lack of three-dimensional carving, is also found on Irish sculpture.12

Another general trait of the Hilton design is what Stevenson described in respect of the reverse, as its 'uncramped' feel. He was thinking, most probably, of the clear presentation of the symbols and the orderly nature of the panels. This perception is fully borne out in the carving on both faces of the lower portion, most obviously in the spacious treatment of the growing point in the lower horizontal border of the vine-scroll frame. The trait is evident also on a number of the fragments of the mid- and upper portion of the front face where there is sometimes a surprising amount of uncarved dressed surface between the relief forms. In this trait the sculptor is markedly different from the Nigg sculptor in whose work only the simplicity of the spiral panel at the bottom right of the front of the slab gives some relief from the density of the ornament. Even more densely decorated is the tall slab at Rosemarkie where the carving on the front face gives the impression of a closely embroidered textile thrown over the slab with only the background of the cross being cut back and decorated with key patterns running into spirals carved in low relief.

To exploit the value of uncarved surfaces is also indicative of a move away from floating composition which depends on the exact interlocking of animals and figures so as to fill the space, in the manner, for example, of the panel with hunting scenes on the reverse of the Shandwick cross-slab. Finally, the decision, now revealed, to employ a single animal style on both faces, but on different scales, gives a unity to the monument paralleled only on the St Andrews Sarcophagus, where ornamental animals on corner slabs are given traits matching the naturalistic animals depicted on the David panel.

In summary, the design lay-out of the whole monument shows a distinctive combination of traditional and more classical lay-outs together with a marked capacity to plan ahead for projections from the edges of the slab and varying heights of relief. The reverse of the slab provided ample evidence for the Hilton sculptor's capacity to design a balanced lay-out, but the new evidence reveals his ingenuity in that most Pictish of skills, the manipulation of heights of relief to give special effects to the presentation and decoration of the cross and its background. More unusual is his setting of relief against the value of blank dressed surface, as is his decision to match rather than contrast the ornament used for both sides. A full study of all the sculptural fragments from Portmahomack, Tarbat, may provide parallels for some of these traits. Among the earlier finds from that site it can be seen that the

lay-out of the serpent panel on Tarbat no 2 is markedly less cramped than the serpent panels on Nigg, and that the sculptured wreaths, Tarbat nos 5 and 6, have a similar openness of design.¹³

5.2.3 Style of carving

The specialist study in this volume of contemporary tooling observable on the Hilton slab (Chapter 7.2.2), in the interests of objective assessment, and in order to make comparisons with other monuments possible, is not concerned with the style of its free-hand carved elements. It is those elements which to a large extent give a carving its individual character and value. The reverse of the slab, as is usual, is carved in low relief. A style of flat relief was already present in some of the incised symbol stones where the incision is so deep as to isolate the symbol on its own plane, or the background has been cut away.14 From the examination made for this project it appears that the Hilton sculptor remained faithful to a type of tool used by the symbol cutters. To that extent the craft tradition remained undisturbed just as the use of the lobed scroll convention for body marking of animals continued unbroken from the time of symbol cutting to that of the Nigg cross-slab and other mainstream sculpture. The traditional tool, known as a punch, was obviously capable of preeminent work in high relief, and we must assume that a master sculptor had a wide range of punches of different sizes to be ground to specified degrees of sharpness, a personal tool-kit built up from training and experience.

Stevenson drew attention to the rounded nature of the relief used on the Hilton reverse. This round profile was produced after the initial cutting away and it creates a soft, flexible appearance which allows for the expression of drapery styles for the figural art, supple interlace, and a degree of dimensional swelling and recession for the triple spirals. The pattern in the circular field at the crossing of the arms of the crossslab at Tullylease (Co Cork) is similar to that used to fill the two discs in the Hilton symbol panel, but the two sculptors have chosen to carve the strands in different styles. The Tullylease interlace is carefully chosen to match the height of relief of the surrounding key pattern. At Hilton the rounded, pliant, interlace gives the two disc symbols their own surface interest and carrying power. The figures in the hunting scene have modelled hair and drapery and the floating composition of riders and animals is skilfully achieved. The interesting but not always successful attempts at expressing perspective

may be due to lack of space, the penalty for confining the hunt in a frame. Although the frontal female rider has an impressively ovoid head and complex drapery, the figure style on the front face appears more robust in the case of the tuniced figure to the right of the shaft, and more expressive in the robed figure to the left, which shares the same tapered hemline, but has the recessed clinging drapery between the lower limbs evident in the treatment of Paul and Antony on the Nigg cross-slab (illus 5.25). The careful carving in low relief of curvilinear ornament, presumably to indicate embroidery, on the tunic of the figure to the right is the most ambitious of a number of renderings of textile patterning in Pictish sculpture. In its delicacy it recalls the spread of branches over the maned shoulders of the lion emerging from a tree to attack the horse of the hunter on the long panel of the St Andrews Sarcophagus (illus 5.49). 15 The remarkable embroidery on the surface of the garment would probably not have survived had the lower portion been exposed to the elements as long as was the reverse. Also amazingly preserved is the articulation of muscles and the depiction of body hair and scales on the surface of the non-naturalistic animals on the front face of the lower portion.

In comparison with the style of relief carving used for the panels on the reverse, the vine-scroll within the frame appears, as Stevenson remarked, 'somewhat wiry'. To some extent this is due to surface wear. The condition of the surfaces of the carving on the lower portion provides an unparalleled opportunity to appreciate what the Hilton of Cadboll vine-scroll must have looked like when it was newly carved. The extent of the surface detail preserved on the animals flanking the growing point of the vine-scrolls in the lower border of the frame puts it into the same category as the carved surfaces of the panels, also disinterred, of the St Andrews Sarcophagus. The crisp quality of detail and texture on that monument give it an unfamiliar look sufficient indeed to render some commentators sceptical of its having been the work of Pictish sculptors. What we see at Hilton is the attention given to the anatomy of the animals: haunches are contoured; manes are expressed; wings are carved in relief significantly higher than the body to which they are attached, covert feathers delineated as rounded pellets, differentiated from the pinnate feathers; the craniums of animals are carved in well-rounded relief, separated from the snout and jaws by a curved cheek line and their lower height of relief. The bodies and limbs, at stretch or elegantly bent, are reduced to mere strands, streamlined to suggest darting motion. Appendages,

such as ears and tails, are carved to resemble leaves and coiling tendrils. The style of carving is kept light except in the areas of well-rounded chests, necks and heads, which give emphasis to the essential action, the eating of the sustaining fruit.

Some of the most technically remarkable, well-preserved Pictish sculpture is found among the small fragments from Tarbat recorded by Allen, in particular, the astonishingly deeply cut spiral work of Tarbat no 7 and the virtually three-dimensional key pattern of Tarbat no 8. First the choice of pattern had to be made but there followed the choice of carving style in order that it would work for some larger vision held in the mind of the sculptor.

Some of the new fragments of sculpture found during the excavations by the University of York on the site of what is now recognised as the monastery at Portmahomack, Tarbat Ness, are of the same quality and condition as the earlier pieces. 17 In its local context the Hilton lower portion should be examined alongside these other mint condition fragments in order to get the full impact of Pictish sculpture, at the point of production, in Easter Ross. The clean cut surfaces of the raised triple spirals at Hilton and on a number of similarly pristine fragments of spiral ornament from Portmahomack can now be in the mind's eye when looking at the Shandwick cross-slab, for its cross had just such raised spiral bosses, some fifty-four of them, covering the entire surface of the cross, only now all their surface detail has gone. A similar mental transference can aid our appreciation of the carving on major cross-slabs in the south, such as the battered Meigle no 2 and the badly worn Aberlemno no 3.

5.3 Reading the message of the Hilton of Cadboll cross-face

5.3.1 The cross-base (see Chapter 4.5.1)

The loss of the front of the slab deprived the monument of the fundamental visual statement of Pictish slabs, the depiction of the Cross of Salvation. The variety of cross-shapes used by the sculptors on the slabs demonstrates access to a range of sources of designs and individual creativity. The recovery of the lower portion of the cross-face revealed a unique variant, a deep two-stepped cross-base flanked by blank side panels which projected from the edges of the slab. On the upper edge of the base are tiny vestiges of the lateral mouldings of what must certainly be the cross-shaft (illus 5.3). Had the design followed that of some



carpet pages in contemporary Gospel-books, where the form of the 'base' is replicated as terminals for the other arms of the cross, the juncture would have been much narrower.¹⁸ The return up the right-hand side of the shaft is just perceptible. That on the left became detached at the time of conservation and is fragment .3030. This fragment joins with fragment .2998 which preserves an indication of the depth of surface within the shaft mouldings and a trace of carved surface.

Setting the shaft of the cross on a base is a design feature of a number of the taller Pictish cross-slabs. The feature has been attributed to a desire on the part of Pictish sculptors to make their cross-bearing monuments more like the free-standing crosses of their neighbours in England and Ireland.¹⁹ There may be an element of truth in this, always remembering, however, that if the Picts had wanted to produce free-standing crosses they could easily have done so, and indeed there are a significant number of such crosses in the Pictish regions which were in all probability carved by Picts. The Dupplin cross (Perthshire) is a notable example.²⁰ For the Picts the slab format was more flexible, giving space for a variety of functions and more ambitious designs.

The bases given to the cross-designs on the slabs vary in shape from a narrow rectangular plinth occupying the full breadth of the slab as on 'Sueno's Stone' at Forres (Moray) and on the symbol-bearing cross-slab in the grounds of Elgin Cathedral, to an approximately square block as on both sides of Skinnet (Caithness) and St Vigeans no 7 (Angus). The tall slab at Cossans (Angus), one of the most beautiful and complex of the Pictish cross-designs, has an elegant pyramidal base.²¹ Cross-slabs often get damaged on their lower edges, Hilton of Cadboll is a case in point, and we do not know how many bases have been lost. We do not know, for example, how the shaft of the intricate cross on the Nigg slab ended. It seems, however, that stepped bases of the Hilton type are not a common feature. There is a trace of a stepped base on the small but sophisticated slab Kirriemuir 2 (Angus) (illus 5.4).22 Until very recently the only formal analogy in Pictish sculpture for the Hilton cross-base was an incised cross-slab at Rosemarkie (illus 5.5a). The slab survives in three fragments and is thought to have been discovered while digging a grave in the churchyard. Like all sculpture produced at Rosemarkie the slab

Illustration 5.3 Hilton of Cadboll: the front of the lower portion as excavated



Illustration 5.4

Kirriemuir no 2, Angus: the front of the cross-slab showing the damaged stepped base (© Tom and Sybil Gray Collection, RCAHMS)

is finely dressed and well carved. It is incised with a contoured shafted cross having widely curved hollows at the arms. The surviving transverse arm ends with an inward facing curve but the top arm is straight. An area around the armpits has been cut away to give emphasis to the centre of the cross, a device used by the Nigg sculptor. This carefully crafted cross has a complex stepped base. It is a cruciform stepped shape within which a recessed panel follows its contours. The narrowed section of the base on the lower edge, which has something of the appearance of a tenon, is



Illustration 5.5a

Rosemarkie, Ross and Cromarty: slab incised with 'Golgotha' stepped base, set on a stylised hillock from which flow the rivers of Paradise (© Susan Seright, and Jon Bailey, Groam House Museum)

set on a series of sloping lines giving the impression of a mound. The tall symbol-bearing slab at Rosemarkie has a small equal-armed cross on both front and back. That on the back is within a panel deeply bordered by key pattern (illus 5.6). The cross is set in a bed of interlace. It has a square at the centre and stepped terminals similar to the shape of the base on the cross-incised slab. This cross has been convincingly associated with the design of a cross carpet-page in the Book of Durrow, Dublin, Trinity College Library 57, and it testifies to the venerable nature of the church at Rosemarkie.²³ Its format suggests that it could have been copied from a precious piece of metalwork in the Rosemarkie treasury. No other cross on a Pictish cross-slab has cruciform stepped terminals.

In the summer of 2004, when the tall cross-slab in the churchyard at Edderton (Ross and Cromarty),

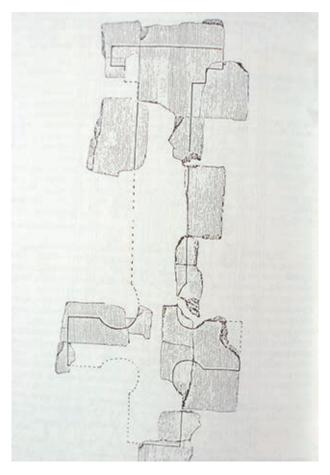


Illustration 5.5b

St Cuthbert's Coffin: the internal incised board (after Haverfield & Greenwell 1899)



Illustration 5.6
Rosemarkie, Ross and Cromarty, cross-slab: the lower half of the reverse showing an equal-armed cross with stepped terminals (Crown copyright RCAHMS)

some 17km from Hilton, was lifted for straightening, it was discovered that the well-proportioned Latin ringed cross on its front face was set on a base with six narrow steps expressed by contoured relief (with loss of surface on the left side) leading up to the shaft (illus 5.7).²⁴ The unexpected total of three shafted crosses with stepped bases, and one equal-armed cross with stepped terminals, north of the Moray Firth, and geographically proximate, requires explanation.

An analogy in sculpture south of the Grampians is found on one of the corner slabs, Stone 6, of the St Andrews Sarcophagus (Fife) (illus 5.27b).²⁵ Here a reserved stepped cross-shape, consisting of two cruciform units, sits on a base which is also reserved. The recessed area is decorated with key pattern. This design bears a close resemblance to the reserved cruciform shape on the base of the incised cross-slab at Rosemarkie, described above, and to the equal armed crosses on both the front and back of the Rosemarkie tall cross-slab.

Outside the corpus of Pictish sculpture a close parallel to the cross-incised slab at Rosemarkie is found on an inner board of St Cuthbert's Coffin Reliquary of AD 698 (illus 5.5b). Here an outline Latin cross is set on a two-stepped base. At the time of the

publication of exhaustive research into the material culture associated with the relics of Saint Cuthbert, the board with the stepped base was regarded as problematic. Ernst Kitzinger pointed out that crosses with stepped bases were not a feature of free-standing pre-Norman sculpture. Such bases were, however, compatible with a 12th-century date, the date of the second coffin of St Cuthbert. Kitzinger concluded 'To reach a definite conclusion on the date and function of the cross panel seems impossible at this time.' ²⁶ Two



Illustration 5.7
Edderton, Ross and Cromarty: the front face of the cross-slab showing the stepped base revealed in 2004 (© Ian Fisher)



Illustration 5.8

The Book of Kells, Dublin, Trinity College MS 58 detail of f.34r, the Christi autem initial (© The Board of Trinity College Dublin)

papers given independently at a conference in 1987 to mark the 1300th anniversary of the death of Cuthbert demonstrated that this was no longer the case. Richard Bailey, from an art-historical perspective, emphasised the extent of the use of crosses with stepped bases on coins of the seventh century, known to have been circulating in England in significant numbers. The cross on the inner board could therefore belong to the earlier coffin. He further claimed that, despite the fact that none has survived, the stepped bases on the coinage and the cross-incised board implied that 'freestanding crosses of this shape were familiar objects in late seventh-century Northumbria'.27 Scientific evidence supported this date for the cross-panel. The second paper, by Cronyn and Horie, reported that dendrochronological analysis had shown that that the board had indeed belonged to the same period as the coffin of 698.28 The cultural context of the cross-head on the inner board, with its straight arms and rounded

arm-pits, is Columban, and it would be wrong to see the appearance of a stepped base and vine-scroll pattern on the Hilton slab as a single Northumbrian cultural package.²⁹ The stepped base appeared in Northumbria some time in the seventh century, the vine-scroll in the eighth. By the time that the Hilton of Cadboll sculptor was at work both designs had been around for a long time. However, any lingering suspicion that the appearance of stepped bases is a sign of lateness is now dispelled.

Given the many specific connections between Pictish sculpture and the art of the Book of Kells, Dublin (Trinity College Library MS 58), it would be reasonable to look to the decoration of that Gospelbook for a shared use of the stepped base. Stepped



Illustration 5.9

The Book of Kells, Dublin, Trinity College MS 58 detail of f.7v, the Virgin and Child with angels (© The Board of Trinity College Dublin)

fields are in evidence at focal points in a number of the figurative pages of the Book of Kells. The great Chi-Rho, the XPI monogram on folio 34r, which announces the birth of Christ, amidst the spinning spiral ornament, has a prominently positioned stepped cruciform shape, outlined in yellow, at the base of the P (illus 5.8). The P terminates in a face which has been convincingly interpreted as that of the youthful Christ.³⁰ On folio 7v, the throne on which the Virgin sits holding the Christ Child is decorated with four stepped shapes within each of which is a circle (illus 5.9). This stepping creates similar stepped shapes at the margins and the whole design creates an illusion of an equal-armed cross with rounded armpits.³¹ The Temptation of Christ on folio 202v has a framework made up of stepped shapes, some cruciform. Stepped fields are located on the bottom edge, flanking the

witnesses on earth, and on either side of Christ's head. A four-stepped canopy on the upper edge defines the heavenly region occupied by the angelic host.32 On folio 114r the bases of the columns, that support the arch within which Christ is arrested, have five steps.33 The portrait of St John, on folio 291v, is framed by four equal-armed crosses, one on each of the four sides. The four corner pieces, outlined in yellow, are stepped. The portrait of John has the strange feature of being superimposed, as it were, on a figure of the crucified Christ. Only His head hands and feet are shown outside the frame.34 On folio 27v the Evangelists' symbols occupy the angles of an equal-armed cross. At the crossing of the arms is a cruciform

stepped shape (illus 5.10).³⁵ In this location, in a similarly composed four-Evangelists page on folio 1v, the Trier Gospel book (Trier Domschatz, Cod. 61), has a portrait of Christ.³⁶ In another four-symbols page in the Book of Kells, folio 290v, preceding the portrait of St John, there is a lozenge-shape. This shape has been recognised as a symbol of Christ.³⁷ The stepped cruciform shape clearly could take on the same meaning.

Is it then that the Hilton of Cadboll sculptor chose to design his cross with a stepped base in order to evoke the person of Christ not otherwise represented on it? A general awareness of its Christological symbolism in manuscript art, which had been inspirational in other ways, could have been all that he needed to know. A

stepped base has, however, a deeper Christological resonance.

Early in the fifth century the Emperor Theodosius II had erected a uniquely splendid cross encased with gold and studded with gems on Golgotha Hill outside Jerusalem, the site of the crucifixion. The commemorative cross, the 'crux gemmata', became a focus for pilgrimage, and its appearance is fully documented. The cross was approached by a flight of steps with curtains on either side and above it a canopy. The Golgotha Cross was portrayed in all media: in the great apse mosaics in Rome and Ravenna; in opus sectile in St Sophia in Constantinople; on grand portable objects such as a glass chalice, and more humbly, impressed with terracotta stamps, on the loaves of bread handed out at the services for pilgrims.³⁸ It was an image in wide circulation well before the image

of Christ on the cross began to appear. A cross sitting on a base comprising a flight of steps was instantly recognisable as the historical Calvary cross on which Christ died in order to bring Salvation to mankind. The pyramidal bases of the Irish High Crosses have long been accepted as symbolic of this cross of Salvation and the stepped bases supporting St Martin's Cross and St Matthew's Cross on Iona will have had the same association. The four rivers of Paradise flowed from the Golgotha mound. An ivory book cover, now in Milan Cathedral Treasury, dating to the late fifth century, shows a central panel with the jewelled Golgotha Cross and the flowing rivers (illus 5.11). It is surrounded by scenes from the life of

Christ and portraits and symbols of the Evangelists.³⁹ A bread stamp shows the rivers as wavy lines descending the mound. The likelihood is that the cross-incised slab at Rosemarkie with its cross set on a mound from which random seeming diagonal lines descend displays this Golgotha imagery. To its depiction of a cross-shape associated with the Book of Durrow, Rosemarkie can therefore add a specific depiction of a Golgotha Cross with an iconographic detail not evident on Ionan or Northumbrian sculpture. Another cross at Rosemarkie could be claimed as part of this iconography. It takes the form of an equal– armed cross carved on a boulder, a well–defined format and design found on Iona and in Aberdeenshire.⁴⁰ Uniquely, however, it has a recessed circular recession on each arm and a deeply cut hole



Illustration 5.10

The Book of Kells, Dublin,
Trinity College MS 58 detail of
f.27v, cruciform stepped shape
(© The Board of Trinity
College Dublin)



Illustration 5.11

Ivory book cover, fifth century, showing a jewelled cross standing on Golgotha Hill surrounded by scenes from the life of Christ and portraits and symbols of the Evangelists (Milan Cathedral Treasury: photographed by Hirmer Verlag München)

with a diameter of 20mm, surrounded by a moulding at the crossing. These recessions must have been made for settings in some other media. This then was a jewelled cross. The cross on the top half of the front face of the Shandwick cross-slab undoubtedly represents the 'crux gemmata' on the Hill of Calvary (see illus 5.21). When the sun shone on its newly carved ornament, consisting entirely of raised spiral bosses, it could have taken its place with the great Italian visualisations of this theme.

Not so very remote from the time of the production of the Shandwick and Hilton cross-slabs are the Golgotha crosses, on the gold solidus of Heraclius (613-32) embedded in the Anglo-Saxon Wilton Cross, the gold 'shilling' of 640 in the collections of the Ashmolean, Oxford, and the gold solidus of around the same period in the collection of the Fitzwilliam Museum, Cambridge.41 Such portable, high-status artefacts would have attracted the attention of patrons and sculptors looking for models. Literary accounts of the Holy Places were also circulating in the seventh and eighth centuries, with versions compiled by Adomnán of Iona and Bede of Jarrow.⁴² These accounts will have been known in the monasteries at Rosemarkie and Portmahomack, and by the clerics of Nigg, who knew so well Jerome's Life of Paul the Hermit and benefited spiritually from the overtly Eucharistic presentation of his story on the front of their crossslab (illus 5.25). The Hilton of Cadboll cross-base fits without difficulty into this intellectual world, one that embraced Northumbrian visual and literary culture, sought out by the Picts themselves, and the art and literature of Iona.

The reason why the sculptor of the Hilton of Cadboll designed his base with steps, and with an arrangement of bosses set within it, is surely that he intended to evoke the Golgotha Cross. The Edderton sculptor presumably knew the Hilton monument and was motivated by it. Rosemarkie it seems had its own store of models which may have played their part in the sculptor's decision. The same is true of the monastery at St Andrews which had such a rich treasury and such close connections with the sculptors of Easter Ross. Knowledge of crosses in Northumbria and Iona will also have been readily at his disposal. Anyone, so to speak, in the business of designing crosses, will have known about the Golgotha cross-type and what it stood for.

The internal decoration of the base consisted of key pattern with a variety of terminals given to the bars, which included pairs of linked spirals which created

the raised bosses. Again the most fruitful starting point when considering the choice of key pattern is the decoration of the Book of Kells. Françoise Henry, that most discerning of historians of Insular art, when reviewing the decorative repertoire of Kells, wrote of the role of key pattern: 'The key-pattern is especially common in the decoration of the Book of Kells and in the canon tables it shares popularity with spirals, interlacing and animal or human interlacing ... This is all the more surprising as it is a monotonous, tedious ornament, not much susceptible to change or inventions, being the most inert of the whole range of ornament in the manuscript, its almost complete absence from the most intricate pages such as the Chi-Rho [page] ... is not surprising.'43 We have seen above that in the Chi-Rho page there is, if not strictly key pattern, a stepped cruciform panel within the XPI monogram, a point of essentially 'inert' focus, a necessary resting place for the eye, from the turbulent spiralwork and elusive iconography filling the rest of the page. The small panel is filled with finely spun interlace, much worn perhaps by devotional touching. The virtually identical shape at the centre of the foursymbols page on folio 27v is filled with key pattern, but while the significance of the shape can be claimed as Christological it would be far fetched to associate key pattern, as such, with Christ.

Key pattern was chosen by the Hilton of Cadboll sculptor because the units of the pattern can fit neatly into the corners of the steps, and because of its 'inert' quality which adds to the stable architectural nature of the design of the base. The details of the Hilton key pattern are described in Chapter 4. The scale of the unit is large enough to be emphatic, and the terminals of the bars are innovative in so far as they go beyond the usual hooked and Z-shapes. Both factors were important in getting the terminals with raised spirals to be of a diameter which allowed them to be positioned correctly within the base.

Key pattern with spiraliform features is common in Pictish sculpture and in manuscript art. However, this pattern on the Hilton base, because of its breadth of layout, and the height and surviving surface detail of the spiraliform bosses, is a uniquely impressive survival in Insular sculpture. For an example of key pattern with double spirals, not raised, but bordering an important piece of iconography, we can compare the underside of the ring of Muiredach's Cross at Monasterboice (Co Louth).⁴⁴

There can be little doubt that the emphatically placed raised spirals on the Hilton lower portion have



Illustration 5.12

Dunfallandy, Perthshire: the front of the cross-slab with raised bosses on the cross head (©Tom and Sybil Gray Collection, RCAHMS)

more than decorative significance. At the very least, as argued above, these represent the gems studding the Golgotha Cross. In general appearance they closely resemble the cross on the slab at Dunfallandy (Perthshire) where five bosses rise out of a bed of spiral

work on the upper and lower arms, and three from key pattern on the transverse arms (illus 5.12). It is accepted that such carefully placed and differentiated bosses on Irish and Anglo-Saxon sculpture are likely to carry symbolic significance. At Dunfallandy a distinction may be being made between the five wounds of Christ and the three persons of the Trinity. A puzzling feature of the bosses on the Hilton lower portion is their arrangement. Insular artists do not tier bosses in such a way that they finish on a straight line. The rhythms of Insular art favour alternation. Bosses may be paired in a rectangular panel, but if the number of bosses is uneven, or the arrangement in rows of differing lengths, then they are arranged symmetrically in mirror image. One would expect therefore rows of respectively, three, two and five bosses, to be followed by further rows of three and two. Cruciform arrangements of bosses are also common. To end with a straight line of bosses is a 'classical' mode. The lower edge of the slab has not been recovered and it is possible that the base was deeper, and allowed for the two rows beneath the five. However, enough of the terminals below the row of five bosses survives to show that another row of raised spiral bosses did not occur immediately. It seems an almost inescapable conclusion that the sculptor had the confidence to arrange his ten bosses on the base in this unconventional way in order to give the base a strong horizontal feature at its lower edge. There is no difficulty in finding a symbolic numerological significance in the number ten which symbolised the Law of God, the 'never-to-be-forgotten "decalogue" of St Augustine'. The central bosses at Hilton also collect together in a lozenge shape which, as has been mentioned above, is a symbol for Christ.⁴⁵ There is one precedent for the classical arrangement of circles set in a framework of geometric ornament

in the bases of the supporting columns of an arch set over the opening words of the Gospel of St Luke in an early-ninth-century Gospel-book produced in the south of England, BL Royal MS 1.E.VI.⁴⁶ The bases are rectangular, in proportions more like cross-bases

than the bases of columns. They are decorated with a pattern made up of stepped cruciform shapes of the kind described above on the throne of the Virgin in the Book of Kells. Within each unit is a circle making up an arrangement of three rows of circles of respectively one circle followed by two, and ending, at the lower edge of the base, in a straight line of three circles. This southern manuscript in page size and decoration merits the description 'sumptuous' for it has classically inspired purple pages and lettering in gold and silver. The artist, like the sculptor of Hilton of Cadboll, was clearly free of slavish conformity to the Insular design

Illustration 5.13
Meigle 2, Perthshire: the front of the cross-slab. Detail of animal ornament on the cross-shaft

conventions. Some indications of visual responses shared by Pictish sculpture and the manuscript art of south of the Humber have long been recognised, and to these this distinctive arrangement of circular points of emphasis can be added.⁴⁷

5.3.2 The cross-shaft

The majority of Pictish cross-slabs display the cross as an equal-armed cross set on a long shaft. The differentiation between the cross-head and the shaft is made either by notches on the sides of the shaft or by a change of pattern. At the point where it joins the base the Hilton shaft is just under 400mm wide. If the now truncated projections near the top of the narrow faces B and D belonged to transverse arms, as seems likely, then the arms were 360mm high. It is probable that the lower arm of the equal-armed cross head would have similar dimensions and would be 360mm wide. The difference in measurement between the lower arm and the bottom of the shaft is small but suggests that the shaft had a slight taper. Though scarcely significant, the difference reinforces the near certain view that the shaft met the lower arm of an equal-

armed cross. How the differentiation was marked is unknown, but since there is some evidence for panelling on the shaft there may have been a margin marking the extent of the lower arm, as for example, on the crosses on the front and back of the Edderton slab (illus 5.7 & 5.45). An alternative would be for the pattern on the lower arm to merge with a different pattern at the top of the shaft with no margin separating them off. From the reconstruction of the front of the mid-portion we know that there was animal ornament on the shaft at the level of the tuniced figure. Decorating the cross with animal ornament is unusual. It is generally an indicator of ambitious sculpture. The Nigg cross-head is unique in this respect with its arrangements of deceptively symmetrical animal ornament on the cross-head which can be associated with the corner slabs with animal ornament on a larger scale on the St Andrews Sarcophagus, and with the

smaller scale animal ornament on silver objects in the St Ninian's Isle Treasure.⁴⁸ The shaft of the cross on the Meigle no 2 slab is entirely decorated with animal ornament more loosely related to the St Andrews type. The large Meigle animals consist of three tiered pairs alternately confronted and addorsed (illus 5.19). The large animals are entangled with much smaller animals and this trait is part of the St Andrews/Nigg style (illus 5.13). It was of great interest therefore when two small fragments joined to form a pair of small addorsed animal heads which were subsequently found to belong to the surface of a large fragment showing

the forequarters of two large confronted animals (illus 5.14). This then is a quite distinctive motif found in major Pictish centres of sculpture. The placing of the motif at this point on the shaft is not what one would have predicted, for there is a plethora of similar large animals in the adjacent background of the cross. The scale of the shaft's large animals is somewhat smaller than the animals that flank the base, but an animal of much the same scale and pose approaches the tuniced figure on his left (illus 5.35c). The small addorsed animals are interesting because of a general lack of evidence for symmetrically arranged animal ornament on the front of the lower portion and among the fragments. Their small heads are worn but they seem to replicate the head type found elsewhere on both the front and back of the slab: a rounded cranium, snubnose, and wide-open fanged jaws with the tongue passing between them. Similarly confronted smallscale decorative animals in a more linear style can be seen at the very top of the upper arm of the Nigg cross (illus 5.24).

There is another fragment of animal ornament, .320, which has recently been shown to be locatable on the cross-shaft. It shows what may be a serpent head in high relief, coiled round and seen from above. It is within a border which drops to a different level of dressed surface and so may well have been part of the ornament on the cross. It has a superficial resemblance in curvature to relief forms on a fragment, .8, which conjoins with both the large animal fragment on the shaft and the fragment with the tuniced figure, but without more context it is difficult to imagine how it featured on the shaft. It could possibly be a lone survivor from a panel of serpent ornament. If the bottom of the shaft was decorated with animal ornament consisting of smaller animals inhabiting, as it were, larger animals, it has to be asked what kind of ornament would have followed it further up the shaft. The small slab Kirriemuir no 2 (Angus) with the cross with a stepped base, has a rare example of a panel of animal ornament at the bottom of the cross-shaft and a cross-head entirely covered with key pattern (illus 5.4). The resumption of key pattern, after the animal ornament on the cross-shaft, balancing the key pattern on the base would be a reasonable possibility. However, there is evidence among the fragments of face A for what may be another kind of animal ornament consisting of animals in a structure of foliage, perhaps a bush-scroll. Nothing can be ruled out for the way in which Pictish cross-slabs are decorated, but this kind of foliate ornament is not very suitable for the



Illustration 5.14

Hilton of Cadboll, Ross and Cromarty: conjoined fragments of animal ornament on the cross-shaft (© Trustees of the National Museums of Scotland)

decoration of the background of a cross. It is the type of foliate ornament that should be placed centrally. It is therefore a candidate for the decoration of the shaft where a structure consisting entirely of animals of different scales might be followed by one of animals and foliate forms. The style of these animals is also of interest. All the surviving heads have some of the features of animal ornament elsewhere in the slab, the gaping jaws with pendulant tongues ending in a lobe, and a cheek line that separates off the blunt muzzle from the rounded cranium with its extended ear or crest. The neck, where it survives, is long and tubular (illus 5.15a). The feel of these gaping heads set atop scrawny necks is markedly similar to the array of heads which, like so many screaming war-trumpets, edge the sword pommel from Beckley in Oxfordshire (illus 5.15b). A similar line of protective heads edge the St Ninian's Isle chape no 15 (illus 5.15c). These heads from the far north have the same separation of the rounded skull from the blunt muzzle, here achieved by an incised line. None of these fragments of animal heads from Hilton is eating fruit, hence the prominence of their pendulant tongues. This style is one that falls naturally into the predominant animal style of Insular art of the eighth century.49

5.3.3 The cross-head

The only trace of the cross-head left on the truncated and defaced slab exhibited in Edinburgh are the scars



Illustration 5.15a

(a) Hilton of Cadboll, Ross and Cromarty: fragment.269, belonging to the front face of the cross-slabshowing an animal headadjacent to a curved strip of relief (© Trustees of the National Museums of Scotland); (b) Beckley area, Oxfordshire: sword pommel (© Trustees of the British Museum. Shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence.); (c) St Ninian's Isle treasure, Shetland: no 15, scabbard chape (© Trustees of the National Museums of Scotland)

near the top of the narrow edges, which suggested that projections had at some point been removed. Their position made it probable that the projections represented the ends of the transverse arms of the cross. Such projections occur on the tall cross-slab at Fowlis Wester (Perthshire) (illus 5.16). It is possible, of course, that these upper projections had no relationship to the cross-head as at Meigle no 2 (illus 5.19). During an examination of the Edinburgh slab for this project the opportunity was taken to examine its top edge which in antiquarian drawings and early photographs consistently showed signs of damage at its centre point. Observers reported that the damage was consistent

with the removal of a projection in the centre of the top edge towards the front of the slab. It seems therefore that the cross-head was planned so that both its upper and transverse arms projected beyond the edges of the slab. The aim of the sculptor was clearly to design a cross that had a physical presence commensurate with the stepped, bossed base and its flanking panels and projections. There is no doubt therefore that the image of the cross was of paramount importance for the function of the monument.

Given the large number of fragments of face A surviving, it seemed highly likely that some would provide factual information about the shape of the



5.15b

5.15c



cross-head. Regrettably, as yet, this has not been forthcoming, and all that can be done is to produce hypotheses against which the information implicit in the fragments can be tested. Since the base was so unexpected in its physical presence, it is hard to imagine any profitable speculation about the shape of the crosshead. The difficulties experienced determining the exact shape of the cross-head of the Apostles' cross-slab at Portmahomack, where a large fragment of the crosshead has survived, is an object lesson in this respect (illus 5.23). From the point of view of the art-historian the basic probabilities are that the Hilton cross took the form of cross with a square field at the crossing, creating what Allen described as double-square hollow angles in the armpits. This is a type of cross-head found on many Pictish slabs including the cross on the Nigg slab and a very finely carved low relief cross-marked slab found in 1997 in the wall of the crypt of Tarbat Church.⁵⁰ This design would match the angularities of the design of the base. On the other hand, the other very common type of cross-head had rounded armpits, and this design would conform to the other crosses in the district, notably Edderton, that had stepped bases. The cross on the front of the Edderton slab is indeed so majestic that it is tempting to accept it as an echo not only of Hilton's stepped base, but of its crosshead also (illus 5.7). The Rosemarkie incised cross with the fullest iconography of the Golgotha Cross also has rounded arm-pits. The cross incised on the inner board of St Cuthbert's Coffin had, as described above, a stepped base, and it too had rounded armpits. It has been argued that the cross with rounded armpits had a historical association with the Columban origins of Christianity, shared by Northumbria and Pictland, and thus it was always an important crosstype symbolically. The Edderton sculptor chose a cross with a square field at the crossing for the reverse of his slab, a difference which falls naturally into a general Pictish tendency towards variety (illus 5.45).

In looking for associated imagery and design practice for the Hilton slab, the tall cross-slab Aberlemno no 3 has always been exploited. The long perceived connection of aspects of its hunting scene on the reverse with the hunting scene on the Hilton slab bonds them art-historically. The Aberlemno cross-head is another unique production. Set on a long narrow shaft, the cross-head has rounded armpits, completed to form circles within the arms, and a circular field at the crossing. A ring passes under the arms of the cross. This is also the cross-head type on the front face of Edderton.



Illustration 5.16

Fowlis Wester no 2, Perthshire: the front of the cross-slab showing projecting transverse arms (© Courtesy of Perth Museum & Art Gallery, Perth & Kinross Council)

For a cross with double squares in the armpits, one might have expected some trace of the angles of the mouldings to have survived among the fragments, but so far there have been no conjunctions of this type to meet this expectation. What has emerged instead is the discovery that a cross of this type is at the centre of the spiral panel on the reverse of the slab. It has always been known that there was a circular motif at the centre of the spiral design and as the reconstruction of the mid-portion continued it became evident that it had encircled an outline equal-armed cross. This was exciting and it is possible to establish the art-historical context for such a presentation of a cross (see below). When the reconstruction of this area was complete and the fragments bonded together it was clear that the cross was not merely outlined but was the typical square-angled cross of the Nigg type. The resonances of such a cross are quite different from a mere outline cross. In a very real sense the defaced slab on display in Edinburgh has always been a cross-slab.

The question arises whether the cross-type is repeated on the cross-face complete with the encircling ring. It certainly provides some further justification for the view that the angled base of the cross on the front face should be matched by an angled crosshead. However, the stepped base, as now witnessed by Edderton, brings with it rounded arm-pits, and it could be argued that if the Picts had a cross on both sides of their slabs they might, like Edderton, want to vary the design. Cross-slabs like Rossie (Angus) and Gask (Perthshire) with full-length crosses on both sides, employ the same shape of cross for front and back. Dunfallandy (Perthshire) has a rounded arm-pit cross with a square field at the crossing on the front, and a small rounded arm-pit cross set on a base on the reverse. Obviously speculation base on likelihood cannot get one very far, and there is no direct evidence one way or another. At least the crosshead in the spiral panel is evidence for a cross-head of this type having been used by the Hilton sculptor on the back of the slab, and to speculate that perhaps he used it also on the front, complete with encircling ring, is at present perhaps the best guess, in spite of a lingering feeling that the two crosses on the slab would have been differentiated.

If one suspects that predicting the nature of the shape cross-head is at present a largely vain pursuit, there is one strong determining factor in proposing an element in the decoration of the cross-head. The location somewhere on the rest of the cross of raised bosses of the same height as those on the base seems inevitable.

It seems highly unlikely that the strong but somewhat stark ornamentation of the base, which entailed the cutting back of much of the slab, would not have been balanced elsewhere on the cross design, to do the work of highlighting the cross, setting it off from the sculpture in the background. In contrast with the freestanding crosses of their neighbours, crosses on Pictish cross-slabs do not regularly feature the emphasising of the arms of the cross-head and the crossing with high relief sculpture. There are, of course, notable exceptions in the bosses on the Dunfallandy cross-head and the heavy rectangular forms on the arms of Aberlemno no 3, although both have the crossing carved in relatively low relief (illus 5.12; illus 5.17). The equalarmed cross with double-square hollow angles on an end panel of the St Andrews Sarcophagus (stone 2) has a boss at its crossing itself embellished with raised spiral bosses (illus 5.18). In contrast, the Nigg slab keeps its bossed high relief forms in the background of the cross. The Pictish free-standing cross from Dupplin (Perthshire) has bosses at the crossing of both front and back, but low relief decoration on the cross-arms. The cross on the Crieff slab has a central boss.⁵¹ There are candidates among the Portmahomack fragments for central or arm bosses and the reconstruction of the sculpture from that site, when it is fully published, will have to be taken into account in this matter and many others.⁵² If there is a strong presumption that there were bosses on the cross-head at Hilton, and the evidence of the fragments of raised bosses from face A are taken into account, then the least speculative suggestion is that bosses on the slab resembled, in size or location, the small spiral bosses such as are found on the Shandwick cross, the Dunfallandy cross-head and on the arms and ring on Meigle no 2. To which might be added the arrangements of small bosses at the crossings of St Madoes and Fowlis Wester (illus 5.16).

Since we have evidence for a considerable number of small raised bosses decorating face A, the hypotheses might be confined to designs that arranged small bosses on the cross-head and/or shaft to maximum effect, that is on the arms and, centrally placed, on the shaft. Another determining factor might be that the cross was decorated with a repertoire that plays a minor part on face C. For example, the frame on the reverse of the Nigg cross-slab is decorated exclusively with panels of interlace and key pattern. On the front of the slab there is no interlace, except in the interlacing bodies which make up the snake-bosses, and a single panel of key pattern. The reverse of Hilton has no raised spiral bosses, comparatively little key pattern and interlace,



Illustration 5.17
Aberlemno no 3, Angus: the front of the cross-slab (Crown copyright RCAHMS)

and its spiral panel is carved in low relief. There is a significantly large number of face A fragments with key pattern. There is less interlace, although the face A fragments of interlace would require more surface

area than the interlace-filled discs on face C. One of the conjunctions of interlace appears slightly domed, reminiscent of the shallow domed relief in the armpits of the cross on the front of the Edderton slab and



Illustration 5.18
St Andrews Sarcophagus, Fife: the complete end panel, stone 2

similarly located interlace-covered domed forms on the Aberlemno no 3 cross-head. This could have been a feature of the Hilton cross-head, but, since there is only evidence for one interlace covered boss, a location on the crossing is perhaps more likely. It is the number of spiral bosses of different diameters surviving among the fragments which supports the view that there were bosses somewhere on the cross-shape.

Of the cross-heads on Pictish monuments listed above there is no doubt that if we are looking for the cross-head with most impact then the choice must fall on that of Meigle no 2 (illus 5.19). It exploits its rounded top in such a way that the upper quadrants of the ring form the outer edge of the slab. However, its cross-head with its angled armpits, with its small bosses at each corner of the arms set on a background of key pattern, and an arrangement of bosses of three sizes at the centre would match the Hilton base admirably and conform with the evidence of the fragments from face A. Leaving the ring aside, this design would require 29 small raised bosses, and 73 fragments carved with raised bosses have been identified among the fragments. Only a few of these fragments with bosses rise from a bed of spirals and none has evidence of rising from key pattern in the manner of the bosses on the base. The reason for this may well be that the tops of the bosses have been knocked off destroying all clues to the nature of the bed of ornament from which they rose. The bosses on the Dunfallandy slab rise from both

spiral ornament and key pattern (illus 5.12). Before one becomes too enamoured of the idea of a crosshead like that of Meigle no 2, being set on a shaft with



Illustration 5.19
Meigle no 2, Perthshire: the front of the cross slab

a base like that at Hilton of Cadboll, it must be stressed that there is no physical evidence for this suggestion. That said, that there were bosses of the type found on the base somewhere on the cross-head seems to the present writer incontrovertible. Their location on the cross-head is likely to have highlighted the significant parts of the cross design. The bosses could have been confined to a cluster at the crossing as at St Madoes and Fowlis Wester, and possibly at Portmahomack, but, given the spacious arrangement of the bosses on the base, the location of points of emphasis on the arms also seems probable. That the symbolism of the Golgotha Cross required a studded cross-head reinforces these speculations.

Sufficient bosses have survived as fragments to locate this type of decoration not only on the cross-head, but within fields on the shaft. A raised boss is only a small part of the area of surface covered by its surrounding bed of curvilinear pattern. This location would also meet the requirements of the symbolism of the jewelled cross. Spiral-work on shafts of crosses on Pictish crossslabs is relatively uncommon. Shandwick alone has a cross entirely covered with raised spirals. The shaft of the cross on Woodrae which supports an equal-armed cross is decorated with spiral running into key pattern which runs into interlace. The shaft of St Vigeans no 7 is entirely covered with spiral patterns, but they are of a type unrelated to raised bosses. St Vigeans no 2 has a passage of spiral work at the bottom of the shaft. The regrettably worn handsome ringed cross set on a base, now in the parish church at Largo, Fife, has traces of spiral pattern on its shaft.⁵³ If it is argued that there were spiral bosses on the Hilton shaft, they would have to be accommodated above the animal ornament known to be located low on the shaft.

Returning to the shape of the cross-head, it was suggested above that the ring encircling the cross embedded in the spiral panel on the reverse might match the cross-head on the front of the slab. Given the breadth of the slab one might have expected the cross to be ringed in order to divide up the area to be carved at the top of the slab. The triumphal symbolism of the ring would also well suit the Calvary base and there are bosses sufficient to stud it in the paten-like manner of Meigle no 2, where the ring employs eight bosses.

As has been pointed out in connection with the decoration of the cross-shaft (Chapter 5.3.2) there are a significant number of fragments carved with animal ornament associated with curved strands which were located somewhere on face A of the upper portion,

and it is just possible that sections of a ring filled with animal ornament might be reconstructed if the arcs of these curves were assembled and measured. While at present there is no evidence to support this among the fragments, there is precedent for such decoration of architectural features in the Book of Kells and on Irish sculpture, where arches or rings are filled with linked decorative animals in procession. An example in Irish sculpture is the treatment of the ring on the cross at Durrow (Co Offaly) where the ring on the east face is filled with animal ornament, and quadrants of the west face are decorated, alternately, with raised bosses and animal ornament.⁵⁴ It is the apparently loosely constructed nature of the animal ornament as presently perceived on the face A fragments that might prove difficult to build into this hypothesis.

5.3.4 The background of the cross

The background of the cross on either side of the base, the cross-shaft, and the cross-head represents a very large area of carved surface and many of the fragments must belong to it. The work of reconstruction has succeeded in joining the top of the lower portion to the bottom of the mid-portion with the result that we now know that in addition to the blank panels and the animal ornament that flank the base, figural ornament was carved on either side of the lower part of the shaft. While this is a small proportion of the whole background area it has been enormously informative, the animal ornament providing a firm stylistic context for the cross-slab and the figural ornament correcting the inevitable concentration by commentators on the hunting scene on the reverse. The carving style is heavy plastic relief, in strong contrast with the admired delicacy of the rounded shallow relief used for the reverse of the slab. The mental adjustment necessary for the reassessment of the work of the Hilton sculptor, based hitherto only on the reverse, is considerable, but once made it removes the monument from the artificial isolation of Stevenson's 'Cadboll style' and allows it to be part of Pictish sculpture of this period with all its manifestations of assimilation combined with individual intellect and talent.

5.3.4.1 The background of the cross: the local and national Pictish context of the animal ornament

If the choice of a two-stepped base for the cross and its decoration with groupings of spiral bosses rising from a bed of key pattern was unusual, the locating of animal





Illustration 5.20

Hilton of Cadboll: the front face of the lower portion: (a) detail of animals to the left of the cross-base, (b) detail of animals to the right of the cross-base (© Trustees of the National Museums of Scotland). For the additions from the mid-portion, see illus 5.33a & b

ornament on either side of it within the background of the cross was standard practice. That said, the nature of the animal ornament in this area of cross-slabs varied enormously, from seemingly purely decorative animal ornament, to animal motifs suggestive of protection or menace. Much of the decorative animal ornament in Pictish sculpture betrays origins in Insular art in other media. Only the single portraits of animals, or motifs of animal combats, or of animals attacking naked men, call for more specific explanation. The immediately local sculptural context for the animals on either side of the Hilton base is not immediately perceptible. Primarily it presents itself as large in scale, carved in well-modelled high relief, with a loose structural composition neither truly, nor deceptively, symmetrical. The composition of ornament is to some extent, of course, dictated by the nature of the space to be filled. The very broad Hilton of Cadboll cross-slab had a lot of background to fill and to employ a larger than usual scale of motif was understandable. There was the further difficulty of arranging the ornament round the steps of the base. The individual fields, to left and right, were unsuited to the kind of symmetrical animal ornament used to fill regular, rectangular spaces.

The animal ornament on face A of the lower portion is described in detail in Chapter 4.5.1. Its basic characteristics comprise animals looped together asymmetrically. Those on the left are arranged in an approximately diagonal composition, with heads towards the top and hindquarters below, set respectively on the top step of the cross, and to the left of the riser of the second step above the blank panel (illus 5.20a). The animals have extended tubular bodies with high groins. The back legs are sharply bent at the hock. The animal on the left margin of the slab has only one foreleg shown. It has a pear-shaped shoulder set on a pad of relief and appears to hang limply, short and stick-like. The heads of the animals are markedly different. The one on the left has a profile dog-head, with a blunt muzzle, rounded forehead and circular



 ${\it Illustration~5.21}$ Shandwick, Ross and Cromarty: the front of the cross-slab (Crown copyright RCAHMS)

eye. It has pricked up ears, open fanged jaws, and an extended tongue. The head of the animal to the right is seen from above. It has a segmented head and ears flung forward. Only one foreleg is present. One would expect that the forelegs of this animal would also be seen from above arranged in a lizard-like position, but there is no surviving evidence for this. It bites a tail which most probably belongs to a third animal. Its body loops round the animal on the margin in a strangle hold. Both animals have body texturing: the active aggressor with clearly defined scales, the seemingly passive victim, with a mane of twisted hair expressed in parallel mouldings. The tongue of the victim extends towards a mat of median-incised interlace. To the right of the base two creatures with similar dog-heads have their bodies looped to form a figure-of-eight. One sits awkwardly on the second step of the base and, after looping through the body of the animal to the right, rests its forelegs on the first step. The hindquarters of both animals are at the bottom of the composition. The larger hindquarters lie along the right margin of the slab, with the hocks extended, resting on the on the margin above the blank panel (illus 5.20b). The tail of the larger creature loops round to fetter the smaller legs in a manner that could account for their drooping pose. The tail of the smaller creature passes through its own legs to form a passage of interlace comparable to the interlacing forms on the left side of the base. Both animals have stick-like forelimbs which clasp each other's body. The heads have extended lobed tongues that loop round each other's body. The head to the right looks back over its shoulder in the direction of the cross. The one on the left also looks back, but the head is raised so as to look upwards. On both sides of the base the animals' limbs are shown in the so called 'Anglian lock' where the offside leg is brought forward over an interlacing strand and the nearside leg tucked back under the strand.

In local sculpture the animal ornament most comparable in scale and modelling is the dog-headed snake-bosses positioned under the cross on the Shandwick slab (illus 5.21). Other less gigantesque animal motifs on this slab, which have gone virtually unremarked, provide a further glimpse of local animal repertoires and deserve detailed description. To the right of the shaft is a symmetrical unpanelled motif of interlinked fish-tailed snakes with heads meeting at the mid-point of the lateral margins and tails at the mid-point of the top and bottom. The motif on the left, also symmetrical and unpanelled, consists of two animals set vertically; their snouts meet at the centre



Shandwick, Ross and Cromarty: detail of the reverse of the cross-slab (Crown copyright RCAHMS, drawn by Ian G Scott)

of the motif and above them their short tails link, but otherwise they are not entangled with each other. Both necks and hindquarters are rolled. The offside foreleg passes over the body and then under it to link with the nearside leg which loops round the neck. The hindlegs have a similar arrangement in order that all four limbs create V-shapes with angles at each corner of the panel. Three of the four small half panels, two square and two rectangular, on the reverse of the Shandwick slab have animal motifs (illus 5.22). At the top left, there is a small-scale version of the massive dog-headed snake-bosses, but here arranged as flat circular interlace not raised into bosses, providing a good example of how

the same motif could be treated entirely differently. The bottom right motif has four dog-headed snakes whose bodies consist of median-incised interlace and whose heads reach out into the corners of the panel. Most interesting is the panel to the bottom left. Here the dog-head is developed into a raptor with fanged jaws opened wide and with a pointed ear thrown forward. The four heads face into the centre of the panel. In spite of their fierce jaws these animals appear not to be biting either parts of themselves or other creatures. They may be fish-tailed, and two may be median incised. Nevertheless the head type relates to the Hilton animals on face A of the lower portion.

The other local large-scale fierce animal is on the fragment of a cross-slab recently found at Portmahomack (illus 5.23). For a time it gave a popular name, 'the Dragon stone', to the fragment. Single animals placed to the right and left of the upper arm of a cross are exceedingly common in Pictish sculpture. The Portmahomack animal is clearly intended as a powerful force rendered doubly so by the serpent head on the end of its tail. The sculptor at Portmahomack, like the sculptor at Hilton, had a difficult space to fill and he does it successfully. Whether the kneeling posture was intended to represent an animal at rest, and therefore in nature beneficent and protective, or was simply imposed by the shape is uncertain. The animal could also be interpreted as malevolence kept at bay by the cross. What concerns us here is the heavy head with the fanged jaws and extended tongue. The Portmahomack single hybrid beast replicates well the contained force of the Hilton beasts.

The most intricate animal ornament to be found locally is on the Nigg cross-head. It consists of snake-bosses and arrangements of quadrupeds. The snake-bosses are located immediately under the transverse arms of the cross on either side of the shaft. The quadrupeds fill the four arms of the cross. The shaft is filled with key pattern and interlace, creating by means of change of decoration the typically Pictish equal-armed cross set on a shaft.

The animal ornament on the Nigg cross-head has been fully analysed elsewhere (illus 5.24).⁵⁵ Its principal characteristic is the use of a delicate, fine style of carving to express animals with elongated tubular bodies forming disciplined structures set on a bed of interlacing, stick-like limbs and extended tongues and tails. The animals that flank the Hilton base also have, but to a lesser degree, their bodies set in an interlace of body extensions. On the Nigg slab the animal heads are largely reptilian, having jaws but no ears. The one



Illustration 5.23
Portmahomack, Tarbat, Ross and Cromarty: fragment of the top of the front of a cross-slab (© Tom and Sybil Gray Collection, RCAHMS)

exception is the pair on the top corners of the upper arm which have naturalistic profile dogheads with pricked ears, open fanged jaws and blunt muzzles. The one to the left has the extended tail of another creature in its mouth. The one to the right has an extended tail looped round its neck. These heads are designed in the same way as the profile animals on the lower portion of the front of the Hilton slab. The dog-headed animals on the Nigg upper arm have their necks thrown back to form a wide V-shape in a posture comparable to the pair to the right of the Hilton base.

Rolled and looped haunches are typical of the Nigg animal ornament but there are also examples of extended haunches. In either case forequarters and

hindquarters are widely separated from each other by tubular bodies. There is a variety of poses for forelimbs, some stretched out, others bent at the elbow and held up 'akimbo'. On the right transverse arm the forequarters of all four animals are designed as if seen from above, their forelegs stretched out in a lizard-like position. It is not certain how the scaly creature at Hilton whose head and neck is seen from above held its forelegs. Indeed it may be that like its victim only one forelimb was shown At Nigg these quadrupeds with lizardlike poses have profile heads presumably to create an illusion of symmetry with the four heads on the left transverse arm. The easy interchange at Nigg between profile and plan viewpoint compares well to the pairs of animals on the Hilton lower portion.

The snake bodies emerging from the snakebosses in the background of the Nigg cross-shaft are median-incised but there is no surviving evidence for bodymarking on the decorative animals on the cross-head. The crouching lions on either side of the liturgical vessel in the pediment have manes, and contouring of the shoulder muscles directly comparable to the marking of the haunches on the Hilton animals (illus 5.25). Such details were obviously part of a common stock of artistic conventions. The Nigg snakes have been characterised as 'peaceable', content to confront each other snout to snout in the manner of the dog-heads emerging from the massive bosses on the front of the Shandwick slab, but in fact many of them have their jaws clamped on to the necks of other snakes. On the fragments of a cross-slab from Portmahomack, Tarbat no 2, where there has been rather looser snake ornament in the background of the cross, one of the surviving snakes has the biting fanged head of the Hilton animals. It is not necessary to labour here the abundant comparisons that can be made between the ornamental quadrupeds of Hilton and the repertoires of such art on monuments at Nigg, Shandwick and Portmahomack. It will be apparent that much of the animal ornament on these local monuments share to a considerable degree conventions which were used by their sculptors at will. However, none of the motifs used elsewhere on the Easter Ross peninsula displays the same heavily modelled style for quadrupeds, coupled with the lack of structural constraint, and consequent free movement, which give the animal motifs on the Hilton of Cadboll lower portion such impact.

For comparable heavy relief modelling of animals we have to look to the south, to the two corner-slabs which frame the figurative panel of the St Andrews Sarcophagus, now in the St Andrews Cathedral Museum, Fife.⁵⁶ Here decorative quadrupeds are carved in high relief, with ungainly, undulating, elongated bodies, stick-like limbs, and heads either in profile or seen from above. The surviving heads on the panel to the left (stone 4) are those of deer, while

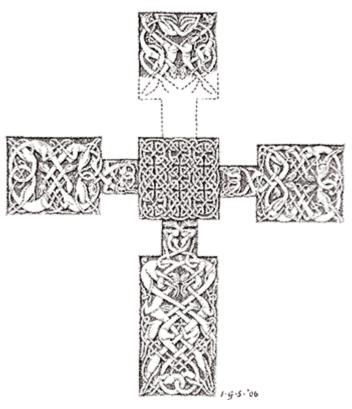


Illustration 5.24

Nigg, Ross and Cromarty: drawing of the animal ornament on the crosshead (scale 1:10) (Crown copyright RCAHMS, drawn by Ian G Scott). The drawing includes details at the crossing, now worn away but present in the cast in the Victoria and Albert Museum

those on the right are quadrupeds with shaggy lion-like manes (stone 5) (illus 5.26a & b). In spite of the difference in scale, and the naturalistic features, the underlying disciplined structures of the motifs created by the tubular bodies of the animals can be seen to be a heavily modelled version of the Nigg style. The delicate, versatile, style of the Nigg cross-head is likely to stand closer to the ultimate model for this kind of



Illustration 5.25
Nigg, Ross and Cromarty: the front of the cross-slab
(Crown copyright RCAHMS)

quadruped ornament on Pictish sculpture, but there can be no doubt that the quadruped ornament on the St Andrews Sarcophagus is directly related to it. It is easy to imagine the fine Nigg style being rendered in the more plastic style of the Sarcophagus. The 'fine' style is also seen at Portmahomack, on Tarbat no 2. Shandwick, in spite of its bold gigantism for the snake-bosses, was also creating animal motifs for discrete units of ornament in a heavier style, but one still in

touch with the miniature origins of Nigg. The Hilton semi-naturalistic animals carved in high relief on the lower portion of face A, with their naturalistic heads, tubular bodies and prominent body texturing are evidence that the St Andrews heavily modelled version of this animal style was represented in Easter Ross.

The quality of the Nigg cross-head animal style inevitably suggests knowledge of metalwork styles. It has long been compared to that of the decorated silverware of St Ninian's Isle, Shetland. Particularly close is the ornament on the cone-shaped mounts (nos 12 & 13) and the sword pommel. These pieces are decorated with quadrupeds with naturalistic hindquarters, long-reaching necks, and elongated coiled bodies. As at Nigg, heads and hindquarters are widely separated, some heads are reptilian others are dog-like with blunt muzzles, and anatomical extensions create a background of interlace. The animals on mount no 12 grow from an onion-like layering of hindquarters in precisely the manner of the animals on the lower arm of the Nigg cross-head. Other arrangements on this mount, such as the swing back of the necks of creatures confronted chest to chest are also paralleled on the cross-head, and now, as we have seen, at Hilton.⁵⁷

5.3.4.2 The Insular context of the animal ornament

The animal ornament on the front of the lower portion at Hilton suggests that another style, additional to but compatible with the Nigg style, was known in Easter Ross. It will be argued that this style is exemplified in the art of the Anglo-Saxon Gandersheim Casket, a whalebone house-shaped casket carved exclusively with animal motifs including the inhabited bushscroll. The Casket is now in the collections of the Herzog Anton Ulrich-Museum in Brunswick, and in 1999 the Museum held an international colloquium to consider every aspect of a work of art that has always been recognised as of consummate craftsmanship and design. The stylistic affiliations and iconographical aspects of the ornament were the subjects of papers by Richard Bailey, Carol Farr and Leslie Webster, who between them covered its analogues in sculpture, manuscripts, ivory, bone and metalwork. It was agreed, though not without some reservations, that the Casket belonged to the cultural milieu of eastern Mercia and was most probably the work of a craftsmen based in Peterborough, around the year AD 800. These conclusions were not surprising, but the detailed discussion of the evidence was unprecedented and must now be regarded as definitive.58



Illustration 5.26a
The St Andrews Sarcophagus, Fife: deer-heads' corner-slab, stone 4



Illustration 5.26b 'lions'-manes corner-slab, stone 5

That there is a link between the art productions of the Picts and those of Mercia is not a new suggestion. One of the principal lines of thought in Henderson's chapter on Pictish art in *The Picts*, written in 1967, was to play down the degree of dependence on eastern models proposed by Mrs Curle for the art of both the Hilton of Cadboll slab and the St Andrews Sarcophagus. It was argued that the characteristics of much of this art could be paralleled not exclusively in orientalising sources, and an ill-defined Northumbrian context, but in the two principal monuments of Mercian culture at Fletton (Peterborough) and

Breedon-on-the-Hill (Leicestershire). The Mercian connections were well-received, but more recently Steven Plunkett has strengthened and re-defined their nature, in a subtle and wide-ranging chapter entitled 'The Mercian Perspective' in the monograph on the St Andrews Sarcophagus published in 1998.⁵⁹ Here he identifies a shared 'accommodation between Insular and oriental ornamental sources' present in both the Sarcophagus and the Breedon sculptures. Plunkett sees the relationship not only in terms of direct influence but in terms of process, the means whereby a master craftsman interprets, synthesises

and makes his own the 'varied ornamental and figural materials at his disposal'. Such materials are made available to the craftsmen by their patrons, and it is this aspect of process that gives regions and centres their distinctiveness and establishes their productions as truly individual works of art. Patrons take part in cultural exchange of artefacts which in the hands and minds of their artists are transformed. So, for Plunkett, 'The St Andrews Sarcophagus is in no way a product of this [Mercian] atelier, but embodies a comparable

Illustration 5.27a
The St Andrews Sarcophagus, Fife: corner-slab, stone 6

initiative, in a context where there is stylistic evidence for cultural exchange between the two regions'. This analysis provides an appropriately complex mechanism for participation in the creation of the Insular art style without loss of regional identity.

Intensive studies of some of the major artefacts of the second half of the eighth century, the York Coppergate Helmet, the Rothbury Cross, the St Ninian's Isle Treasure, the St Andrews Sarcophagus, and now the Gandersheim Casket, have abundantly revealed the extent of this cultural exchange. To some degree all this art shares 'materials', to use Plunkett's word. In addition, all have resonances with the Southumbrian group of illuminated manuscripts, which includes the Vespasian Psalter, the St Petersburg Gospels, and the Barberini Gospels.⁶⁰ To this one can add the art of



*Illustration 5.27b*Corner-slab edge, stone 5

the Book of Kells.⁶¹ It is not intended to go over this ground yet again for the purpose of the elucidation of the cultural context of the Hilton of Cadboll animal ornament, but in this new Pictish material we have further evidence that Pictish sculpture shows a comparable initiative within a context of cultural exchange, which enriched thought, and elicited an innovatory artistic response which was met with technical virtuosity. Without the technical quality of Pictish sculpture such assertions of relationships would, of course, be vacuous. Shared features founded on such cultural exchange and productive of such monuments cannot be accounted for in the simplistic terms of 'Northumbrian', or indeed 'Mercian' influence.

Two examples taken from Plunkett's paper demonstrate the effects of this change of viewpoint. The first concerns the well-known matter of cruciform breaks in interlace and the creation, within interlace, of reserved cruciform spaces to contain cross-shapes. It was Allen who first pointed out the striking parallel in the use of the latter device in on the edge of a cornerslab (stone 5) of the St Andrews Sarcophagus and its pervasive use in the St Petersburg Gospels, a manuscript of the late-eighth century which, appropriately, has been attributed variously to both the north and south of the Humber. Plunkett pursues the background to this analogy further, noting a fundamental resemblance between the construction and decoration of the reserved cross-shape on the low relief corner slab (stone 6) and the carpet pages of the Lindisfarne Gospels, British Library, Cotton Nero D IV (illus 5.27a & b). On this basis he proposes 'that the interlace with inset crosses is a Celto-Saxon invention, at home on the Sarcophagus, which is picked up by the artist of the St Petersburg Gospels - rather than vice-versa'. The probability that Pictish sculptors had a hand at an early stage in the evolution of this particular device is strengthened by their acknowledged superiority in the intricacy and variety of their interlace patterns. Related motifs are found on cross-slabs from Portmahomack and at Rosemarkie.62

The second example of probable north to south transmission relates to a unique motif on the Gandersheim Casket. In their papers in the proceedings of the Casket symposium both Richard Bailey and Leslie Webster are at a loss to find sufficiently exact analogies for the spiral motif in the central panel of the lower tier of panels on the back of the Casket. It consists of a roundel of spirals, six triple spirals arranged around a central triple spiral (illus 5.28). The grouping of six spirals around a central spiral at the

crossing of Irish and Pictish crosses has been studied in an important paper by Liam de Paor in the *Festschrift* for Helen Roe.⁶³ Although de Paor's account of the Pictish examples is flawed, what he calls the 'seven-bossed disc on the crossing' does seem to have the status of a specific decorative device possibly carrying some numeric significance. A good Pictish example is at the crossing of the cross on Aberlemno no 2.

What makes the Gandersheim Casket motif distinctive is that from its perimeter four creatures



Illustration 5.28

The Gandersheim Casket, Brunswick: detail of the back showing a seven-spiral roundel (© Herzog Anton Ulrich-Museum Braunschweig, photographed by B P Keiser)

with forelimbs extended in a lizard-like pose, emerge to move towards the corners of the panel. At a merely decorative level such a motif could be regarded as just another example of what Françoise Henry called the interpenetration of decorative motifs, whereby ornamental patterns run into each other: interlace can run into spiral pattern; spiral into key pattern; interlace and spirals can be animalised; and animals develop foliate features. However, for creatures to emerge from a seven-spiral roundel undoubtedly gives the motif more symbolic weight than the animal-headed interlace and animal-headed single spirals which

abound in the manuscript art of the late eighth century and are represented on Pictish and Irish sculpture. The snake-bosses of the Nigg slab and the St Andrews Sarcophagus, where snakes emerge from a boss made up of their interlaced bodies, certainly convey more than just the interpenetration of motifs. Plunkett considers that the 'boss of spirals ... with lizards emerging' on the Casket is related to the Pictish snake-boss and its metalwork analogues.⁶⁴ He further suggests that the comparatively rare examples of Mercian spiralwork show knowledge of these northern manifestations, thus providing another instance of influences between the art of the Peterborough region and Pictish St Andrews running in both directions. Webster accepts



Illustration 5.29

The Kildalton Cross, Islay, Argyll: oblique view of detail of the central boss on the eastern face (Crown copyright RCAHMS, drawn by Ian G Scott)

that the Pictish snake-bosses are visually similar, and carry the kind of symbolism required for the Casket motif in the context of its overall iconographical programme, but points out that the Casket creatures are not snakes and that their bodies are not made up of running spiral pattern. 65 Whether it is justifiable to set store on such distinctions must be doubtful. Are we to claim that the creatures with lizard-like forelimbs and fanged canine-heads emerging from the bosses set in a cruciform arrangement of spirals on the lowest panel of the east face of the St John's Cross are not wholly made up of snakes and represent an introduction of a distinct motif resulting in a kind of hybridisation of the snake-boss?66 At the very least the Iona lizards emerging from the snakeboss into the corners of a panel bring the Gandersheim motif and the Ionan/

Pictish decorative world somewhat closer. The visual similarity is significant.

Spiral patterns are a feature of Pictish sculpture, particularly in Easter Ross sculpture, at Portmahomack, Shandwick and Hilton of Cadboll. Pictish preeminence in stone in this ornament is similar to its pre-eminence in interlace. In later sculpture, on the Crieff (Perthshire) and Ardchattan Priory (Argyll) cross-slabs, there are examples of spiral pattern at the crossing running out into the cross-arms to produce ribbon-bodied creatures with dog-like heads and fanged jaws. Both of these monuments are committed to the interpenetration of motifs. Crieff conflates animals with vine-scroll, and at Ardchattan a human figure holding a book has extended legs intertwining to engage with spiral pattern.⁶⁷ The Gandersheim motif surely shows an artist combining motifs in precisely the way that the sculptor of the Kildalton Cross (Islay), another Ionan monument, puts at the crossing of the east face four splayed creatures moving into a bossed form in a manner very similar to the four stylised lions moving up the Steeple Bumpstead (Essex) boss (illus 5.29).68 Richard Bailey's sculptural parallel at Fletton for Gandersheim's inhabited spiral roundel shares with these far flung analogies an approach by lizard-like bipeds towards a circular shape. His second Mercian parallel, South Kyme (Lincolnshire), lies in the occurrence of evidence there, among the disjecta membra of a stone shrine, for the use, on one monument, of both spiral ornament, a rare motif in English sculpture, and zoomorphic ornament of the Gandersheim type.⁶⁹

While spiral ornament of diverse complexity is exceedingly common in Pictish sculpture, bipeds with tails developing into interlace, an important motif south of the Humber, have so far not been recognised as a feature of Pictish animal ornament. The sculptor of the Hilton of Cadboll cross-slab will have had access to the visual sources used by the sculptors (possibly sculptor) of the Nigg cross-slab and the St Andrews Sarcophagus. In all the art-historical discussions of the St Andrews Sarcophagus, and indeed of the Gandersheim Casket, the Hell panel from the Northumbrian Rothbury Cross has always featured, for it displays fleshy quadrupeds and lizard-like creatures with textured bodies seen from above (illus 5.30). The links with Pictish sculpture have been focused on the Sarcophagus without reference to the animal ornament of the Nigg cross-head, in spite of their close relationship. This is understandable for while the Nigg menagerie includes creatures with lizard forelimbs the carving is infinitely delicate, quite



Illustration 5.30

The Rothbury Cross, Northumberland: the fragment showing the 'Hell' scene on the base of the cross-shaft (© Corpus of Ango-Saxon Sculpture, photographed by Tom Middlemass)

different from the plasticity of the heavy modelling at Rothbury and St Andrews. However, an important shared connection between all three monuments is in terms of structure, in the use of tiered, or mirror image, animal motifs composed of sinuous S- and heart-shapes constructed by their bodies.

The Rothbury analogy has further importance in that, while the confronted creatures at the bottom of the panel are quadrupeds, further up the design these are replaced by bipeds with long tails. All six creatures have their heads and shoulders seen from above, but the hindquarters of the quadrupeds are shown in profile. In a full study of the Rothbury Cross Jane Hawkes

points to this unusual view of these monsters with their 'bodies seen partially from the side and the heads from above', a feature which she considers to be a distinctive trait of eighth-century Insular zoomorphic art.⁷⁰ This arrangement is exactly paralleled on some of the Gandersheim creatures (illus 5.31a & b).⁷¹

With this background in mind it is time to return to the animal ornament on the lower and mid-portion of the Hilton of Cadboll cross-slab, and in particular to the pair of animals to the left of the stepped base. Both have well-preserved body texturing, and the pair create an animal motif set on a mat of interlace made up of a tail extension, fettering hindlegs, and a tongue intertwined with limbs and an ambiguous median-incised strand. The modelling and sinuousity of the animal whose head lies along the left margin of the slab instantly recalls the bodies of the creatures in the St Andrews Sarcophagus 'deer-heads' corner-slab, but it is the mane that evokes the animal art of the Gandersheim Casket. This is expressed not by the curls on the St Andrews 'lions'-manes' corner-slab but by twisted ridges exactly paralleled on the Casket and on the animal fragment at South Kyme (illus 5.32). The maned beast at South Kyme has a fanged dog-head and a pointed raised wing. In lay-out and art style the now fragmented shrine at South Kyme is dated to the late eighth or early ninth century with particular reference not only to the Gandersheim casket, but also to the familiar related suite of major art works of that period which includes the Hedda Shrine at Peterborough, the Witham pins from Lincolnshire, and the St Petersburg Gospels.72

In May 2005 it was possible to fit fragment X.IB 355.1 on to the broken upper surface of face A of the lower portion (illus 5.33a). This fragment shows the neck and head of an animal with its ears thrown forward seen from above, biting a tail that passes between animal haunches. Its neck has scales which match those on the body of the animal on the lower portion that has the neck of the maned animal pinned down in a strangle hold. The conjunction shows that the scaly animal with its short forelimb, only that on the near side shown, held forward, has its head seen from above. The body texturing and pose places it firmly in the general context of creatures on the Rothbury 'Hell' panel and the Gandersheim Casket. Creatures with heads seen from above, as we have seen, are also found on the Nigg cross-head and the St Andrews Sarcophagus. There are two other features of this scaly animal which recall the art of the Gandersheim Casket, one certainly present, the other as yet speculative. The first is the treatment of



Illustration 5.31a

The Gandersheim Casket, Brunswick: right-hand end with foliate scrolls inhabited by winged creatures (© Herzog Anton Ulrich-Museum Braunschweig)



Illustration 5.31b

The Gandersheim Casket, Brunswick: left-hand end with foliate scrolls inhabited by bipeds, including a pair with forelegs seen from above (© Herzog Anton Ulrich-Museum Braunschweig)

the head. The miniature scale of the Casket creatures seen from above, conveniently drawn and collected together by Webster, show a consistent treatment of the heads.⁷³ The snout tapers, the circular eyes appear protuberant and the curved eyebrows are extended to the end of the snout creating an inverted Y-shaped segmentation of the head reminiscent of an animal wearing a muzzle. All these distinctive features appear on the animal head on fragment X.IB 355.1. One has simply to remove the thrust forward ears to create a facsimile of the Gandersheim heads, for texturing, sinuosity and head type are all there. Here too, the head seen from above combined with a single forelimb

shown in profile is paralleled in the creatures within the lower foliate scrolls on the right-hand end panel of the Casket (illus 5.31a). The head type, notably the circular eyes and segmented head, can be discerned in a detail from a disc-headed pin from Brandon, Suffolk, also illustrated in a drawing by Webster,⁷⁴ and on the splayed quadruped on one of the Witham pins.⁷⁵ It also appears on brooch no 17 of the St Ninian's Isle Treasure⁷⁶ where four animal masks with snouts segmented by a ridge and round eyes move away from the circular setting on the terminals. A similar head appears on the crest of the St Ninian's Isle inscribed chape.⁷⁷ Wilson pointed out that other zoomorphic features in this brooch,

including heads with long ears, parallel the heads on the metal mounts of the Gandersheim Casket.⁷⁸ These animals with the long ears and extended tongues are described by Webster as 'a recurrent motif in all media'. Lizards with heads seen from above on the hoop of the larger penannular brooch from Clunie (Perthshire) have the same long snouts, and circular, drilled, eyes.⁷⁹ The new scaly beast on the cross-face of the Hilton of Cadboll slab is a more fully realised, in the sense of being a fractionally more naturalistic, version of a pervasive animal type in all art productions of the late eighth century.

In one important aspect the Pictish animals on either side of the stepped base would seem to differ from the Mercian types represented, not only on the Gandersheim Casket, but on the roof of the 'Hedda' shrine and on the animal motifs ornamenting the Coppergate Helmet. Pictish sculptors it seems did not find a use for the bipedal animal whose body tailed away into interlace. On the Nigg cross-head, with one exception, and on the St Andrews corner-slabs, all the

animals, however reptilian in body, are quadrupeds. The exception at Nigg is a pair of confronted bipeds within the constriction of the lower arm of the crosshead (illus 5.24). They have naturalistic dog-heads, show one forelimb, and have tapering serpentine bodies that loop round the necks of the quadrupeds in the lower arm to return into the constriction to end in a blunt tail. As we have seen the animal repertoire of both the Rothbury fragment and the Gandersheim Casket also shows coexistence of the biped and the quadruped, but examples of the typical biped body developing into interlace have not so far been identified in Pictish sculpture. It is significant that, similarly, there are no examples of bipeds in the animal ornament decorating the silverware of the St Ninian's Isle Treasure. Like Pictish sculpture generally, this de luxe metalwork is committed to the quadruped. However, the scaly beast to the left of the Hilton base may be such a biped. Fragments have not yet been identified that would explain exactly how the snaky creature's body ended. An obvious reconstruction



Illustration 5.32
South Kyme, Lincolnshire: fragments of relief-sculptured panels (© Paul Everson and David Stocker)



 ${\it Illustration~5.33} \\ {\it Hilton~of~Cadboll:} \ the front~of~the lower portion~with~additions~belonging~to~the~mid-portion. \\ {\it Ian~G~Scott~can~be~seen~in~the~background} \\ {\it (©~Trustees~of~the~National~Museums~of~Scotland)}$



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would entail the creature with the ears flung forward biting the tail of its own hindquarters. The difficulty is accommodating the fragments of figural art that are conjoined to X.IB 355.1, which would seem to make it necessary for the animal tangle to end, horizontally, at the height of the hindquarters. Reconstructing a body to meet this requirement means ignoring other indications, notably the trace of a hanging limb which passes under the scaly body between the forelimbs of the other two animals. This limb must come from a

third animal which has also to be fitted into the space available. The median-incised interlace has also to be accounted for. At first this was thought to be a filler snake whose body had been usefully distinguished by median-incision from the other creatures. We know that the strand passed under the snaky body and that it had a blunt end. It could be interpreted as an extended tongue falling from the jaws of the largely missing third animal, but it could equally well be the end of the body of the scaly creature finishing with the blunt



Illustration 5.34

tail of the Nigg bipeds. In any event that so markedly scaly a creature should be a quadruped seems unlikely. It may be then that it qualifies as a rare example of the Mercian type of reptilian biped with a body developing into interlace.

A feature of the maned animal on the left margin of the slab is the apparently limp hang of its short nearside forelimb. The position is ambiguous: the animal may be intended to be prone pinned by the weight of the scaly creature, or it may be being pulled up so that its head droops ineffectually. The latter is the more effective pose and is the initial impression given to the viewer. It is perhaps significant that there is a dramatic, almost narrative, feel to the positioning of the animals one with the other, which calls for a spatial narrative interpretation usually inappropriate for animal ornament. Intertwined decorative animals are rarely thought of as stranglers and victims, with the possible significant exception of the animal ornament in the Book of Kells.

While traits belonging to the delicate animal art of the south, and Mercia in particular, are clearly to be seen in the animals on either side of the Hilton crossbase, other influences have also been at work. These traits belong to animals of a more naturalistic sort, even a more gross sort such as is seen on the 'lions' manes corner-slab' of the St Andrews Sarcophagus. We have to look at other visual resources such as the art of the Book of Kells and related manuscripts. For example, the pose of the maned animal at Hilton recalls that of the considerably livelier single animal in the group of three quadrupeds in the Corbie Psalter, Amiens, Bibliothèque Municipale, MS 18, on folio 109r, at Psalm 126 (AV 127), which shows a profile animal with its head looking backwards, its weak forelimb hanging in to its flank and its tongue enmeshed with that of another whose head is turned to confront it (illus 5.34). The decorative naturalism of this animal art could have some relevance to the development of the animal ornament at Hilton, even though it is still recognisably in touch with the world of ornamental fantastic animals and lumpy shapeless monsters.80 Animal ornament in the Book of Kells fills frames and underpins symmetrical structures required by the scale of the Gospel incipits, but there are also clutches of smaller decorated letters as, for example, on folio 250v, which have at least a naturalistic tendency, and indeed are sometimes fully naturalistic.81 This moving in and out of ornament and naturalism even to express the same imagery is typical of Pictish animal art. The Corbie Psalter has not abandoned animals as ornament,

but a bias towards naturalism gives it a slightly different appearance. Recent work by Bernard Meehan has begun to explore the subtleties of the relationship between the Psalter and the art of the Book of Kells signalled earlier by Françoise Henry. Extended tongues are a feature of the new animal ornament found on fragments of face A. Looping tongues ending in volutes are part of the typical head type of fanged open jaws, blunt muzzles, rounded brows and prominent ears. The fitting of fragment X.IB 355.5 on to the top of the right-hand side of the lower portion partially completed the pair of animals, one, on the right margin of the slab being shown to have this type of head. The missing pricked ear was identified on a separate fragment. The fitting of a further fragment, X. lB 355.265, showing a head of compatible scale, on to the lower portion, completed the pair of intertwined animals to the right of the base (illus 5.33b). This animal has the back of its head close to the cross-shaft. The pair are arranged more or less symmetrically with hindquarters at the bottom, bodies in a figure of eight in the middle and heads at the top, but not confronted, for as we have seen the animal adjacent to the cross-shaft looks upwards not across to its companion. The tongues are extended and loop round each other's bodies to end in a volute. This head type on a smaller scale appears on the upper portion of face A, and it has been suggested above that some of it might have been used to decorate the shaft (Chapter 5.3.2).

Animals with prominent ears, open jaws (but fang-less) and pendulant tongues ending in volutes appear also on the Gandersheim Casket. Webster cites abundant close analogies, some with fangs, in sculpture and metalwork of the late eighth century. 82 We can now recognise that this 'widespread style' had clearly spread to Easter Ross.

It might be that the extended pendulant tongue should be regarded as merely a decorative adjunct which can contribute to the background of interlace which is part of this style. For example, on the Casket the lolling tongue hooks as it were into a loop of the interlaced body neatly engaging with it. Another motif keeps the tongues free of interlace. Here lappet extensions create an intricate mat of interlace between the wings and tails of addorsed bipeds with animal heads. Among the fragments from Hilton there are examples of heads with both unengaged lolling tongues, and tongues which are caught up in other strands of animal extensions or curved foliate stems. Animal heads with gaping jaws and an extended pendulant tongue carved in a variety of scales and heights of relief are a distinctive feature

of the animal style displayed on face A of the Hilton of Cadboll cross-slab.

Meehan in his work on the role of decoration in the Corbie Psalter has drawn attention to the extent to which tongues are emphasised in both the Psalter and the Book of Kells, particularly so in the case of lion-like creatures. He considers this feature of animal design to be a device, the significance of which is uncertain, but which he tentatively suggests might reflect 'the last words of Christ's ancestor David, "The Spirit of the Lord hath spoken by me and his work by my tongue", 2 Kings 23.2, the lion symbol of the house of Judah representing David in this context'.83 This, of course, could be an example of the literal illustration of the scriptures which characterises the Utrecht Psalter, Utrecht University Library MS 32, folios 1-92, and which could be present in the predominant lion imagery of the St Andrews Sarcophagus.84 It would certainly not be inappropriate to give the extended tongue of the fierce Pictish lion/dragon on the Apostles' Stone fragment at Portmahomack some such symbolic weight. I do not think that the semi-reptilian creatures on face A of the lower portion could be interpreted in this way, although, as we shall see, the difficulty of interpreting the surviving figurative iconography of face A makes it necessary to keep the mind open. The lively, delicate creatures with their tongues extended, carved on the upper portion of face A, may be purely decorative but it is possible that they too have some general significance related to the work of creation. For the Gandersheim Casket, Leslie Webster has demonstrated convincingly that what appears to be simply panels of finely carved highly decorative animals in a style found in contemporary works of art in many media have in fact each been subtly designed to express, individually, creatures of the air, earth or water, and symmetrically ordered so as to convey a symbolic programme. This extension of the decorative animal into symbolic, and even illustrative, contexts has been demonstrated as occurring in the art of the Book of Kells and the Rothbury Cross. It is probable that all ornament in Insular art conveys a degree of symbolism whether in the construction of ornamental but meaningful shapes, or in the case of animal ornament, referring to the abundance of creation, something early identified by Stevenson on the Hunterston Brooch, or to what Meehan identified in the Book of Kells as the conjunction of Christological symbols.85

Writing in the St Andrews Sarcophagus monograph, Henderson pointed out that the corner-slab with the deer-headed quadrupeds was sited to the left of the side panel, adjacent to the deer-hunt on foot, and that the panel to the right with quadrupeds with lions' manes was next to the image of David rending the lion's jaws. This she thought was an example of how a master sculptor gave his work of art coherence, tying his decorative repertoire to the figurative art. Elsewhere in the same volume, Douglas Mac Lean more perceptively suggested that these seemingly decorative animals on the corner-slabs flanking the David panel could have carried the meaning of beneficence (the deer) and malevolence (the lions) (illus 5.26a & b).86 It may be that what we are seeing in masterpieces of the late eighth century, when artists in all media were at the height of their powers technically and conceptually, is a new emphasis on the exploitation of ornament as a means of reinforcing or indeed of conveying meaning. We might therefore expect that the animals on either side of the Hilton cross-base, itself charged with allusive symbolism, were conceived in symbolic mode. However, these large-scale decorative animals, so useful in establishing a stylistic context, pose a difficult iconographic problem.

5.3.4.3 The figurative art on the background of the cross in the mid-portion

When it was found that the fragment with the head of an animal seen from above was conjoined on its upper edge to fragment X.IB 355.268, which itself was conjoined to fragments .294 and .21, it became apparent that immediately above the animal motif was narrative art consisting of three figures whose lower limbs alone survived (illus 5.35a & b). The best-preserved figure is adjacent to the cross-shaft. It wears an ankle-length robe with feet in profile facing to the left. The drapery of the robe is well expressed, shown clinging to the legs. The left side of the hemline (the right does not survive) dips to a point, and above it hangs a separate form, possibly close to the body, which is also pointed. This form could be a wing, but no surface treatment survives to confirm this identification. Immediately in front of the robed figure, and also facing left, are the unclad legs of another figure. This figure faces a third figure, over a considerable uncarved space, whose feet only, facing to the right, have survived. There was no possibility of a formal division, either by a horizontal margin or a passage of ornament, of this interactive figurative scene from the tangle of animals immediately below.

On the other side of the shaft within the midportion, on a very slightly higher level with the







Illustration 5.35

Hilton of Cadboll: (a) the mid-portion of the front face under reconstruction, general view, (b) the group of three truncated figures, (c) the truncated figure with an embroidered tunic flanked by animals (© Trustees of the National Museums of Scotland)

narrative scene described above, five fragments have been joined running from the right edge of the slab into the space occupied by the cross-shaft. Although severely damaged there are vestiges on two of these fragments of animals of the type and scale of the animals flanking the base. One, fragment X.IB 355.6, which preserves part of face B, the right edge of the slab, shows the forequarters of a thick tubular body with raised forelimbs. The other, fragment X.IB 355.9 is a battered fragment with carving preserved only on its top edge, from within the cross-shaft. The carving appears to be, as already described, the forequarters of a pair of large affronted animals with their forelimbs meeting in an inverted V-shape, within which there are the heads of two much smaller scale addorsed dog-headed animals with fangs and extended tongues

(illus 5.14). Joined to the fragment of the large animal on the right edge of the slab is a remarkable piece of figurative carving. Fragment X.IB 355.7 shows the lower half of a figure wearing, under drapery bunched at the waist, a stiff undraped knee-length tunic which is decorated with an all-over pattern of scrolls (illus 5.35c). Fragments 355.22, .23 and .36 join to show that this figure had well-shaped unclad legs and that his feet are in profile pointing to the right. To his left, on 355.7, is the rounded haunch of an animal with a naturalistic pelt, and a short tufted tail hanging down straight. The large-scale 'decorative' animal appears to be interacting with the figure so grandly dressed, its forelimbs lying close to his left side. It appears, therefore, to have some narrative significance, possibly transferable to the animals of the same

species at the bottom of the cross-slab. No carving has as yet been identified among the fragments to indicate his relationship with the smaller, seemingly more naturalistic creature, at his back. This creature with its curly pelt, rounded haunch and tufted tail looks like a lion. Lion imagery introduces many iconographic possibilities but the conjunction of .11 with .7 lengthened the haunch and gave it a hook-like appendage which could be interpreted as a large dew claw. The conjunction does nothing to clarify the imagery and it may be that the naturalistic features of this creature are misleading and that when complete it had a much more monstrous appearance. This would get round the difficulty of a man flanked by two different genres of animal on different scales, one naturalistic and more or less appropriate to the scale of the man, and the other much larger and fantastic. Unfortunately there is no indication of the nature of the relationship between the two creatures and the man in their midst. One assumes that it is combative but this is only an assumption. The confronted large creatures overarching a smaller pair of animals on the Hilton cross-shaft may, as we have seen, echo the motif found on the St Andrews corner-slabs and on the Nigg cross-head lower arm, but it is closer to the decoration of the shaft of Meigle no 2 where the entire shaft is decorated by three tiers of large static confronted or addorsed animals with smaller decorative animals of a different type set between them. Clearly the Hilton of Cadboll lower and mid-portion presented a formidable array of animal art on the cross and in its background, with figurative art if not embedded within it, closely associated with it. The conjunction of fragment .265 and .5 to the lower portion and to the mid-portion fragments .11, .7 and .6 confirmed that there was no panel division between the tuniced man flanked by animals and the animal motif below. The animal head to the left is indeed 'looking up' at the action centred on the man, and there seems no reason for this pose other than some involvement with it.

In early medieval art men interacting with monsters or fierce beasts occur in heroic, scriptural or theological contexts. Pictish sculpture includes representations of the exploits of David, Daniel and Jonah in the form of the 'abbreviated representations' common to Early Christian art.⁸⁷ Non-scriptural heroic struggles between men and beasts have not so far been identified in Pictish sculpture, although a possible exception is on the lost Meigle panel where early drawings suggest that the man confronting a bear was defending himself with a knife.⁸⁸

The full-length figure wearing a tunic at Fletton, struggling with the extended bodies of bipeds, in spite of the tilt of his shoulders, appears not to be a hero mastering the animals which flank him.89 A naked figure, of similar proportions and pose, grasps a scrollstem within an inhabited vine-scroll at Breedon.⁹⁰ The meaning of the imagery of these Mercian figures seems to embrace man's struggle in the natural world but is significantly less intense than the image of a naked half-length figure grasping the hindlegs of quadrupeds at the bottom of the Rothbury panel. This panel is generally accepted as illustrating a scene in Hell, where the vulnerably naked figure is being menaced by fierce beasts.⁹¹ Two of the Pictish tall cross-slabs which share other visual resources with the Hilton of Cadboll cross-slab have Hell iconography. Aberlemno no 3 has a typically abbreviated Hell motif in the background of the cross to the right of the bottom of the crossshaft (illus 5.17). Here a naturalistic quadruped has hindquarters shown in profile and forelimbs stretched out on either side of its head, which is seen from above. The animal is intent on gnawing the head of a man whose well-formed legs emerge from what appears to be the hem-line of a garment. In Pictish sculpture figures in such motifs are normally shown naked, but this admittedly very damaged figure may be an instance of a clothed figure under attack by a beast of Hell. Higher up the background of the cross are angels, and it looks as though there is some locational appropriateness in the placing of a Hell motif at the very bottom of the slab. It may also be noted that the figures trapped between the letters of the opening to St Luke's Gospel, folio 188r of the Book of Kells, which has also been interpreted as a Hell scene, are mostly partially clothed. The two figures at the bottom right are quite elaborately dresssed. One wears flounced garments of some complexity and the other an undertunic with a wavy hemline.92

Earlier it was proposed that the bossed cross-head of Meigle no 2 would have admirably suited the bossed base of the Hilton of Cadboll cross and the similarity of the animal ornament on the shafts of both crosses has been pointed out. On the left-hand side of the shaft of Meigle no 2 is a dramatic Hell scene expressed more explicitly than an abbreviated man and monster motif (illus 5.19). Here in the constricted space between the broad cross-shaft and the edge of the slab a naked figure, with his head flung back, is about to be snatched by one leg (the other is raised up) into the jaws of a monstrous animal. However, help is at hand in the form of the strong arm of another figure

securely positioned within the left volute at the top of the cross-shaft. Fierce animals move up the right hand of the shaft, one with its head lodged in the right volute, its jaws held closed. The scene then is more a representation of redemption, than damnation, of purgatory rather than Hell.⁹³

On the grounds of other iconography on Pictish tall cross-slabs it could be reasonably argued that the animals at the bottom of the slab, on either side of the Hilton cross-base, are the inimical, dire beasts of Hell and that two of their kind are confronting a tuniced figure at a mid-point between the right-hand edge of the slab side and the right-hand moulding of the cross-shaft. That there was some conflict being enacted farther up the background of the cross could account for the animal to the right of the shaft looking upwards, away from the cross. The only evidence for that conflict, however, is the position of the man confined between differentiated fierce animals.

More problematic are the dramatically presented animals to the left of the base, for immediately above them is a peaceable narrative. The status of the robed figure, next to the cross-shaft, possibly an angel, is clearly superior to that of the unrobed figures who are presumably of equal status. The robed figure appears to be either a witness or a detached controller of a situation. Another possible interpretation of the spacing and relationship of the three figures is that the robed figure is presenting the figure that is in front of him to the figure on the left. Some light might be shed on the interpretation of the three figures by attempting a more specific interpretation of the scene to the right. Unfortunately here also the lack of visual clues makes for uncertainty. Iconographically the best clue is undoubtedly the nature of the man's garment. A handsomely decorated short tunic belongs to a wealthy, secular person. On that basis, the figure has been interpreted as Dives, of the parable of Dives and Lazarus in Luke 16, where Dives, the rich man, goes irredeemably to Hell while Lazarus, the poor man, goes to Heaven.94 As we have seen, that the figure is clothed is not an insurmountable difficulty. On the other hand, depictions of the damned are usually shown under stress, physically contorted. The Hilton robed figure appears to be standing firm holding his ground. Again perhaps the robe provides the answer. In order that this essential attribute of a rich man on earth can be displayed the figure has to be static. Accounting for the naturalistic lion on the figure's right is not easy. However, Pictish beasts of Hell can be either naturalistic or decorative, and in a notable

representation of the Hell motif on the front of the cross-slab at Rossie Priory (Perthshire) two different styles of animals are pulling a naked human being apart. One is a fiercely clawed lion that has the man's head in its jaws wrenching it back, and the other a fishtailed reptile that hauls up and bites at a raised leg. On the large cross-slab at Fowlis Wester a larger than life size lion-like monster snatches at a naked figure with his head well back in the animal's throat. If the tuniced figure is on his way to Hell then one could predict that his as yet unidentified shoulders might be thrust back, his head already within the lion's mouth. To date no fragments have been identified with carving that would confirm this hypothesis. But here, on what is the left side (facing right) of the cross of the crucifixion, is potentially, a Hell scene, expressed not just in the usual Hell motif but one which might have illustrated a specific parable of Hell in the New Testament.

Returning to the figures on the left, suggestions as to their interaction have been made above. The most obvious interpretation would be that the figures facing each other are Adam and Eve with a Holy Person remonstrating with them after the Fall, the first sin that could lead to the damnation figured below in the pit of writhing beasts. The extent of the carved space between the figures is, however, difficult to account for. If the Temptation was the subject then there was plenty of room for the Tree of the Knowledge of Good and Evil. If the subject is Remonstrance then one would have to resort to explaining the composition as a sophisticated spatial recognition that after the Fall Adam and Eve were separated from God, she to be the bearer of children, he to be the tiller of the soil. The Fall narrative in the frontispiece to Genesis in the Grandval Bible, British Library, Add MS 10 546, an early illustrated Carolingian Bible of the first half of the ninth century, includes scenes of God's Remonstrance with the fallen pair, and the angel escorting them to their future life of toil (illus 5.36). The Fall narrative in this cycle in four registers is entirely made up of threefigure compositions, and another possibility, which allows better for the space between the two confronted figures, would be God's introduction of Adam and Eve into the Garden of Eden before the Fall.95

What should be taken into account is that there may well have been a fourth figure in the scene, or indeed a group of figures. There could have been a robed figure behind the figure facing to the right making a symmetrical group. If so this could be a Harrowing of Hell with angels leading Adam and Eve out of Hell figured below.⁹⁶ If there were a group of unrobed

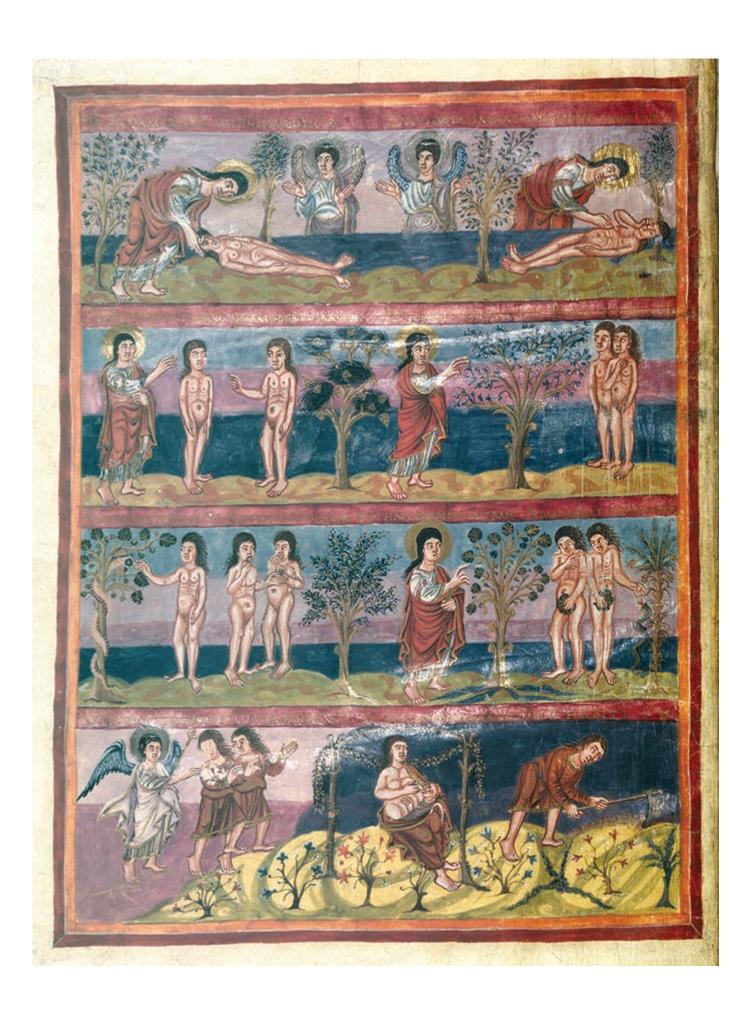




Illustration 5.37
Ivory of the Last Judgement, London, Victoria & Albert Museum (© Victoria & Albert Museum, London)

figures seen in depth behind the figure facing to the right then the scene could be the redemption of Adam and Eve, and others, presided over, as is usual in later medieval art, by two angels, or by Christ accompanied by a single angel. The Redeemed are usually clothed, but not always, and in any case we do not know whether the confronted figures were clothed or not. On an Anglo-Saxon ivory panel of the late eighth century a scene of the Last Judgement shows at the bottom left, a group of the Just with short tunics and bare legs

Illustration 5.36
The Grandval Bible, London, British Library, Add MS 10 546, f5v, the frontispiece to Genesis (© British Library Board)

being ushered into Heaven by an angel. Adjacent, at the bottom right, the mouth of Hell is represented by the jaws of a monstrous beast snatching the head of the first of a group of the naked wicked (illus 5.37). The composition, particularly of the group with the angel to the left, is a good analogy for what survives of the Hilton iconography on either side of the cross-shaft. There are other unconjoined fragments with carving which show human heads, legs and feet, but where they are located on face A is as yet unknown. They do show, however, that there was other figural art on the front face.

A provisional suggestion therefore for the iconography of face A of the lower portion, including the conjoined fragments from the mid-portion, is that it represents at the bottom of the slab on either side of the cross-base the monstrous beasts of Hell: to the left (facing right) of the Cross of the Crucifixion an illustration of Dives snatched by a lion-like beast and about to be dragged down by a monstrous beast into Hell; and to the right of the Cross of Crucifixion a redemptive scene of the Harrowing of Hell. More generally, it appears to be concerned with the Last Judgement.

Such an interpretation is consonant with the vivid images of Hell in Pictish sculpture, and their extension at Meigle no 2 which shows redemption, and with the pastoral messages concerning the difficulties of another Rich Man depicted on Meigle no 27 (James 2.3), and the need, generally, to take up the shield of faith and the sword of the spirit in order to extinguish the devil (Ephesians 6) near the top of a cross-shaft of St Andrews no 19.97 The latter sculpture also has a Hell scene at the bottom of the slab directly comparable to the scene in the Book of Kells incipit to Luke, where monsters latch on to the crowns of the heads of the damned. This Hell miniature also includes a lion crunching a human head on the top margin.98 The style in which the animals in Hell are expressed has been shown to be related to that used in art of all media to the north, and particularly south of the Humber, including identifiable stylistic traits which suggest cultural sharing with the art of the Gandersheim Casket. That the style appears to be to some degree coarsened is the natural consequence of its role in the narrative.

5.3.5 The message of the original face A

The message of the cross face proposed above is that of the Salvation of Mankind as a result of Christ's death on the cross raised on Golgotha Mount leading to

the remission of sins and the promise of Eternal Life. Christ's obedience to God's will undid the disobedience of Adam, and thus the interpretation of the scene on the cross's right side as a depiction of that disobedience would be appropriate. The vivid depiction on the cross's left side of the fate of the wicked, no matter how powerful and wealthy, to be cast into Hell would, however, be better matched by the Harrowing of Hell where the redeemed, including Adam and Eve, are led into Heaven. The other figural imagery, represented by the surviving frontal heads, could obviously have extended the pictorial representation of these fundamental tenets of the Christian faith, possibly forming part of a more ambitious Last Judgement. The decoration of the cross and its background included a large proportion of animal ornament, sufficient to suggest that it was symbolic of God's Creation.

5.3.6 An impression of what the original face A might have looked like when complete

It will be obvious that the work of reconstruction has not provided many key elements in the appearance of the original face A which would undoubtedly have enriched or modified its message, particularly in the light of current views on the symbolic use of the ornamental repertoire. For what it is worth, a hypothesis is offered here of what the complete original face A might have looked like, one which is entirely personal to the writer and which other members of the reconstruction team and future interrogators of the database may, for good reasons, want to argue against. The hypothesis may usefully focus criticism and elicit more evidential description. One unsatisfactory aspect of the hypothesis to be acknowledged is that it relies too much on symmetry for the decoration of the background of the cross.

With these provisos in mind it is suggested that the cross-face consisted of a ringed equal-armed cross with square terminals and double squares in the armpits. Its upper and transverse arms projected from the slab edges. The ring was decorated with spiral bosses. The arms of the cross-head were decorated with spiraliform key pattern and curvilinear ornament both of which had elements raised to create bosses, in order to represent the jewelled cross of Golgotha. A circular interlace-covered boss was placed at the centre of the square field at the crossing. The ornament was carved on platforms of relief which added emphasis to the cross-shape. The cross-head was set on a shaft decorated with panelled animal ornament of various

types: loosely constructed serpent ornament; animals within a leafless and fruitless bush-or medallion-scroll; and a panel consisting of large animals containing smaller animals. These panels were also set on raised platforms of relief. The base consisted of a two-stepped base filled with spiraliform key pattern some of which was raised to form bosses arranged in three lines of three, two and five bosses. The appearance of these bosses evoked both the jewelled cross of Salvation and their number, ten, had the numerological significance of the fundamental body of the Law, the Decalogue. The architectural emphasis on the base was created by undecorated panels which projected beyond the edges of the slab. The background of the cross, starting from the base, contained animal ornament on both sides representative of the beasts of Hell. To the left from the point of view of the viewer, not that of Christ crucified, was the reward of the faithful and to the right, the punishment of the wicked. Above these narratives, on either side, were passages of purely decorative loose interlace running into key pattern, and above that again, more figural art, expressive of Redemption, involving frontal-facing figures. Animal motifs surrounded the ring, below and above. The selection of decoration for such a monument was in the main committed to reinforcing its known message concerning man's sojourn in God's terrestrial creation of plants and animals, and his choice of disobedience to the Law and subsequent damnation, or of obedience, bringing with it the Redemption and Eternal Life made possible by Christ's death on the Cross.

5.4 Text becomes commentary: reappraising the Hilton of Cadboll reverse face

(For detailed descriptions see the catalogue-style entries in Chapter 4.)

The composition of the carving on the back of the slab has been much praised for its balance. The discipline of the format of a framed vertical triptych certainly contrasts with the looser, sometimes to the point of chaotic, compositions of the backs of early cross-slabs such as Meigle no 1 (illus 5.47) and Eassie (Angus).⁹⁹ As we have seen, the sculptor of what is regarded as Hilton's closest analogy, the back of the Aberlemno Roadside cross-slab (no 3), was defeated in his attempt to achieve a similar control over his subject-matter. He found that he had to be content with a partial panel division, separating the right-hand side of the

double disc from the trumpeters, but letting the Z-rod stray into the hunting scene. The Shandwick sculptor, possibly emulating the Hilton sculptor, panelled all his subject-matter on the reverse. His double-disc has no straggling Z-rod appendages and is kept separate from the numinous, albeit key-patterned, Pictish beast with its unique hint of contextual relevance concerning the protection of the flock from the lion. The largest panel on Shandwick is given to a circular burst of spiral pattern consisting of fifty-two triple spirals of varying sizes arranged in three concentric circles (illus 5.22). The upper four panels on the back of Shandwick run from edge to edge of the slab. The Hilton sculptor opted for a frame to contain his panels. This was almost inevitable, given the breadth of his slab, but, unlike the Nigg sculptor who had surrounded his imagery on the reverse with an arched frame, he planned, in addition, for internal division into three panels. The three internal panels taper to accommodate the slight taper of the slab. The lowest panel when complete may have been fractionally larger, a touch of classical proportion which is presumably accidental but nonetheless steadies the column of panels. However, it should be emphasised that the lower part of the spiral panel falls into the fragmented mid-portion, and further work on the reconstruction might modify this description. Although the spiral panel had to be planned to fit exactly between the inner margins of the frame, some flexibility, often imperceptible, had to be exercised in the execution of even ostensibly geometric gridded patterns.

5.4.1 The spiral panel

The Hilton spiral panel is more confined than the spiral panel on the Shandwick slab. According to Allen, when complete, the Hilton design would have contained 32 triple spirals and eight smaller double spirals arranged round 'a central boss'. There is no evidence for a raised boss, although the presence of a circular element at this central point has long been recognised. We now know that embedded in the spiral pattern at its centre point was a ringed equal-armed cross with double squares in the arm-pits creating a square at the crossing of the arms (illus 5.38). The cross is imposed on the ring which passes under the arms. The design, apart from its enclosing moulding, is a miniature version of Meigle no 2. This eye-catching feature adds to the array of balanced circular fields on the reverse of the slab, relates to the upward thrust of the central growing-point of the vine-scroll in the lower border of the frame, and

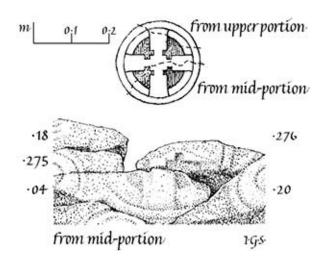


Illustration 5.38

Hilton of Cadboll: the reverse of the upper portion and lower portion of the cross-slab, with the cross at the centre of the spiral panel reconstructed from fragments belonging to the mid-portion (Crown copyright RCAHMS; drawn by Ian G Scott)

is surrounded by a glory of spirals. The cross provides an incontrovertible link between the back of the slab and the Christian message of the front. The recovery of this cross alone creates a shift in perception of the design of the back of the slab. The impulse to display a cross on both sides of the monument, so evident in the case of the symbol-bearing slabs at Rosemarkie and Edderton, was also felt in monuments to the north at Skinnet and Thurso in Caithness and in the south on the iconographically rich monuments in Perthshire at Gask and Rossie Priory. But the appearance on the Hilton slab of a second cross on the reverse, of a distinctive design, is new for the tall cross-slabs of the Tarbat peninsula.

The organisation of the spiral pattern at Hilton so as to create a central field compares well with the arrangement of spirals on the little-studied cross-slab at Glenferness (Nairn) on the opposite shore of the Moray Firth (illus 5.39). Although, as Allen noted, the spiral-work on the cross face fills an H-shaped field, it centres on a rectangular space with concave sides. In his description Allen noted the similarity of this spiral-work to that in the Book of Durrow and other 'Irish' manuscripts, and conjectured that the rectangular space on the slab might have contained ornament now defaced. ¹⁰⁰ Similar spaces are created in panels of spiral ornament in the Book of Kells. In reproduction, some appear to be blank, but, for example, in the portrait of Christ on folio 32v, which is naturally replete with



Illustration 5.39
Glenferness, by Nairn: the front of the cross-slab (Stuart 1856, pl XXIIII, 6; photographed by RCAHMS)

Christological symbolism, the shapes with concave sides within the square fields supporting the arch within which Christ stands can be seen to be divided by two diagonals with a cross-shape created at their crossing point.¹⁰¹ Conservation of the Glenferness slab may yet reveal such a cruciform shape in this prominent position immediately above the framed Old Testament image of an appearance of God on earth in the form

of the 'angel of the Lord', with whom Jacob wrestled successfully. The cruciform shape at the centre of the spiral panel on the Hilton slab can be regarded as a ringed cross carrying the full weight of the triumphant Christian symbol. Within the composition of the back of the slab as a whole, the cross and its halo of spirals provides a focus for the Eucharistic symbolism of the encompassing frame decorated with inhabited vine-scroll.

A similarly encircled straight-armed Greek cross is set between the first set of lateral scrolls within an inhabited tree-scroll on a gilded bronze plaque from Cumbria dated to the late eighth century (illus 5.40). The cross itself and its context have also been linked to the portrait of Christ in the Book of Kells and its specifically Eucharistic symbolism. The Hilton cross within a spiral panel framed in vine-scroll is not the looked for 'precise parallel' for this unique cross set within the vine itself on the Cumbrian plaque, but the symbolism, including the relationship to the point of growth of the vine, is clearly of the same order.

5.4.2 The symbols panel

Spiral pattern appears again in the decoration of two of the five symbols carved on the back of the cross-slab. The uppermost panel contains a crescent symbol with a V-shaped rod that stretches out to fit neatly into the upper corners of the panel. The horns of the crescent and the point of the V-shape are decorated with spiral pattern as are the two discs of the double-disc symbol and Z-shaped rod located outside the panel within the upper edge of the frame. The complex constructions of both symbols are described in detail in the catalogue description for the upper portion of face C (Chapter 4.5.3). The role of curvilinear ornament in the decoration of the crescent symbol on both incised and relief monuments was fully analysed by Robert Stevenson. He established the nature of the pelta patterns used in incision on the symbol stones, and pointed to the analogous curvilinear decoration of letters in the Irish Psalter known as the Cathach, Royal Irish Academy s.n., which dates to the early seventh century. 103 On the symbol stones curvilinear ornament, such as S-shaped scrolls, were also used in addition to simpler circular devices for the decoration of the double-disc symbol. In relief sculpture, arrangements of spirals, often raised into bosses, were used widely, to great effect, to decorate the doubledisc symbol: notable examples are at Shandwick,



Asby Winderwath Common, Cumbria: bronze plaque showing an encircled equal-armed cross supported by the growing point of an inhabited vine-scroll (© Trustees of the British Museum. Shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence.)

Rosemarkie and St Vigeans no 6. It may well be that the deep-rooted convention of using curvilinear ornament on two of the commonest symbols accounts, at least in part, for the Picts enduring interest in spiralwork which resulted in such *tours de force* as the spiral panels at Shandwick and Hilton, the deeply cut spirals characteristic of sculpture at Portmahomack, and the unsurpassed virtuosity of the spiral designs on the front of the Nigg cross-slab.

For the decoration of suitably shaped symbols in relief Pictish sculptors used the full range of the decorative repertoire of Insular art with great ingenuity. On Hilton, for example, an underlying interest in wreath-like structures has been noted above and in the catalogue description. To decorate the two examples on Hilton of the rare single disc symbol with interlace was clearly an aesthetic choice, for more spiral-work would have been a mistake, but the interlace design is not a unit of the usual circular knotwork, but formed of two dense concentric circles centred on a stud.

From the point of view of display, the clarity of the basic shapes of the abstract symbols was important for they functioned as information on public monuments. The line, balance, and overall design of the individual symbol shapes are important manifestations of distinctively Pictish art.104 The shapes of the Hilton symbols show how the sculptor could give his double-disc proportions and decoration that could blend with his vine-scroll patterns. The roundness of the crescent outline and the overarching effect created by the volutes on its horns connects it to the circular shapes below. The floriations of the rods are treated as tendrils, which in their turn connect to the vine-scroll. It is subtle interplay of this sort which justifies the description of the reverse as in its own right 'a genuine work of art'.

The volutes on the horns of the Hilton crescent also appear on the crescent and V-rod carved on the right-hand narrow edge of the lower portion of a fragment of a slab from Portmahomack. They are omitted by Allen in his drawing but are recorded by Ian G Scott (illus 5.41). This is the slab with the section of framed vine-scroll so similar to the Hilton vine-scroll. Such volutes are found only on the crescents of these two Easter Ross-slabs. The floriation of the surviving left

end of the V-rod and the Z-rod of the serpent symbol at Portmahomack also resembles the treatment of the rod ends at Hilton. The suite of symbols on the Portmahomack fragment are interesting in that the tuning fork, one of the less common symbols, predominates north of the Grampians, with two examples at nearby Dunrobin and Kintradwell. This

distribution matches the northern distribution of the rare single disc symbol, one of which comes from the farm of Ardjachie by Tain, Ross-shire. That these two slabs, related in their use of the inhabited vine-scroll, should both display rare symbols of regional significance is a salutary reminder that the symbolism even on sophisticated monuments of this date, the second half of the eighth century, still had specific messages to convey.

The fifth symbol is the symbol pair made up of a mirror and comb. As is usual, it is placed lowest in the tier of symbols, within the top left corner of the hunting scene. It is just possible that the pair has been displaced from the main panel of symbols in the manner of the doubledisc and Z-rod. Its miniature scale is paralleled on the Rosemarkie symbolbearing slab where the comb is set within the double-disc symbol design, and two mirrors on either side of the point of the V-rod of the lowest crescent symbol. The alternative, generally favoured, is that the Hilton symbol is being used attributively and refers to the adjacent female rider. Some writers believe that all mirror and comb symbols are attributive in some way to the female sex. Others see such an interpretation as inappropriately stereotypical. 105 The small scale of the Hilton mirror and comb has to be taken into account. On the Rosemarkie slab, where there is no figurative sculpture, the symbol pair plus an additional mirror-like object are like Hilton markedly smaller than the other symbols. Whether this change of scale reflects something about their

meaning will be discussed below. Certainly the mirror symbol became less important on the relief slabs and to this extent the small versions on Rosemarkie and Hilton may be a localised response carrying its own meaning.¹⁰⁶

5.4.3 The hunting scene (Chapter 4.5.3)

The unique characteristic of the hunting scene on the reverse of the Hilton of Cadboll cross-slab is that it

is presented in a four-sided panel. Unlike the many other hunting scenes on Pictish monuments, it is, as it were, a framed picture, such as would be appropriate for a panel in an ivory casket or a miniature in a manuscript. It has therefore a sobriety, to the point of sedateness, very different, for example, from the wandering, undisciplined hunting scene on Meigle no 1, and from the compositional ambiguities of the hunt on the reverse of the Nigg slab (illus 5.47 & 5.2). In its controlled lay-out it ranks with the set piece of the battlescene on Aberlemno no 2 and the heavily symbolic side panel of the St Andrews Sarcophagus.

By the time of the carving of Hilton of Cadboll the hunting-scene composition was well established, designed around the basic unit of the deer being brought down by the hounds. Usually there are two hounds, one latching on to the animal's forequarters and the other grabbing at its hindquarters or leaping on to its back. This arrangement for the depiction of hounds bringing down a deer is a standard one in late classical art. The Picts must have had a model for it which included the turning of the neck of the front hound into space in order to bite at the throat of the deer. Although the depictions of profile incised animals on symbol stones are brilliantly expressive of the essential stance of a variety of animals, such turning into space is not an aspect of that art and it is most unlikely to have been drawn from the life. In a more assimilated version of the hounds bringing down the deer, such as is seen on the fragment of a shrine panel at Burghead (Moray), the front hound is transformed into a profile, backwards looking beast

with its necked locked between the forelegs of the deer in the standard decorative convention of the offside leg of the deer being brought forward. The hound's

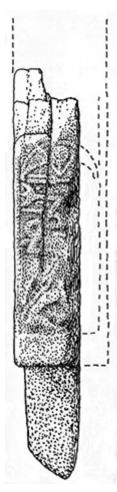


Illustration 5.41
Portmahomack, Tarbat
no 1: the Pictish symbols
on the narrow edge of
the slab fragment which
has part of an inhabited
vine-scroll border on
its surviving broad
face (© Trustees of the
National Museums of
Scotland)

ART-HISTORICAL CONTEXT



Illustration 5.42

Burghead, Moray: fragment of a shrine panel showing a stag being brought down by hounds (Crown copyright RCAHMS)

generously tufted tail is similarly decoratively locked in its own hindlegs (illus 5.42). For all its linear power of expression the Burghead version of the motif has opted for the decorative. 107 In contrast, the Hilton version is true to its naturalistic origins. Both hounds are in full cry, and like the deer, at full stretch. The front hound turns into the deer's flanks and the hound on the haunch is taut with effort. The deer has its mouth open with its tongue hanging out. The spear in its back has done its work. Such an explicit depiction of the death of the deer is rare. The prostrate stag on the front of the small but sophisticated slab, Kirriemuir no 2, has a similarly lolling tongue and a bird of prey at its neck reinforces the fact of the kill (illus 5.4). 108

The ultimate origin of the motif of the rider, the man on horseback, also lies in Roman art and we must suppose that the mass-produced image of the Roman cavalryman running down a barbarian played its part in helping the Pictish sculptor to achieve this difficult image. For the Picts there was no difficulty with the horse, but getting a man into the saddle will have needed a model. It is instructive to compare the abbreviated hunting scene on the back of Kirriemuir no 2, to a similar scene on a sarcophagus at Arles, which will have drawn on similar Roman sources. On Kirriemuir no 2, the hunter is running down the deer with his horse and has his arm raised to fling his spear (illus 5.43). The Angus sculptor could himself

have created a depiction of the action, but it is probable that he has, uniquely, preserved evidence that the Picts were indeed aware of the image of the cavalryman, as exemplified on the commemorative slab at Bridgeness at the eastern end of the Antonine Wall, where a rider is shown at the moment of flinging a spear at a barbarian that he is running down. He might also have been aware of the Roman iconography where the leader of the hunt raises his right arm at the moment of the kill in conscious imitation of the victorious emperor. The Kirriemuir abbreviated hunting scene,



Illustration 5.43
Kirriemuir no 2, Angus: the reverse of the cross-slab
(© Tom and Sybil Gray Collection, RCAHMS)



Illustration 5.44
Meigle no 2, Perthshire: the reverse of the cross-slab
(Crown copyright RCAHMS)

like its Gallo-Roman analogue, moves to the right, but the majority of the more developed Pictish hunting scenes, such as on the Hilton slab, move to the left, with the riders set diagonally, and the deer and hounds motif neatly tucked under the leading horseman. This compact design admirably suited the Hilton sculptor's square format. The diagonal arrangement of the riders achieves a sense of progression and this may have been a Pictish innovation. As at Hilton, there is usually a degree of hierarchy in scale among the hunters, with an emphasis on the uppermost rider. The reverse of the cross-slab, Meigle no 4, provides, a good example of how marked this differentiation could be.¹¹²

At Hilton, the representation of a female rider at the top tier of the composition goes beyond these conventions. The rider is seated frontally on her mount, which is larger in scale than those of the horsemen lower down. She has a companion riding abreast whose horse is indicated largely by doubling the contours of her mount. Only the nearside hindlegs of the horses are drawn with any degree of independence. The depiction of three riders abreast in this manner is seen on the cavalcade accompanying a single horseman at the top of Meigle no 2 (illus 5.44) and more ambitiously, on the side of the heavily decorated recumbent Meigle no 26.113 It is also used on the very worn tall slab at Fowlis Wester. This method of conveying riders in depth again ultimately comes from a model, in this case most probably a coin, commemorative medal or perhaps a cameo.

At Meigle, the riders are all seen in profile and there is no difficulty in using the convention of outlining to convey the heads of the riders. At Hilton the frontal figure in the foreground created a problem for which it seems there was no model at hand. The solution found, generally described by modern writers as 'awkward' or as suggestive of an 'afterthought', in fact is quite ingenious. A recessed space is cut into the surface of the slab to contain both the frontal and profile face. Only the male profile face needed this special treatment but the recession continues to the right of the head of the female rider. The device serves to unite the two figures in a recessed panel and gives added prominence to the frontal head. Attention is drawn to the recessed space by a hound leaping towards it, and by the trumpets being blown by a pair of figures at the top right corner of the frame. This technique for depicting space is well paralleled on the reverse of the Nigg cross-slab where the sculptor cut into the surface in order to achieve the rare viewpoint of the offside left arm of a shield-bearer, seen within the shield grip as he moves to the right. Pictish sculptors in relief regularly utilised incision and different levels of relief to convey spatial effects. For example, the flutter of drapery at the left elbow of the hunter on foot on the side panel of the St Andrews Sarcophagus is carved in relief just raised above the dressed surface, whereas the rest of the figure and his drapery are in rounded relief.¹¹⁴

The depiction of frontal figures is unusual on the tall cross-slabs. The frontal depictions of Daniel and, on a miniature scale, of David on Meigle no 2 belong to models of abbreviated motifs of Daniel in the Lions' Den and David breaking the jaws of the lion. Frontality in art usually raises the status of a figure to that of the iconic whereas a profile figure belongs to the depiction of narrative action. The corpus of frontal sacred figures has been notably added to by the recovery at Portmahomack of a substantial fragment of a slab showing a range of Apostles, very probably part of the slab which included the inscribed fragment. The presence of a woman shown frontally on the Hilton slab (she is not sitting side-saddle as is often said) raises the much discussed matter of whether the concept of portraiture, something between iconic and narrative art, existed at this period. Also debated is whether the acknowledged secular nature of much Pictish figurative art represents contemporary indigenous social life and artefacts, or is based on models used either as practical aids to draughtsmanship, or as a means of finding imagery to convey ideas outwith contemporary day to day experience.

To try to answer these questions, or at least to consider the options available, it is necessary to look briefly at the logic of Pictish representations of the rider and of the hunt. Why did the Picts carve so many images of riders and hunters on horseback? The simplest reason must be that the Picts, like many other societies, saw in hunting the essence of social cohesion, a powerful metaphor for authority and leadership outwith the battle-field.¹¹⁵ Where the Picts are distinctive is the extent to which they regarded hunting scenes as suitable for display on Christian cross-slabs. In appreciating the social metaphor of the hunt they were no different from anybody else in western Europe, but depicting it so regularly in a Christian context is less usual.

We must, however, dismiss the view of one modern writer, who, writing from the standpoint of a later period, regarded Pictish hunting scenes as 'uninhibitedly representational' of an indigenous sport, carrying none of the symbolic overtones of stag-hunts on Early Christian monuments. 116 Given the evident awareness of Early Christian imagery in



Edderton, Ross and Cromarty: the reverse of the cross-slab (© Ian Fisher)

Pictish sculpture this is an unjustifiable assumption. Joseph Anderson, rightly, had no difficulty in accepting the chase on Pictish sculpture as a Christian symbol-picture for conversion, which at the same time conveyed information about contemporary aristocratic ideals and contemporary artefacts. This view accords with recent acceptance of the presence of multiple meanings in Insular art generally, and to a degree answers the question of why the hunt appeared so often of Pictish cross-slabs.

The female rider at Hilton has always evoked the response that here was a representation of either the

person commemorated in a memorial monument, or celebrated as a person of local social consequence, perhaps even a bride bringing dynastic advantage. 117 If every slab with riders or hunters on horseback referred to a specific individual, and also every set of symbols, as some would have it, Pictish monumental sculpture would be exceptional to a degree wholly incompatible with its known conformity, in other aspects of its art, with contemporary practice in Europe. The Picts who raised monuments in the seventh and eighth centuries were after all literate, certainly with a degree of literacy that must have extended to expressing their names in letters. To avoid specific identification on a memorial stone might be appropriate to a member of a confined religious order, but a secular leader would have had no such scruples.

Nonetheless, it is hard to dismiss altogether the view that representations of single riders on slabs such as Meigle no 5, and of dominant riders such as the rider shown in high relief on the back of the slab at Edderton, might refer to historical individuals, even although, of course, no question of 'likeness' is involved (illus 5.45). Into a different category of visual meaning might come the undifferentiated huntsmen of Aberlemno no 3, and the strikingly dominant rider accompanied by his hounds and a phalanx of men at the top of the reverse of Meigle no 2. This latter image could certainly be interpreted as a topos for the victorious leader, with the classical Victory at his head reinforcing the symbolism of a monument raised to extol the idea of such leadership, rather than to depict a known historical leader such as the single rider on the Dupplin Cross who is identified by an inscription.¹¹⁸ Similarly, the dominant hunter with his hawks and his retinue on the Elgin slab could serve as a topos for the hunt as symbolic of authority.¹¹⁹ That there is a possible relationship between the meaning of the symbols and the depiction of hunting scenes on Christian monuments symbolic both of authority and responsibility has been argued recently elsewhere. 120

It is time to reassess the comparison between the version of the hunt on Hilton of Cadboll and that on Aberlemno no 3 (illus 5.46). How similar are they in fact? Aberlemno shares two of Hilton's five symbols and their decoration, if not identical (there is nothing like the complexity of the Hilton crescent and V-rod at Aberlemno), is similar. The same, however, could be said of the decoration of these same symbols on the Rosemarkie cross-slab. There can be no question, as has been suggested, that the two disc symbols at Hilton are a misunderstood version of the double-disc

at Aberlemno.¹²¹ After all, Hilton has a perfectly good design for the double-disc and Z-rod within the top border of the vine-scroll frame. There are no single discs or the mirror and comb symbol pair at Aberlemno.



Illustration 5.46
Aberlemno no 3, Angus: the reverse of the cross-slab
(Crown copyright RCAHMS)

Both scenes utilise the convention of the diagonal lay out of the hunters. There is no foot-hunter carrying a rectangular shield at Hilton. The hunt at Aberlemno is a much larger affair for three deer are being pursued: one is beset by hounds in much the same way as is the single Hilton deer; another image varies the pose of the surviving hound at the rear; the third is a different image of a deer with its head still up but its legs bent underneath its body. This latter pose is used for distressed animals on a number of Pictish monuments, and possibly, as at Hilton, a kill is indicated.

The only really close similarities between Hilton and Aberlemno no 3 are the trumpeters, in both monuments located at the top right of the composition, and the stray small animal leaping up at the female rider at Hilton, which is placed between two horses at the centre of the hunt at Aberlemno. It has been suggested that this stray animal is a small lion. 122 The recent photography of the Edinburgh slab for the Hilton project shows that it is a fierce animal with a curly pelt, a tufted end to a 'heraldic' tail, and possibly a fanged jaw. If this small animal is indeed a lion, then it could be an extract from the same Psalter model that provided the trumpeters on Hilton and Aberlemno no 3, and the image of David rending the lion's jaws on Aberlemno no 3. The alternative view is that the Picts did not need to borrow models for leaping profile hounds. The hound could be of the mastiff type represented on the fragment of the shrine at Burghead. 123

The trumpeters motif has long been associated with the iconography of David and his musicians on folio 30v in the Canterbury Psalter, British Library Cotton Vespasian A. 1.124 Certainly the Picts had access to a source of David iconography and there are stylistic similarities to support a connection with this manuscript. On the matter of priority there have been differing views, but all would agree that the Hilton sculptor shows a capacity to express the motif of the trumpeters more skilfully for he places them one beyond the other with their feet on different ground lines whereas the Aberlemno trumpeters stand one in front of the other on the same ground line. If, as has been argued, the Hilton sculptor was such a skilful refashioner that he could improve on the simpler spatial arrangement he found in his model, then it seems surprising that he could not achieve a more satisfactory spatial representation of the riders abreast.

Of course both sculptors may have been constrained by the amount of space available to them. The Hilton sculptor wanted to save space within the confines of his

panel, while the Aberlemno sculptor may have wanted to extend the hunt imagery by placing the trumpeters side by side, reducing the element of a relationship in depth to the overlapping of the rear trumpet. Like all the riders on these slabs, the Hilton trumpeters wear a semblance of classical dress with tunics with pleated skirts worn under a cloak-like upper garment. At Aberlemno the trumpeters appear to have straight tunics, like the soldiers in the Aberlemno no 2 battle scene, and over-garments like shirts with inverted V-shaped slits at the side. Did the Aberlemno sculptor modify his model in order that there was a clear social distinction in dress between them and the hunters who wore classical dress, or did the Hilton sculptor himself upgrade their style of dress, as well as the depiction of their stance, rather than simply copy the grand style of dress present in the model? The latter seems more probable. On balance the view that the Hilton sculptor stands closer to the model, which of course was not necessarily the Vespasian Psalter itself, must prevail. But where does the argument for the use of a Psalter model leave the view that the Picts may not have needed a model at all for their trumpeters? Certainly if the evidence of Aberlemno no 3 was all that had survived a case could be made for a native representation of a native ceremonial custom of a fanfare either accompanying, or taking part, in a hunt. But if, as seems more probable, there was a model, and the prevalence of David iconography in Pictish sculpture strongly supports this view, then the motif of the trumpeters at Hilton indicates, as one would expect, that the framed hunting scene incorporates imagery additional to the fully assimilated version of the hunting scene.

The frontal female rider at Hilton, although not taking part in the hunt certainly comes into the category of the dominant rider in the context of a hunting scene. Is she then presented as a symbol of female authority or more mundanely, as a 'portrait' of a local aristocratic woman? There is no doubt that the image of a woman sitting frontally on horseback is a potent one. The question is whether this was a norm for Pictish female riders in certain social contexts, or that a rare exotic pose was being exploited at Hilton for the purpose of heightening the image. Sitting frontally, in contrast to sitting side saddle, would not be suitable for taking part in a hunt and it could be argued that this fact is a sufficient reason for the failure of women to be included more frequently, even as followers of the hunt, in Pictish hunting scenes. There is, however, one instructive exception. On the reverse of Meigle

1 under an array of symbols including a large-scale salmon, serpent and Z-rod, and mirror and comb, are five riders, two in miniature, set on a steep diagonal line (illus 5.47). One, leading the second register, has been identified as a female rider sitting frontally. 125 The figure is very worn but the there seems little doubt that a robed female figure is sitting frontally on her mount. In contrast to the Hilton female rider she appears to have an elaborate hairstyle, or to be wearing a crown-like head-dress. The only indication of the chase is the hound that leaps up at her shoulder paralleling exactly the relationship of the stray leaping animal to the female rider at Hilton, and to one of the riders at Aberlemno. In the case of Aberlemno no 3 the hound could be regarded as a space-filler, but its presence alongside the frontal female rider at Meigle and Hilton cannot be a coincidence. Somewhere there was a model for a frontal female rider accompanied by a hound. It should also be noted that in front of the female rider on Meigle no 1 is a winged figure, based on an image of an eastern god, 126 of the classical personification of Victory, which, as we have seen, is used attributively for the dominant rider walking his hounds on Meigle no 2, accompanied by riders shown abreast. Clearly the female rider on Meigle no 1 for all her miniature scale has the same dominant status. The layout of the reverse of Meigle no 1 is extraordinary, for its changes of scale and accumulation of seemingly heterogeneous imagery, some of it of the most exotic kind, make it the antithesis of the panelled discipline of the Hilton reverse. However, in its gathering in of disparate motifs it included this frontal female rider with a hound, demonstrating a connection between sculpture at Meigle and Hilton which to some degree supports the case for the non-specific nature of the Hilton female rider.

The insignia of female authority is not so distinctive as that available, largely from classical sources, for her male equivalent. One might expect a general sumptuousness of dress and personal adornment, a diadem or a specific hairstyle. The Hilton female rider has pleated garments, a heavy shoulder-length hairstyle and may be wearing a brooch. The basic insignia are therefore present, and, if the brooch is indeed a penannular one, the image has an element taken from indigenous material culture.

But if there was a model, as the image on Meigle no 1 suggests, what was its nature? If images of Roman cavalrymen were an aid to formulating the Pictish man on horseback then it is perhaps justifiable to re-visit the visual similarity between the Hilton figure and



Illustration 5.47
Meigle no 1 Perthshire: the reverse of the cross-slab
(Crown copyright RCAHMS)

portrayals in a variety of portable media, as well as in stone sculpture, of the Gallic horse-goddess Epona.¹²⁷ The many representations of the goddess have been fully studied, and the widespread nature of her cult fostered by her importance for the mobile mounted infantry of the Empire is fully attested.¹²⁸ The depictions show varying degrees of Romanisation. One from Agassac, Haute Garonne, is uncannily like the reverse of Meigle no 1, where the doll-like goddess is perched frontally on her galloping mount between groupings of geometrical symbols and a range of fantastic animals which include a large fish and a sea-cow. Other images show the goddess elegantly clad in Roman dress, and with a Roman hairstyle, seated on a heavy mare designed along the lines of a Roman war-horse, its off-

side foreleg raised in the typically Pictish manner used for the horses of the female rider and her companion at Hilton. 129 Flanking foals were a usual attribute for Epona, appropriate for her role as goddess of the stables, and she is also portrayed with a dog. 130 The hounds, which are adjacent to the frontal female riders at both Hilton and Meigle, and not associated with the action of the hunt, could therefore belong to an image of Epona. Epona was invoked on the Antonine Wall and there is no great difficulty in supposing that images of her were available in the north over a long period. Françoise Henry was prepared, even if perhaps wrongly, to interpret a very worn figure seated between horses on the eighth- or ninth-century cross at Kilree (Co Kilkenny) as Epona, another way in which the goddess is represented.¹³¹ The hypothetical model which lies behind the female rider sitting frontally accompanied by a dog could then relate to knowledge of the iconography of Epona acquired from the 'dead' but influential art of the Romans in north Britain.

There is, of course, another figure of devotion who rides frontally. The Virgin Mary is depicted on the Ruthwell Cross sitting frontally travelling on a donkey into, or returning from, Egypt (illus 5.48). The Christ child is on her lap. 132 There is only one certain representation of the Flight into Egypt on Irish sculpture, that on the cross at Moone (Co Kildare). The Moone Cross shares subject-matter with Pictish sculpture, but the style is very different from the figurative art of Hilton, and the sculptor at Moone is content to represent the frontality of the rider schematically.¹³³ It is disconcerting that Epona may also have been shown holding a baby, a rarity explained with reference to her connection with fertility and her pervasively maternal nature.¹³⁴ The Ruthwell image is interesting because of its depiction of the back hemline of a saddle- or back-cloth. The Virgin sits comfortably between two well-rounded features which could be the edges of the cloth, or some kind of structure related to a foot-rest. The Hilton mount has a backcloth and, possibly, a crupper, but there appears to be no indication on the Hilton image of any aspect of the horse-gear required for sitting frontally. This is surprising given the Pictish attention to detail in these matters. If sitting frontally was a contemporary mode of riding then one would have expected the addition of at least a footrest, in addition to the cloth, to be included in the image. The feet of the female rider at Hilton are unsupported, hanging to one side in a more graceful position than the feet outwards pose of the Agassac Epona. It seems more probable that Pictish



Illustration 5.48
The Ruthwell Cross, Dumfries: the north side showing the Flight into or out of Egypt

women normally rode astride, and indeed both Epona and the Virgin are sometimes depicted riding in this way. It is of interest that the female rider on Meigle no 1 appears to have an elaborate hairstyle reminiscent of that of the Mother goddesses of classical art, but also present in female Pictish representations of the Virgin, ¹³⁵ and that it is possible, though not at all certain, that her mount has a broader cloth perhaps of a sort more functional for the frontal pose. The shoulder-length hairstyle of the Hilton female rider is closely paralled on representations of Epona. ¹³⁶

In recent literature the figure at Hilton has been interpreted as an image of the Virgin Mary in the Flight into Egypt. This attractive view of a slab located in a locality of later devotion to the Virgin merits consideration. That the identification was made locally during the later life of the slab seems inevitable. One proponent of the interpretation has seen in the worn carving at the centre of the figure the head of a child cradled in her hands. ¹³⁷ Allen thought that the figure was 'holding something in her hands'. Stevenson, with no mention of hands, tentatively suggested that she was wearing a penannular brooch. Others have claimed that she is wearing a torc or holding a hawk on

a supporting perch.¹³⁸ It has to be said that in different lights and in different photographic reproductions all these interpretations are defensible. Clearly, to decide whether we are dealing with the Virgin or a secular powerful woman, whether historical or conceptual, is important. It seems unsatisfactory to look to multivalency, the bearing of multiple meanings, to accommodate both a Holy and a secular figure, particularly if the figure is regarded as showing a historical secular individual.¹³⁹ Certainly the sources for the visual imagery of the female rider and her context appear to be composite. The sculptor had on hand the conventional imagery of the hunt to which he added a rarely used but recognisably potent image

of the frontal rider (one associated with the Celtic goddess Epona and the Virgin), accompanied by a dog (present in the iconography of Epona), and a trumpeter motif with origins in Psalter iconography. The form of the brooch, if the figure is indeed wearing a brooch, belongs to contemporary native dress but its prominent display could equally owe something to knowledge of artistic and literary conventions, as well as to contemporary social high-status conventions. Literary influences could account for a figure being shown wearing a brooch. For example, if the sculptor's aim was to depict a powerful woman then a classical allusion to the wearing of a rich jewel by Dido while taking part in a fateful hunt that had consequences for

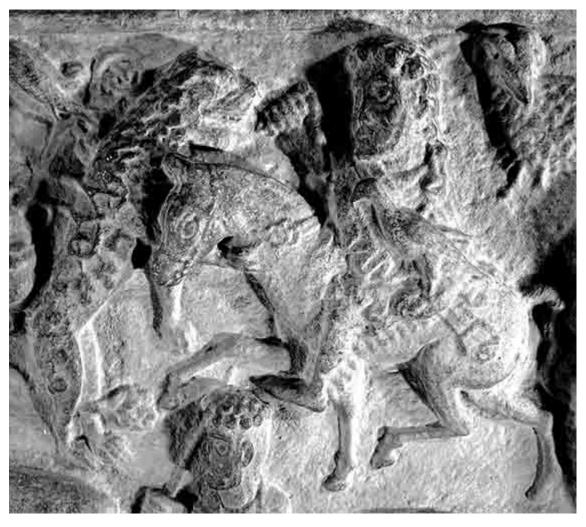


Illustration 5.49
St Andrews Sarcophagus, Fife: the surviving long side panel, stone 1, detail showing the lion hunt

the destiny of Rome would serve his purpose. 140 The unusual emphasis on the death of the prev described above might suggest that the powerful woman was a specific deceased person. If we discount such a human extension of the significance of the distressed deer then the possibility remains that the female rider is nonspecific, that is, not a representation of a contemporary woman. Certainly her presentation on the slab could be non-specific in the way that the motif of the lionkiller on horseback on the St Andrews Sarcophagus is a symbol of kingship in itself, which could have been intended to be read with or without reference to an individual king. It would be wrong to think that that image on the Sarcophagus is known, as a fact, to refer even indirectly to a specific eighthcentury Pictish king (illus 5.49). It might do so, but the interpretation remains a hypothesis. The same is true of the identification of the rider figure on a fragment from Repton (Derbyshire). The Repton rider is without question a symbol of authority posed and accoutered at the top of a cross-shaft in terms which amount to a transferable Imperial metaphor. However, that the figure is a portrait of Aethelbald of Mercia remains only a strongly argued speculation and the possibility that a 'soldier for Christ', specific or generalised, is portrayed, is allowed, if only to be set aside, in the discussion.¹⁴¹ Unfortunately there is little scope for speculative specific attribution of the representation of the Hilton female rider to a historical powerful woman, but the image as such can be lifted out of the genre of the depiction of a contemporary individual, alive or dead, into the company of grander composite images of status such as are represented at Repton and St Andrews. Such female symbolism could then more appropriately conflate with the Virgin Mary, as the unique iconography of the 'Virgo Militans' on a Carolingian ivory shows. The ivory is a striking example of multiple resonances, where the Virgin, without the Child, sits on an Imperial throne, with her spindles, but wearing identifiable traces of the dress of a Roman general, a protectress as well as the Mother of God, in terms ultimately relatable to the pagan war-goddess, Athena.142

Specific powerful women were rarely 'portrayed' in this period. The coinage with portraits of Cynethryth, wife of Offa of Mercia, issued in the last decade of the eighth century, is a well-known exception (illus 5.50). Although the classical bust dictates the profile image of Cynethryth, her flowing locks, depicted on one of two issues, has an echo at Hilton. In reviewing the evidence for continental equivalents for the St

Andrews Sarcophagus, Edward James was able to point to a unique example from the eighth century of a sarcophagus where the lid bears a representation of the deceased accompanied by an identifying inscription. It memorialises Chrodoara (Oda) the founder of the nunnery at Amay, on the Meuse near Liège, who lived in the early seventh century. The inscription as translated by James reads '+Saint Chrodoara, an illustrious and noble woman, has endowed numerous sanctuaries'. The female rider at Hilton, even if a depiction of a specific individual, need not have been of an individual contemporary with the carving of



Illustration 5.50
Penny of Cynethryth, wife of Offa of Mercia (757–96)
(© Trustees of the British Museum. Shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence.)

the cross-slab. In fact it is highly improbable on a monument of the pretensions of the Hilton cross-slab that she is simply 'a Pictish aristocratic lady', honoured in her lifetime or later memorialised. Rather she personifies an ideal of female nobility and power in timeless terms conveyed by a careful choice and combination of imagery. We should be able to accept that female virtue, wisdom and perspicacity, could be visually idealised as a symbol of authority, just as male virtue, which contributed to social order and cohesion,

was represented in the majority of the hunting scenes. The Hilton female rider may have been inspired by a historically effective figure, but she has become a personification of the virtuous female.

Returning to the important matter of the brooch worn by the rider. As part of the Hilton project the reverse of the upper portion of the slab was re-examined for photography, measurement, inspection of the upper edge, and close scrutiny of the female rider, particularly of those forms interpreted by Stevenson, as a penannular brooch. The surfaces in the 'brooch' area are worn and full consideration was given to other interpretations but the conclusion was that a large-scale brooch is indeed represented. The description of the brooch can never be definitive because of the worn nature of the carving and the problem, even close at hand, that lighting can create different forms which are suggestive of different interpretations.

The description that follows is the current view of Ian G Scott. While he regards further modification of the description to be probable, the basic identification as a penannular brooch can stand. Except where indicated, 'left' and 'right' refer to the viewpoint when facing the slab, not to the anatomical left and right sides of the female rider. The hoop of the penannular brooch ends in rounded terminals. The pin is positioned on the brooch horizontally with perhaps a slight rise to the left. A slight expansion suggests that the loop of the pin is on the right side of the hoop. There is no surviving trace of the point of the pin. It may be that the brooch is being worn with the point inserted in the cloth. Between the pin and the upper arc of the hoop are two bands of drapery, which expand to three bands between the terminals. At this point, the rider's left hand, with four fingers, clearly shown in a photograph taken by Scott, lies in front of the gatherings of drapery. Below the hand the drapery opens to reveal the draped skirt of a robe worn under the mantle. The mantle is draped over the shoulders. Drapery from the left shoulder sweeps over the left forearm and wrist of the hand to drape over the back-cloth, an arrangement which recalls the classical flutter of drapery over the left forearm of David on both the St Andrews Sarcophagus and on the fragment from Kinneddar, now in Elgin Museum. Three bead-like forms lie in a row along the left edge of the hoop, recalling the two baubles on the knotted drawstring at the neck of David's garment, depicted at St Andrews, and partially at Kinneddar. 145 The three baubles also recall the three tassels of the Imperial brooch. However, what this arc of bead-like forms depicts is not certain. This description of the

area of carving round the brooch shows that the dress of the frontal figure at Hilton stands quite close to the model for David that lies behind the representations on the Sarcophagus and the Kinneddar fragment, something not appreciated until the recent inspection. No explanation can be offered for a further rounded form located on, or adjacent to, the top of the hoop of the brooch.

This identification of a contemporary type of brooch does not mean that the identification of the rider as a portrait of a contemporary woman is confirmed. Recent wide-ranging research by Niamh Whitfield makes it clear that the wearing of brooches in Ireland, and as depicted on sculpture, is not a simple matter. She points out that on Irish sculpture penannular brooches are shown being worn by high-ranking ecclesiastic figures, although not contemporary ones. 146 That brooches were valuable assets in social negotiations, including bride-price, among many other social contracts, is evident from the literary sources. But, as is well known, Christ in the Arrest of Christ carved on the Muiredach Cross at Monasterboice (Co Louth) is wearing a penannular, or possibly a pseudo-penannular brooch. A frontally shown St Antony wears such a brooch on a panel of the Market Cross at Kells (Co Meath). Whitfield points to the wearing of a brooch by the Virgin Mary in what may be a representation of the flight of the Holy family into Egypt on the cross at Durrow (Co Offaly). An alternative interpretation for this group is that it represents the story of Hagar, the slave-girl, and her son Ishmael from whom a great nation sprang (Genesis 21, 14). All this is very far away from contemporary laws controlling the use of brooches. Further, it has also been carefully argued by Ross Trench-Jellicoe that there are other representations of Mary wearing a penannular brooch on early medieval sculpture in Scotland. 147

The combination of a figure wearing a prominently depicted brooch adjacent to the symbol pair of a mirror and comb cannot be ignored in trying to interpret the significance of the Hilton rider although for the reasons given above the temptation to see the symbol pair and the brooch as indicative of a contractual rendering of bride-price should be resisted. The powerful nature of the message on the front of the cross must modify perceptions of its reverse. The message on the front of the cross-slab is not appropriate to a monument raised to mark a social contract, however politically important that contract might be. The woman with her brooch, watching a hunt and accompanied by musicians could epitomise the wealth which was the

undoing of the man with the embroidered tunic on the front, but if she does, then her image is positive, one which embodies the opportunities given to the powerful to exercise social virtue. Framed in the Eucharistic vine and captioned by the encircled cross in a blaze of spirals she clearly represents a high order of female virtue.

We can never tell for certain whether an image or even a resonance of the Virgin Mary was intended from the start, or that the later local veneration for Mary extended itself to the image at Hilton. However the fact that the pose may have had its ultimate origin in the imagery of the goddess Epona, which we know, in other contexts transferred itself to Mary, and that Mary can be associated with the wearing of a penannular brooch in Insular sculpture, allows for the recognition of a symbolic relationship between the two women.

The discussion began with the aim of discussing the options available for the interpretation of the female rider. The only unacceptable option, in the present writer's opinion, is that she is simply a portrayal of a specific contemporary Pictish woman enjoying the hunt. On the other hand the image could be that of a venerable woman from the past. The recent suggestion that the whole monument, like others of the period, is concerned with a new politically motivated ideology, where the boundaries between church and state are being redefined by persons of political power, possibly by such patrons as the female rider, has the merit of recognising that the intellectual processes that lie behind the choice of imagery are complex, and that the female rider was party to them.¹⁴⁸ But now that we have access to the message on the front of the slab it has to be recognised that the whole concept behind this exceptionally large monument, was to convey in shape, design and ornamentation, a recognisable visualisation of the Cross of Calvary, symbolic of the fundamental historical event of Christianity. The reverse of the slab is best interpreted as a theological commentary on the consequences of that event, its imagery consciously contained within a framework expressive of man's Salvation in the Eucharist, and including a vision of a glorified cross. The iconographic programme of the Hilton of Cadboll cross-slab is that of a wholly Christian monument, and the context of the unique panel on the reverse, with its central potent image of a women sitting frontally on her mount and wearing a brooch on her breast, overlooking a hunt, justifies its interpretation as an image of the Virgin embedded in a Christian conversion allegory and enhanced by imagery adapted

from a Psalter. For some, the accompanying male rider makes it difficult to accept the image of the female rider as a representation of Mary. In the iconography of the Flight into or out of Egypt Joseph does not ride alongside Mary. He is always shown on foot leading her mount. The male rider has been interpreted either as a surprisingly self-effacing husband or a groom keeping control of the female rider's horse. The presence of the mirror and comb symbol pair has also to be accounted for. It was important to the subjectmatter of the hunting-scene panel. It could have been tucked between the two discs, in the manner of their counterparts on the Rosemarkie symbol-bearing slab. Had they not been in the panel the rider abreast could have been expressed more clearly. The symbol pair was important and could well refer to both riders, rather than exclusively to the female one. However, if the form of the brooch cannot be assumed to indicate that the wearer is a secular Pictish woman, contemporary with the raising of the monument, there is equally no reason to assume that the miniature mirror and comb symbol pair (whether or not gender specific) has a restricted contemporary relevance.

The acceptable alternative to a Christian allegory for the hunting-scene panel is that in the figure of the female rider and her consort, and in the hunt, we have a metaphor for the virtuous life which the Hilton sculptor and his patron recognised as necessarily inclusive of both sexes. His knowledge of models that would allow him to bring the female rider into the foreground resulted in the creation of a unique symbol-picture, albeit based on the traditional hunting scene. Such an interpretation of the hunt, overlooked by the female rider and her consort, would certainly conform to Pictish thought, as expressed in art, which habitually turned to animal metaphor to define the social condition. That the hunting scenes and 'the man/woman on horseback' were metaphors relevant to ethically compatible secular ideologies, as possibly were the Pictish symbols, is one explanation for their prominence on the ambitious, highly finished, Christian monuments of the Picts.

5.4.4 The three-sided frame filled with vine-scroll

(Detailed descriptions of the vine-scroll and its inhabiting creatures are given in Chapter 4.5.3)

The frame which contains the three panels is in fact a conventional four-sided frame with inhabited vinescroll in the lower and lateral borders. The upper border

contains the Pictish symbol known as the double-disc and Z-rod. That particular symbol could have had a significance which made it particularly suited to keep company with the inhabited vine-scroll, perhaps to represent a climax for its growth, itself being treated as, in some sense, an 'inhabitant'. On the other hand, Insular manuscript art of the eighth century is full of three-sided frames. The sculptor had to solve the problem of finishing off the differentiated lateral vinescrolls. His instinctive confidence as a draughtsman took the simple step of using the upper horizontal border of the frame to convey whatever information was implicit in the double-disc symbol while retaining the effectiveness of the framed layout, even though, ornamentally, in a three-sided form. The symbol with its zig-zag rod, leaf-like terminal embellishments, and open work cross-bar is admirably designed to match the zig-zag of the stem in the left border, and the complexities of scroll, tendril and leaf present in the

vine-scroll generally. This remarkable combination of native Pictish symbol and east Mediterranean Eucharistic symbolism is a fine example of syncretism in Insular art.

A more mundane disregard for the conventions of framing occurs on the section of the frame now visible on the recovered lower portion of the slab. Here to the puzzlement of some modern observers the lower horizontal edge of the frame does not have a moulding. Only the recessed background surface defines the edge. In this we can contrast the slab fragment from Portmahomack, Tarbat no 1, now on display in Edinburgh (illus 5.51). Here the lower border of a similar frame has been preserved, in this case enclosing a figurative scene. The outer lateral mouldings of the frame overshoot into the lower border space. The outer horizontal moulding was carved to abut these side mouldings. The cutting back of the slab to create the tenon cut through the



Illustration 5.51
Portmahomack, Tarbat: fragment of a slab with part of an inhabited vine-scroll border (© Ross Trench-Jellicoe)

extended lateral mouldings, but this, of course, need not imply that there had been an aborted decorative panel beneath the frame. The question arises why this procedure was not followed on the reverse of the Hilton slab. The answer may lie in the evidence of the draughting line (a similar line is just discernible on the Portmahomack fragment) which runs from the top of the right-hand projection on the narrow edge face D, moving upwards as it approaches the lefthand projection on face B. The projections were, at the design stage, carefully aligned to achieve the bold geometry of the cross-base on the front of the slab. On face C the lower horizontal border of the vine-scroll frame had to be set straight, and this was a difficulty, for as the draughting line reveals, the projections, from the viewpoint of the reverse, appear out of alignment. The misaligned projections on either side of the lower border would have looked very untidy. No doubt the juxtaposition could have been fudged, but a much safer option was to start the frame further up the slab well clear of the projections. The tidying up of the area of stone left bare beneath the frame may not have been necessary, if in the end, an enclosing margin for the frame was supplied by heaped, supporting earth, or by some stone packing. That the sculptor would be satisfied with such a closure for his frame would be entirely in accord with the lack of a lower moulding on other Pictish sculpture.

The sculptor of the Nigg cross-slab filled the frame on the reverse of his slab with subtly varied panels of abstract ornament. None of it was spiral-work, for curvilinear forms dominated the decoration of the front of the slab. Hilton's frame was designed to enclose, in addition to the figural scene, two panels decorated with abstract ornament in such a way that the choice of foliate ornament for the decoration of the frame was in line with Pictish aesthetic principles of balance and diversity. The prime motivation for the choice of inhabited vine-scroll to fill three sides of the frame was, however, no doubt, to exploit this widely recognised symbol of Christ as a source of sustenance, whose body and blood, present in the Eucharist, led to the Salvation of mankind. This sacrament is more overtly displayed in the explicitly Eucharistic scene on the pediment of the Nigg cross-slab, placed immediately above the cross. The sculpture on the carved narrow face of Nigg is very worn, but the uppermost panel may have been filled with vine-scroll. Knowledge of the symbol of the Eucharistic vine was not limited in Easter Ross to the 'Cadboll school' consisting of Hilton and the Tarbat fragment. There were plenty of other

models for vine-scroll circulating in Pictland. In the immediate vicinity there is a vestige of an inhabited tree-scroll at Kincardine (Sutherland), an uninhabited tree-scroll at Rosemarkie and a variety of scrolls, some of which were inhabited, on the narrow faces of 'Sueno's Stone' across the Moray Firth, at Forres. Whatever the date of the erection of 'Sueno's Stone', its vine-scrolls are likely to have come from existing stocks of models. Its novelties belong to other areas of the monument.

The origins of vine-scroll have been much discussed. The intensive work of those involved in the Corpus of Anglo-Saxon Stone Sculpture, led by Rosemary Cramp, has not disturbed the belief that the ultimate origin of the insular vine-scrolls is East Christian, but of late there has been a recognition that to some extent Rome was an intermediary, not only by providing access to the Byzantine models, but adding some of its own late antique and Early Christian forms. 149 That Northumbrian sculptors played a dominant role in the reception and dispersal of the motif is also agreed. However, it is no longer acceptable to simply assign the label Northumbrian to all examples of the vine-scroll wherever located. Even the vine-scrolls of Northumbria have their own particular character which merit analysis. This is not a case of an exotic import which thereafter fossilises and deteriorates through misunderstandings. As Cramp puts it, 'the fashion for inhabited scrolls could have been differently explored at the same time in various centres and the York school could have been unrelated stylistically, but nevertheless contemporary with the Bernician school of Jarrow'. 150 If the label 'Northumbrian vine-scroll' continues to be applied to the Hilton design then further information must follow as to which of the many Northumbrian vine-scrolls is in mind.

The close analysis by Richard Jewell of the inhabited vine-scrolls in the eighth-century frieze at Mercian Breedon-on-the-Hill (Leicestershire) also reveals a complex evolution. He suggests that the Breedon inhabited scroll 'depends for its animal style mainly on small-scale models, particularly ivories and textiles from the Christian East, of fifth- to sixth-century date; although, despite the variety and inventiveness of its sub-classical inhabitants, it uses for their setting an insular conventional vine-scroll ...' ¹⁵¹ It is possible therefore to separate the models used for the inhabiting creatures from their Insular foliate setting, and it will be proposed here that a similar selection was made by the Hilton sculptor for the designs of the scroll and its inhabitants.

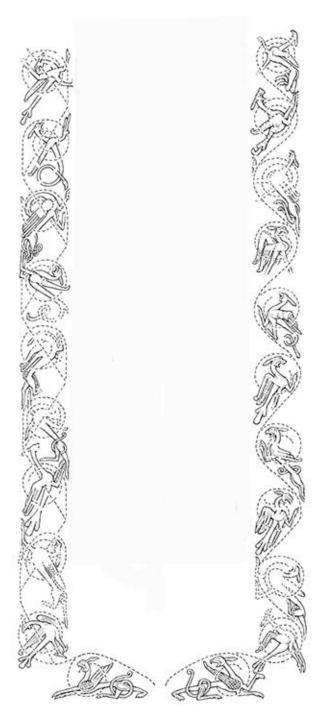


Illustration 5.52

Hilton of Cadboll: the reverse of the cross-slab. Interpretative draft analysis of the creatures inhabiting the vine-scroll (drawn by Ian G Scott)

It is highly improbable that the Hilton of Cadboll sculptor was copying a single Insular model for his inhabited vine-scroll. There was a model for a framed inhabited vine-scroll in Easter Ross evident in the Portmahomack fragment (illus 5.51). The design has a comparatively standard arrangement taken from a portable model such as an ivory, a manuscript or a textile. On the lower edge, confronted animals eat from a centralised plant. They are flanked by two other inhabited scrolls, making a design of four animals for the lower edge. The undulating stem, with scrolls containing birds, continues up the lateral edges. It is unlikely that this design was an extract from face C of the Hilton lower portion. Nonetheless, both vinescrolls may well have been designed by the same sculptor. The important difference between the two designs is that although the Hilton slab is considerably broader than the Portmahomack slab, it has only two animals in the lower edge. This allowed emphasis to be concentrated on a burgeoning growing point, with elegantly spacious over-arching stems, and a focus on an idiosyncratic departure from the symmetrical motif of animals feeding on either side of the growing point. Here the centralised animals are placed with their backs to the growing point with their heads facing in the same direction to the left.

The two very different types of scrolls for the right and left of the frame on the Hilton slab cannot have been taken from a single model (illus 5.52). The simple undulating scroll on the right side was used for both sides of the frame at Tarbat, but the zig-zag scroll on the left side of the Hilton frame had to come from a different source. It has a parallel in the Book of Kells, as do so many art motifs in Easter Ross sculpture. In terms of scroll organisation nothing need be said of the undulating scroll in the right lateral edge except to note that, particularly in its lower reaches, it is comparatively leafy. The scroll on the left may be indirectly derived from the tree-scroll, for its presentation of the stem in diagonal sections crossed by hook-like scrolls does not give the same scope for leafiness. These differences cannot be related to systems of 'deterioration' of vinescrolls in terms of the presence or absence of leafage.

The design of the gracefully arching side growth on the bottom edge of the frame with its elaboration of interlacing shoots emerging from a plinth is to a large extent the original work of a master designer, a brilliant expansion of the model available for the Tarbat fragment and one that was designed to lead the eye to the panel immediately above with its encircled cross set in a halo of spirals There are, however, some

ART-HISTORICAL CONTEXT

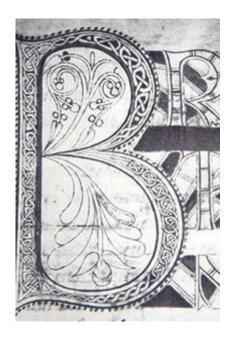


Illustration 5.53
The St Petersburg Bede, St Petersburg, Public Library MS Cod.Q.v.I.18, (Bede's Ecclesiastical History) f.3v, initial B (after Alexander 1978)

points of St Paul's date palms on the Nigg slab. Ridges are used for growth points on the highly decorative Ormside Bowl, found in Westmorland, which has tree-scrolls with spurts of foliage at the central division of the side scrolls, markedly similar to Hilton's fecundity at this point in the design (illus 5.54). In one quadrant of the bowl there is a version of the lobed leaf, decorated with two lines at the tips, producing a form that pervades, to the point of characterising, the foliate forms in the Book of Kells. Examples can be seen throughout the book. For example, the name, Zacharias, that introduces the Summary of Luke's Gospel, on folio 19v, has inhabited vine-scroll with leaves of this type growing among its letters, a suitable choice of decorative motif for his priestly ministry.¹⁵³ The lobed leaves at Hilton are surprising. Like the odd arrangement of the winged animals round the growing point and the arrangement of the ten bosses on the stepped base on face A, they immediately catch the eye of those familiar with Insular art, and this small detail alerts one to a sculptor of unusual independence of mind. The possible sources cited for the lobed leaves

indications of borrowings from other sources both for the plinth and the rounded lobed leaves which spring from it. These rounded leaves are distinctive and belong, to the decoration of the eighth-century manuscript of Bede's Ecclesiastical History, St Petersburg State Public Library O.v.I.18, and to the Book of Kells. The decorated initial B on folio 3v of the St Petersburg Bede has been fully analysed by Meyer Schapiro (illus 5.53).152 The lower bowl of the letter contains a flower with the distinctive lobed leaves found on Hilton. In the upper bowl, a tree-scroll with trefoil terminations to its shoots, has pointed leaves with circular basal leaves, or berries, set a little back from the base of the pointed leaf. This is the combination of leaf and berry forms found in the central section of the lower portion at Hilton. The substitution of a plinth for Tarbat's root ball, or rounded pot, for the growth point, is unlikely to have been an invention, although it could be read as a derivation from the ridged growth



Illustration 5.54
The Ormside Bowl, The Yorkshire Museum, York (© The Yorkshire Museum, YORYM : 1990.35)

are far flung. For the Hilton plinth, closer to hand, although later in date, are the brick-like plinths from which emerge the two vines which spread across the front face of the Dupplin free-standing cross. These have been discussed in the context of Northumbrian slabs and the plinth has its best parallel on a fragment from Hulne Priory (Northumberland) where a plant scroll grows out of a stepped base. Learly the Hilton sculptor had access to a range of models for his strongly architectural vine-scroll growth point.

The choice of different designs for the lateral edges is typical of the Pictish predilection for concealed assymetry, as paralleled in the use of different but similar animal ornament on transverse arms of the Nigg cross-slab. The reconstruction of the fragmented mid-portion has shown that when the slab was complete there was a different number of scrolls on either side of the frame, something which had already been noted on the truncated slab. The reason for this discrepancy can now be seen on the lower portion where the complicated change to the zig-zag scroll involved elongating the stem. The levels of the scrolls on either side are discrepant, and there seems to have been no intention of observing a regular progression of bird, followed by beast. The carving of the sides, which will have started from the bottom, gives the impression of being free-hand, often slightly out of control on the upper reaches, particularly on the left. One is reminded of the dense irregularity of the scrolled animal ornament in the frame which surrounds the portrait of Matthew on folio 28v of the Book of Kells, very obviously brought under control for the similar frame round the portrait of Christ on folio 32v. 155 The virtuousity of the Pictish sculptor allowed for free-hand carving, but he had to have in mind, of course, not only the foliate setting, but the insertion of creatures into it. Some degree of planning must have been necessary. The discrepant nature of the designs for the two sides are obvious when they are pointed out, but it has to be said that they often go unnoticed by observers, and thus the Pictish sculptor's aim of using deceptively similar designs seems to work.

Reference has been made above to the possibility that the structure of the vine-scroll should be separated from the nature of the animals inhabiting it. It is frequently asserted that general development of the inhabited vine-scroll motif can be traced from the naturalistic to the decorative, and finally to frankly conflated versions of plant and animal ornament, ranging from the occasional leafy tail for a beast, to the extreme reduction of the animal to a head on the termination

of a foliage scroll. The Hilton of Cadboll inhabited vine-scrolls have been correctly located within the middle, decorative, phase of this development. The most distinctive aspect of the creatures that inhabit the Hilton vine-scroll is that they are all winged. There is no example of a wingless quadruped or biped. The interest in winged creatures with beast heads is shared by the designer of the Gandersheim Casket, and at one level can be explained by the decorative aspects of hybridisation. The fact however that there was in Easter Ross a model which showed winged quadrupeds feeding from the growth of a central plant gives the Pictish interest in this type of hybrid new importance. The impact of the design on the Portmahomack fragment is marred by the damage to one of the flanking animals. The elegance and boldness of the Hilton adaptation coupled with its splendid state of preservation calls for a reappraisal of its significance for Pictish art and Insular art generally.

Griffins (part-quadruped, part-bird) placed on either side of plant forms is a classical motif, present, most dramatically, as Jewell points out, in his detailed analysis of the Breedon examples, on the frieze on the entablature of the Temple of Antoninus and Faustina in the Roman Forum. The mechanism of the transmission of a version of the motif in time and space to Mercia was a problem for Jewell and is now a problem for the Pictish art-historian. Either there was a lost Northumbrian version, within a frame or frieze, the sole trace of which are the winged creatures on part of the cross-shaft at Croft on Tees, North Yorkshire, or we have here yet another example of the well-attested connection between Mercian and Pictish art.

The Eucharistic significance of ultimately classical griffins which lies behind the decoration of Irish liturgical metalwork has recently been discussed by Ryan. He points to the relation of the motif of griffins flanking a plant to the Tree of Life motif which also has relevance for the inhabited tree-scroll. He draws attention to the frequency of the motif, and its variants, in eighth-century Lombardic sculpture. Situated on the route to Rome Insular artists and their patrons would have the opportunity to see its frequent use on funerary slabs, baptisteries and other church furniture. Given the surprisingly accurate representations of a number

Illustration 5.55

The Book of Kells, Dublin, Trinity College MS 58, f.285r showing the decorated text of the beginning of Luke 24 in an inhabited vinescroll frame (© The Board of Trinity College Dublin) subbaco quiclem situe cupic secun du



Illustration 5.56
The Church of St Mary and St Hardulph, Breedon-on-the-Hill, Leicestershire: inhabited scroll block belonging to the broad frieze, now over the western column of the south arcade (© Conway Library, The Courtauld)

of classical hybrids in Pictish sculpture, including the winged and beaked griffin¹⁵⁸ there must be a possibility that Pictish sculptors had direct access, as a result of Italian journeys, to classical art, or perhaps less speculatively, to an early Christian ivory containing the image of griffins on either side of a plant within its lower edge. The appearance of the motif as the growing point of an inhabited vine-scroll, itself of Eucharistic significance, is an example of iconographical synthesis. We must conclude that inspired by the ancient Italo-Byzantine motif, and aware that the winged beast was part of the Insular decorative repertoire, the Hilton sculptor opted for winged beasts to appear alongside birds in his vine-scroll.

The best analogy for the structure of the vine-scroll in the left border of the frame was, as we have seen, found in the Book of Kells on folio 8r where a horizontally positioned angular medallion scroll rises from a chalice. ¹⁵⁹ An inhabited vine-scroll fills all four sides of the frame on folio 285r where quadrupeds with extended tubular bodies, some with only nearside legs shown, but others with three or four legs, chase each other through vine-scroll (illus 5.55). ¹⁶⁰ Growing points for the scrolls take the form of chalices, set at the midpoint of each side of the frame, from which two main stems emerge. Confronted quadrupeds feed from a central berried stem. The motif is best seen on the left-hand side of the frame where creatures with long necks, raised front legs, and hindquarters

at stretch, present a good parallel for the Hilton motif of paired animals on either side of a plant. The difference, of course, is that these feeding quadrupeds are not winged and so have not the resonance of the ancient griffin motif so evident at Hilton. Except for winged Evangelist Symbols the winged quadruped, to this writer's recollection, is not a feature of the decorative repertoire of the Book of Kells. On the other hand winged bipedal animals are common in the decoration of a south English book, the Barberini or Rome Gospels, Vatican, Bibl. Apostolica, Barberini Lat .570, on folio 1r, folio 11v, and on the Chi-Rho page, folio 18r, where, within a tree-scroll to the left of the monogram, a sole winged quadruped occupies the lozenge-shaped field at the centre of X.¹⁶¹

Confronted quadrupeds in foliate settings in the broad frieze at Breedon take a great variety of forms. The stately heraldic lions on the broad frieze have no stylistic connection with the Hilton creatures. ¹⁶² Some of the Breedon beasts are winged, for example, the somewhat static confronted pair of beasts adjacent to a small figure trapped within a scroll. There are also livelier winged creatures in a mannered, springy, style reminiscent of the often droll animal ornament of the Rome Gospels (illus 5.56). ¹⁶³ Although naturalistically conceived, stylistically, the powerful hounds, also part of the broad frieze, placed on either side of a generously bushy plant motif have both the vigour and elegance of the Hilton creatures, framed so effectively



Illustration 5.57

The Church of St Mary and St Hardulph, Breedon-on-the-Hill, Leicestershire: a section of the broad frieze, now on the south wall of the tower ground stage, shows hounds on either side of a foliate growing point (sketch by Steven Plunkett)

by the arching stems of the scrolls on the lower portion at Hilton (illus 5.57).¹⁶⁴ Although there is no exact parallel, the preoccupation with winged beasts, and with confronted animals on either side of foliate features, evident in the Hilton vine-scroll, is amply paralleled at Breedon.

In considering the style of the winged beasts and birds the analogy with the ornament on part of a shaft at Croft on Tees remains relevant, if only partially. The other long-standing comparison with the broad face of part of a shaft at St Leonard's Place, York, is unsatisfactory in a number of respects, the most important being that the scroll is leafless and that none of the surviving animals is winged. In general, the York creatures do not have the hard, wiry quality evident at Hilton (illus 5.58). 165 Croft remains the better of these two traditional analogies given that its animal ornament is exceedingly varied.¹⁶⁶ In the upper panel of the less discussed front face, the surviving lower section of tree-scroll, inhabited by birds, is structured in the manner of the tree-scrolls on the Ormside Bowl, and on the right-hand end panel of the Gandersheim Casket, where the diagonal shoots are inhabited by winged bipeds, with twisted manes and segmented heads (illus 5.59).¹⁶⁷ The central stem on Croft has the same downwards turning scrolls followed by an upwards reaching heart-shaped growth. Two birds face each other, feeding on berried shoots from the central stem. There is an elaborate leafy development in the lower corners. The lower panel on the front of Croft is an unusual composition. The description in the Corpus entry cannot be bettered: 'Within the lower panel is a group of four profile animals, arranged symmetrically as two pairs; the left-hand animal of each pair is upright, whilst the right-hand beasts are on their backs. The upper pair are winged bipeds with round heads, drilled eyes and open jaws from which

issues a long tongue, median-incised with a volute tip. The snout is heavy. The wing is folded and identical with those of the birds above. The legs are extended forwards and interlace with the tails of the companion beast in an "Anglian lock". The body tapers sharply into a fleshy scroll with a pointed leaf terminal.... Below, in the same disposition, is a pair of canine quadrupeds. Their heads have small pricked ears, a line curving on the jowl and a pendant tongue identical with those of the paired bipeds above. The slender legs are striding.



Illustration 5.58
St Leonard's Place 2, York: front face of part of a cross-shaft showing a section of inhabited vine-scroll (© Corpus of Anglo-Saxon Sculpture, photographed by Tom Middlemass)

A FRAGMENTED MASTERPIECE

The chest and haunches are modelled and the waist is tapered.' ¹⁶⁸ Although not part of an inhabited vinescroll, and therefore ignored in the earlier discussions of the analogies for Hilton, we shall see in the ensuing discussion how relevant to Hilton animal ornament is this eccentric display.

There is no doubt, of course that the tree-scroll on the reverse of the Croft shaft is also relevant, particularly in the way in which the haunches of three of the quadrupeds, two of which are winged, hang out of the scrolls (illus 5.60). The vertical position of a fourth quadruped, whose feet as a consequence lie against the panel edge, recalls the treatment of creatures in the lower panel of the front of the shaft, and also finds a parallel on the Hilton vine-scrolls. In general the Croft



Illustration 5.59

The Church of St Peter, Croft on Tees, Northern Yorkshire: the front face of part of a shaft with one complete panel of animal ornament and part of an inhabited vine-scroll (© English Heritage, National Monuments Record)



Illustration 5.60
The Church of St Peter, Croft on Tees, North Yorkshire: the reverse of part of a shaft showing a panel of inhabited vinescroll (© Corpus of Anglo-Saxon Sculpture, photographed by Tom Middlemass)

quadrupeds with their pricked ears, blunt muzzles, defined jaws, thickened chests, high groins, slender haunches and voluted tails closely resemble the Hilton quadrupeds. Where Croft and Hilton share winged quadrupeds, the wings, whether sharply everted or closed, engage with the body of the creature and its scroll setting, in a similar fashion, regularly employing the device of the 'Anglian lock'. On the other hand, the distinctive birds on both broad faces of Croft, with their proud breasts, short splayed tails and exaggeratedly large claws, are entirely different from the birds in the Hilton vine-scroll, and thus the analogy between the two is by no means perfect. Nor has Croft the status of a unique and influential monument. Its traits are found on other English sculpture¹⁶⁹ The Hilton vine-scroll has not only the unique motif, in sculpture, of winged quadrupeds on either side of a central plant, but has developed winged ornament that allows for the display

of two wings. Nor, of course, is Croft fully analagous in that it is part of tree-scroll design, not a continuous scroll which ascends a vertical frame. Here, however, it must be stressed that it is knowledge of tree- and bush-scroll designs, so popular in the sculpture and other art of southern England, that seems to have opened up possibilities for the Hilton sculptor, and much



Illustration 5.61

The Ruthwell Cross, Dumfries: detail of the lower section of the west side showing a bird with an extended body ending with a fish-tail (© The Warburg Institute)

less so, the art of the simple undulating scroll.¹⁷⁰ The impression given, even while giving full weight to the specific similarities with Croft, is that the Hilton sculptor had under his hand or in his head a whole variety of options and ideas. For example, a distinctive type, not represented at Croft, is the bird with the extended body ending in a hooked or fish tail (see illus 5.52). This kind of extension of the body was already found to be useful in enmeshing birds within scrolls on both the Bewcastle and Ruthwell crosses (illus 5.61).¹⁷¹ On the other hand, the crested birds in the Hilton scrolls, which create ambiguities with beasts with pricked ears, may be a unique feature of Hilton.

There is a further significant feature of the designs of wings of both birds and quadrupeds that the crisp state of the carving on the lower portion of the Hilton slab allows us to appreciate. The wings of the quadrupeds on either side of the growing point on the lower edge of the frame show clearly that the covert feathers, at the base of the wing, were expressed by an arrangement of small bosses (illus 5.1). Bailey has identified this feature as a design trait both of sculpture at Castor, 8km from Peterborough, and of the Gandersheim Casket. 172 The covert feathers of the creatures on the Croft shaft, in contrast, are depicted by irregularly-cut diamond shapes set in a roughly tiled formation. The bossed covert feathers of the Hilton bird design suggests that the Hilton sculptor was familiar with sources not used by Croft but found in Mercian works of art. The Hilton vine-scroll then is by no means dependent on Croft. It goes its own way, as a result of knowledge of other models, but also, to some degree, due to the sculptor's ingenuity and facility for free-style invention. As writers on Insular art have frequently remarked, there is always an element of creativity in animal ornament.

An important new addition to the understanding of the vine-scroll in the lateral edges of the frame on face C is the discovery among the fragments of face A evidence for other small-scale animal ornament which shares many of the physical characteristics of the animals that inhabit the vine-scrolls (see above, Chapter 5.3.2). This evidence consists largely of animal heads which closely resemble those of the animals in the frame. As we have seen they include heads with lolling tongues such as are described above as occurring on the Gandersheim Casket and on the lower panel of the front of the Croft shaft fragment. These particular animals, in some instances, relate to bands which curve in a stem-like fashion (illus 5.15a). They are not part of a berried vine-scroll for they are obviously not feeding. Other animal head fragments have strands

entering their throats which could represent biting at a strand of foliage. This occurs in the Hilton vine-scroll, for example, within the scroll at the top left corner of the frame. The heads, of differing scale, all have one feature not found on either the creatures on Croft or the face C scrolls on Hilton. This is the portrayal of not just widely opened jaws, but fanged jaws. These fanged heads on face A are miniature versions of the three profile heads of animals on either side of the crossbase. A fanged animal head gives a special coherence to all the animal ornament on face A but the similarities between the delineation of the animal heads and the bodily characteristics of the animal ornament on both faces of the cross-slab are striking. This reflects a clear capacity on the part of the sculptor to override the eclecticism of his sources, by thorough assimilation, and invention, thereby creating his own animal style.

The ease with which features of the style can be, as it were unscrambled, makes the matter of dating the animal ornament on the slab comparatively easy. The analogous traits are those which have appeared in recent literature largely concerned with masterworks of the late eighth century such as the Breedon friezes, the Coppergate Helmet, and the Gandersheim Casket. The relationship of the animal ornament on the St Andrews Sarcophagus to the Nigg cross-head, and the Nigg cross-head to the art of the St Ninian's Isle Treasure, is based on a shared disciplined attitude to structure, but there are indications that the seemingly looser style of the carving at Hilton was also an element in the St Ninian's Isle animal ornament: the notably quirky animal ornament on the pommel and the loosely constructed animal ornament of some of the bowls. The emphasis in the Hilton animal style on the fanged mouth is dramatically present on the chapes, and, as we have seen, makes a modest appearance on the surviving corners of the upper arm of the Nigg cross and on a surviving snake in the background of the fragment of a cross-slab at Portmahomack, Tarbat no 2. Fanged heads are a feature of snakes on the St John's Cross at Iona, on the animal on the South Kyme panel (although very worn), and dominate the design on the related metalwork finials now in the museum at St Germain-en-Laye. 173 Powerful individual studies of animals with fangs appear on Meigle no 22, a section of a lintel or frieze, and on the St Andrews Sarcophagus. Pictish acquaintance with the art conventions now evident in the Book of Kells, but no doubt present in other lost Gospel-books some of which could well have been Pictish, would in itself have made available a wide range of fanged lion-like animal designs. Examples

of fiercely fanged animals transfixing fruit in a vinescroll are not readily come by, but it is interesting that on the Crieff slab, where the blending of animal and foliate characteristics is well underway, the animal head employed has also a marked fang.¹⁷⁴

Finally, there is one aspect of English vine-scrolls which is perhaps worth reflecting on in connection with the acknowledged 'Pictish masterpiece in the vine-scroll tradition'. The combination of vinescrolls and inscriptions on Anglo-Saxon sculpture has been noticed by both Bailey and Cramp. 176 As it happens, the Dupplin Cross with its vine-scroll spreading over the front of the cross-head, St Vigeans no 1 with its vine-scroll on a narrow edge, and Crieff with its late version of a vine-scroll on its cross-face, all have accompanying inscriptions. A fragment of a monument with inhabited vine-scroll, and unrelated fragments of another with an inscription, have been found at the monastery of Portmahomack. The now blank panels flanking the cross-base on the front of the slab may simply have been designed to accommodate the projections, which figuratively and literally, added 'weight' to the already architecturally impressive cross-base, itself presumably matched at the top of the shaft, by an equally impressive cross-head. That they may have been planned for inscriptions is given just a scintilla of support from the accompanying vinescroll.

5.5 Summary and conclusions: placing the Hilton of Cadboll cross-slab in its local, national, and Insular art-historical context

The reconstruction of what has been recovered of the lost carving on the Hilton of Cadboll cross-slab is amply sufficient to change radically perceptions of the monument. First, the slab itself is now seen to have had projections on its upper and lateral edges expressive of the shape of the cross of the crucifixion. This alone, on such a large slab, will have given it a physical impact at least matching the Shandwick slab with its entirely bossed cross set high above eye-level. The undamaged lower portion reveals a uniquely architectural stepped and bossed base, flanked by large-scale motifs of animal ornament carved in high relief. Nothing on the reverse gave any hint of the likely presence on the front face of carving of this weight and plasticity. One had assumed a higher grade of relief, but what emerged from the ground is totally different in character from anything that has survived on the truncated reverse. The partial reconstruction of figurative art on the cross-face was

also a surprise. The grouping of three interactive figures to the left of the slab is rare in Pictish sculpture, and the theme to the right, of a man menaced by animals is unusual both in respect of the frontality and scale of the figure with the richly decorated tunic, and of the discrepant genre of the animals which approach him. On the reverse of the lower portion the composition within the lower edge of the frame, of addorsed winged creatures, facing in the same direction, on either side of a fountain-like growth of foliage, and under widely spread stems, is markedly original, adding, well beyond expectation, to what was already known about the diversity of the scrolls in the lateral edges. The fragments of animal ornament which came from the upper portion of the front face cannot be fully assessed because the structures within which they functioned are not yet fully understood. There is evidence that one such structure, on the cross-shaft, was made up of large animals containing within their bodies smaller animals, and another, less certain, may have been a form of vine-scroll, possibly a medallion scroll. These smaller creatures on face A seem not to be feeding from the plant, but nonetheless share with the inhabitants of the vine-scroll on the reverse a lively fluttering style quite different from the heavy animals flanking the base and appearing on the shaft. The spiral panel on the reverse can now be perceived in a significantly more complete form. The reconstruction of an encircled equal-armed cross, of a typically Pictish design, at its centre is a major discovery. This veritable Constantinian vision of a cross shining in the rays of the noonday sun177 alters at a stroke the hitherto predominantly secular feel of the reverse of the slab. Placed on the line of the growth point of the inhabited vine-scroll, it signals in a quite new way the full significance of the decoration of the frame with the symbol of the Eucharist.

The Hilton cross-slab, with its two crosses, the one on the reverse associated with Conversion, and the one on the front symbolic of the mount of Golgotha, must now be regarded as a massive, profoundly Christian monument, very different from the secular resonances of the main features of the carving on the truncated reverse – the Pictish symbols and the hunting scene. Inevitably some changes in the slab's relationship with the other tall slabs of Easter Ross have to be accommodated. It now takes its place alongside the other monuments of the Tarbat peninsula, whether viewed as sentinels of the monastic estate of the monastery of Portmahomack, as argued by Martin Carver, or as the Hendersons propose belonging to a coherent liturgical landscape. There is no longer any

need to see the Hilton slab as somehow a more private, more secular monument.¹⁷⁸ Inspection for this project supports the view that the female rider is wearing a penannular brooch. It is argued here that the brooch is not to be regarded as an attribute of a contemporary aristocrat, but rather, as in other Insular sculpture, indicates the Holy, venerable, or timeless nature of the wearer. Most of the differences in style and subject-matter revealed by the reconstruction are obvious to the viewer when the monument is seen as a whole. The new cross-slab speaks for itself. Indeed its new status as a complex masterpiece of Pictish sculpture can readily be appreciated without specialist knowledge of comparative material.

Of particular interest is the figurative art on the cross-face. The corpus of such art in the area has been expanding. To the angels of Shandwick, and the brilliant encapsulation, on two levels of meaning, of the Life of Paul the Hermit by Jerome at Nigg, can now be added the Hilton figures to the right and left of the shaft. To this one can also legitimately add, although not on the cross-face, the newly recovered range of frontal figures at Portmahomack, probably showing Christ and His Apostles. With the David iconography at Nigg and nearby Kincardine, we now have a considerable range of figurative art in this area which goes beyond the hunting and pastoral scenes, also represented on Nigg, Shandwick and Portmahomack. Subject-matter of this kind is evidence for the cultural richness of the church in this area.

The newly perceived Hilton of Cadboll cross-slab has also acquired the status of a monument influential beyond the immediate environs of the Tarbat peninsula, its presence accounting for the stepped base designs at Rosemarkie and Edderton. Kincardine's David iconography relates to Nigg, and its inhabited tree-scroll to Hilton and Rosemarkie. The sculptors on the south side of the Cromarty Firth, on the Tarbat peninsula, and on the southern shores of the Dornoch Firth, as one would expect, were in close contact, although to a degree not fully appreciated until the reconstruction of the Hilton cross-slab. Understandably there has been a tendency to treat the sculpture of Easter Ross as something exceptional in the corpus of Pictish sculpture. Links with the sculpture south of the Grampians have focused, on Aberlemno no 3 because of the shared trumpeters motif at the top right of the hunting scene, and more recently with the art of St Andrews Sarcophagus. The new Hilton sculpture on the front face of the lower portion is carved in the same style as the animals

on the corner-slabs of the Sarcophagus that flank the David panel. The animal ornament on the Nigg cross-head has the same structures as that of the St Andrews panels, but in a fine style appropriate to metalwork or bone carving. The fleshy Hilton animals on either side of the base now provide what was a missing link between the animal ornament at Nigg and St Andrews. A reappraisal of the hunting scene has shown that there are connections with sculpture at Meigle that have to be recognised. As a result of the reconstruction we can see that the shaft of Meigle no 2 shared with Hilton a form of animal ornament found less exactly at Nigg and St Andrews, and that the forceful image of a naked man being saved from the ravening mouths of the beasts of Hell on Meigle no 2 is matched at Hilton with a depiction of a man flanked by fierce animals. This theme is also found, but in a more conventional form, on Aberlemno no 3. Given these new parallels the contoured horses of three riders abreast on the reverse of Meigle no 2, and on a recumbent at Meigle suggest a possible southern origin for this device. More speculatively the figure riding facing frontally with a hound at her back on Meigle no 1 reappears at Hilton, and also, although here the rider is male, on Aberlemno no 3. The stepped base or the block base does appear in the south but only the Cossans cross-slab with its cross set on a pyramidal base approaches the grandeur of Hilton with its unique overt symbolism. The new Hilton carving has strengthened the links between the Pictish north and the Pictish south and it is a mistake to treat the sculpture as separate manifestations.

The most difficult aspect of the art-historical analysis to convey is the context of Hilton within Insular art. On the other hand, not to be aware of the nature of Insular art leads to ignorance of the cultural contacts enjoyed by Pictish sculptors and makes it impossible to appreciate their individual genius. Insular art is not a record of passive influences, but of participation, assimilation and innovation. It has also to be remembered that what survives is a very small proportion of what was produced. The close relationship between Pictish sculpture and the Book of Kells has long been recognised in the Easter Ross-slabs, but it is also a feature of the art of Meigle, and thus the reality behind the relationship may lie in the existence of now lost illuminated books, the decoration of which accounts for the observable changes in Insular book production that took place between the Lindisfarne Gospels and the Book of Kells. Some of these missing manuscripts could well have been the work of the

Picts, a view that has tangible evidence to support it in the majuscule inscription at Tarbat dated to the second half of the eighth century.¹⁷⁹ It has long been known that Pictish sculpture, including the Easter Rossslabs, shares aspects of the ornamental repertoires of illuminated books produced in the south of England such as the Vespasian Psalter and the Gospel-book known as the Codex Aureus of Stockholm. The slab format made Pictish artists particularly interested in the decoration of manuscripts, but these southern connections have also been matched in sculpture in the south. As we have seen, the mechanisms whereby Mercian art and Pictish art could respond in the same way to the cultural resources of the period have recently been explored perceptively in connection with the art of the St Andrews Sarcophagus. Such mechanisms have to be complex, and credible within the nature of individual artistic production. Sometimes, of course, the links present themselves with great clarity, and this was certainly the case when the lower portion emerged from the ground and the animals to the left of the base on the front face were cleaned out. One with a twisted mane, and the other with a segmented head seen from above immediately recalled the superlative miniature art of a very different artefact, the 12cm-high, houseshaped box known as the Gandersheim Casket. The Casket was made in southern England most probably in the late eighth century. This similarity enriched and opened up previously perceived connections between the art of Mercia and the art of the Picts. Given the pervasive nature of these connections the Mercian elements in Pictish art can no longer be seen as a transitory exotic phase, they are rather part of the Pictish assimilation of art styles evident in art of all media in the Insular world towards the end of the eighth century. This view has special importance for the retention of the St Ninian's Isle Treasure as part of the corpus of Pictish art in spite of its evident relationship to south English metalwork. In this matter the similarity between animals from face A and the decoration of the sword pommel from Beckley (Oxfordshire) is particularly telling. 180

The precise dating of sculpture and of much Insular art of this period can rarely be justified, but cumulative connections, in particular, with the art of southern England suggest a date for the Hilton cross-slab in the later eighth century rather than the often stated, though unexplained, 'around 800'. The current dating of the relevant comparative material cited above, such as the Gandersheim Casket, the front and back of the Croft fragment of a shaft, the southern books, and the Book

of Kells, all support such a date. Only the Breedon frieze, which has less exact parallels, has been assigned tentatively to a date into the ninth century, a date depending largely on the desire to find an appropriate historical royal patron for such an enterprise. Perhaps the most remarkable aspect of the whole monument as now perceived is the extent to which the sculptor can be seen to be manipulating a great number of visual ideas. There is nothing here that has become conventionalised or routine. This is a sculptor at the height of his powers ready to do something different at all points and to express fundamental Christian concepts in concentrated imagery. Such intellectual power and versatility is the hallmark of other works of Insular art, comparable in quality, which the best efforts of scholars in the field in all media have currently chosen to ascribe to the late eighth century. It is to this Golden Age that the Hilton of Cadboll cross-slab can now be seen to belong.

Notes

- 1 Henderson & Henderson 2004, 182.
- 2 Henderson, G 1987, 19, 57, 99, 131.
- 3 RCAHMS 1982, 1980.
- 4 Henderson & Henderson 2004, 213.
- 5 Henderson 1998, 104-5.
- 6 Ritchie G & A 1981, figs 131–2; ECMS, pt III, figs 314A & B.
- 7 Curle & Henry 1943, 265; Henry 1965, 145.
- 8 Henderson 1998, 103-4.
- 9 Henderson & Henderson 2004, 50, ills 13, 184.
- 10 Henderson 1998, pl 14; fig 46.
- 11 Edwards 1983, 8.
- 12 Edwards 1983, 12.
- 13 ECMS, pt III, figs 87, 91, 92.
- 14 Henderson & Henderson 2004, 176-7.
- 15 Henderson 1998, fig 24, pl 5.
- 16 ECMS, pt III, figs 93, 94.
- 17 Tarbat Discovery Programme 2003.
- 18 Alexander 1978, ills 119, 282.
- 19 Henderson 1978, 52-3.
- 20 Henderson & Henderson 2004, 182-95.
- 21 Foster 1996 [2004], ill 85; Henderson & Henderson 2004, ills 216, 47, 48, 271.
- 22 Henderson & Henderson 2004, ill 183.
- 23 Nordenfalk 1968, 124 & n 28.
- 24 Fisher 2007.
- 25 Henderson 1998, pl 14, 148.
- 26 Kitzinger 1956, 218, n 1.
- 27 Bailey 1989, 241-2, fig 14.
- 28 Cronyn & Horie 1989, 253-6.
- 29 Henderson 1993, 209.
- 30 Meehan 1994, ill 27.
- 31 Meehan 1994, ill 7.

- 32 Meehan 1994, ill 6.
- 33 Meehan 1994, ill 54.
- 34 Meehan 1994, ill 37.
- 35 Meehan 1994, ill 5.
- 36 Alexander 1978, ill 114.
- 37 Meehan 1994, ill 36; Richardson 1996, 24-5.
- 38 Richardson 1995, 177–81; Weitzmann (ed) 1979, nos 545, 566.
- 39 Kitzinger 1977, fig 85.
- 40 Henderson & Henderson 2004, ill 312.
- 41 Webster & Backhouse eds 1991, no 12; Gannon 2003, fig 5 2a & b
- 42 Sharpe (trans) 1995, 53-5.
- 43 Henry 1974, 206.
- 44 Harbison 1992, 2, fig 487.
- 45 Bettenson (trans) 1984, 633.
- 46 Webster & Backhouse (eds) 1991, no 171, 217-18.
- 47 ECMS, pt II, 291–3; pt III, 237.
- 48 Henderson 1997, 143-66.
- 49 Henderson 2007.
- 50 Henderson, G 2007; ECMS, pt II, 49–50; Tarbat Discovery Programme 2003, TR 29.
- 51 Henderson & Henderson 2004, ills 196, 279.
- 52 Meyer forthcoming and work in progress University of York (Department of Archaeology).
- 53 ECMS, pt III, figs 253, 359.
- 54 Harbison 1992, 2, ills 248, 256.
- 55 Henderson 1997b, 143-8; Henderson 2001, 115-47.
- 56 Foster (ed) 1998, pls 12, 13.
- 57 Henderson 1997, 160–1; Henderson & Henderson 2004, ills 164–6.
- 58 Marth (ed) 2000.
- 59 Plunkett 1998.
- 60 Alexander 1978, nos 29, 39, 36.
- 61 Brown 1994.
- 62 Henderson & Henderson 2004, ills 168, 316.
- 63 de Paor 1987.
- 64 Plunkett 1998, 211-15.
- 65 Webster 2000, 68 and n 34.
- 66 RCAHMS 1982, 198, ill F
- 67 Hall et al 2000, 163, ill 7; Fisher 2001, 120.
- 68 Fisher 2001, 19.
- 69 Bailey 2000, 48, 49.
- 70 Hawkes 1996, 88.
- 71 Webster 2000, 65, fig 4.
- 72 Wilson 1964, 12–13; Everson & Stocker 1999, 248–51, ills 339–345.
- 73 Webster 2000, 64, fig 1; 65, fig 4.
- 74 Webster 2000, fig 2c.
- 75 Wilson 1984, ill 33.
- 76 Wilson 1973, 2, pl xxxi.
- 77 Henderson & Henderson 2004, ill 163.
- 78 Webster 2000, fig 9d; Wilson 1973, 1 67 & 99.
- 79 Tweddle 1992, 1150–1, fig 576c; Henderson & Henderson 2004, 104–7.
- 80 Henderson 1997a.
- 81 Henry 1974, ill 123.
- 82 Webster 2000, ill 7a.
- 83 Meehan 1998, 31.

A FRAGMENTED MASTERPIECE

- 84 Henderson 1982, 102-3.
- 85 Stevenson 1974; Meehan 1994, 62-3.
- 86 MacLean 1998, 194-5, fig 59.
- 87 Weitzmann (ed) 1979, 396-406.
- 88 Ritchie 1997, 120-1, ills 1, 2.
- 89 Bailey 2000, 47, ill 4.
- 90 Jewell 1986, pl XLVe.
- 91 Mac Lean 1998, fig 59a.
- 92 Meehan 1994, ill 94.
- 93 Henderson & Henderson 2004, 41.
- 94 Henderson & Henderson 2004, 242, n 192.
- 95 Mütherich & Gaehde 1976, pl 20.
- 96 Pächt et al 1960, pl 106 a-e.
- 97 Henderson & Henderson 2004, 156–7, ill 230; Henderson 2000, 39–40, ills 1, 2.
- 98 Meehan 1994, ill 95.
- 99 Henderson & Henderson 2004, ill 208.
- 100 ECMS, pt III, 116, fig 119.
- 101 Meehan 1994, ill 63.
- 102 Youngs 1999, 281-95.
- 103 Stevenson 1955, 101-6.
- 104 Henderson & Henderson 2004, 59-60.
- 105 Foster 1996 [2004], 74-5.
- 106 Mack 1997, 5.
- 107 Henderson & Henderson 2004, ill 300.
- 108 Henderson & Henderson 2004, ill 183.
- 109 Henderson & Henderson 2004, ill 263; Pobé & Roubier 1961, ill 97.
- 110 Henderson 1967, pl 1.
- 111 Boardman (ed) 1993, 344, no 354.
- 112 Henderson & Henderson 2004, ill 35.
- 113 Henderson & Henderson 2004, ill 293.
- 114 Henderson 1998, 26.
- 115 Henderson 1994, 51-3.
- 116 Steer & Bannerman 1977, 186.
- 117 Black 1993, 37-40.
- 118 Forsyth 1995, 237-44.
- 119 Henderson & Henderson 2004, ill 188.
- 120 Henderson & Henderson 2004, 179.
- 121 Mack 1997, 34.
- 122 Close-Brooks & Stevenson 1982, 32.
- 123 Henderson 1998, 109.
- 124 Henderson 1967, fig 38.
- 125 Robertson 1991, 5-17.
- 126 Stevenson 1993, 23.
- 127 Henderson 1967, fig 38a & b.
- 128 www. Epona.net, a scholarly resource © 2004–5 Nantonos & Ceffyl; Schutz 1985, 64–5.
- 129 Pobé & Roubier 1961, pls 179, 181.
- 130 Toynbee 1973, 123, 197-8, pl 94.
- 131 Harbison 1992, 1, 134, cat no 162; 3, fig 809.
- 132 Cassidy (ed) 1992, pl 25.

- 133 Henry 1965, pl 72.
- 134 Toynbee 1973, 197-8.
- 135 Trench-Jellicoe 1999, 605-10.
- 136 Schutz 1985, pl 55.
- 137 Sutherland 1994, 185-7.
- 138 Black 1993, 37–40; Cessford 1993, 41–2; Trench-Jellicoe 1994, 1–7; 1995, 3–9.
- 139 Trench-Jellicoe 1999, 614; Alcock 2003, 414-15.
- 140 Henderson & Henderson 2004, 136.
- 141 Biddle & Kjølbye-Biddle 1985, 287-90.
- 142 Lewis 1980.
- 143 Gannon 2003, 40-1.
- 144 James 1998, 247.
- 145 Henderson 1998, figs 35 & 47.
- 146 Whitfield 2004.
- 147 Trench-Jellicoe 1999.
- 148 Foster 1996 [2004], 93-5.
- 149 Bailey 1996, 52-4.
- 150 Bailey & Cramp 1988, 67.
- 151 Jewell 1986, 102.
- 152 Schapiro 1958 [1980], 202-6, fig 4; Alexander 1978, ill
- 153 Meehan 1994, fig 69.
- 154 Henderson 1999, 167; Cramp 1984, 193, pl 188.1035.
- 155 Meehan 1994, figs 35 & 63.
- 156 Jewell 1986, pl XLIXc.
- 157 Ryan 1993, 156-8.
- 158 Henderson 1997, 25-7.
- 159 Meehan 1994, fig 8.
- 160 Meehan 1994, fig 33.
- 161 Alexander 1978, ills 173, 178, 170.
- 162 Jewell 1986, pl LIIIc.
- 163 Jewell 1986, pl XLV e,c.
- 164 Jewell 1986, pl XLIXa.
- 165 Lang 1991, ill 369.
- 166 Lang 2001, ills 147-51.
- 167 Wilson 1984, ills 56, 57, 59.
- 168 Lang 2001, 90.
- 169 Jewell 1986, 101.
- 170 Bailey & Cramp 1988, 86, ills 202-6.
- 171 Bailey & Cramp 1988, 64, ill 113; Cassidy (ed) 1992, ill 27.
- 172 Bailey 2000, 46-7, ill 3.
- 173 Youngs (ed) 1989, 166, ill 138.
- 174 Hall et al 2000, 157, ill 2b.
- 175 Henderson & Henderson 2004, 53.
- 176 Bailey & Cramp 1988, 86.
- 177 Thomas 1981, 87.
- 178 Carver 2005, 26, fig 2.10; Henderson & Henderson 2004, 180–1.
- 179 Higgitt 1982, 317.
- 180 Henderson 2007, 211, illus 13.

Chapter 6

Recovering the biography of the Hilton of Cadboll Pictish cross-slab¹

SALLY M FOSTER and SIÂN JONES

6.1 Introduction

The concept of a biographical approach to objects or monuments is not a new one,² as numerous recent publications attest.³ Nor is it particularly controversial, if we accept that the meanings of objects change over time and that human and object histories inform one another. The concept of a 'biography' is used metaphorically to refer to these processes with respect to the material world. It also embodies a particular way of looking at objects, one that Gosden and Marshall characterise well when they explain that a biographical approach

seeks to understand the way objects become invested with meaning through the social interactions they are caught up in. These meanings change and are renegotiated through the life of an object. Changes in meaning need not be driven by the physical modification or use of an object [...]. Meaning emerges from social action and the purpose of an artefact biography is to illuminate that process.⁴

Another way of characterising a biographical approach is in terms of the questions it encourages. These include conventional ones, such as, where does the thing come from and who made it? Why was it produced and what did it mean to the people who produced it? How did they use it and what was its place within society? But it also means going beyond the original or primary social and historical context of a thing to ask questions like how does its meaning and use change over time? Can we recognise distinct ages or periods in its social life? How have wider social and historical processes helped to transform its meaning and use and how does the object itself illuminate these processes? At a more personal scale, how do the relationships that people have with the object help to constitute its identity and their own? And finally, what are the accumulated meanings surrounding the object and how do former aspects of its social life inform its later biography?

The Hilton of Cadboll cross-slab has a complex and fragmented history. The detailed chronology has been outlined in Chapter 3 and we will return

to this below along with any outstanding ambiguities and problems. However, the material biography of the monument can be summarised as follows. As a result of the excavations in 1998 and 2001, the Hilton of Cadboll Pictish cross-slab is now known to us through its massive upper portion, the newly excavated lower portion, 3370 carved and 4141 uncarved fragments. The upper and lower portions, along with the thousands of small fragments, have distinct life histories. From the excavations we now know that the cross-slab was erected twice at the Hilton of Cadboll chapel site, probably, in the first instance at least, prior to the construction of the visible chapel. There is evidence suggesting that the cross-face may have been damaged during the 16th century, and then, after the upper portion was broken off in a storm, it was reworked into a gravestone dated 1676. Following its 'rediscovery' by antiquarians, this upper portion of the cross-slab was taken to Invergordon Castle in the mid-19th century by the laird of Cadboll, Robert Bruce Aeneas Macleod. From here his son, Captain Roderick Willoughby Macleod, offered it to the British Museum in 1921. The removal of the upper portion to London resulted in widespread protest and it was re-donated to the National Museum of Antiquities in Edinburgh within the same year. It now features prominently in the 'Early People' exhibition in the Museum of Scotland. Meanwhile, in Easter Ross, a full-scale reconstruction was commissioned by Tain and Easter Ross Civic Trust and erected adjacent to the Hilton of Cadboll chapel in 2000. The archaeological research took place between 1998 and 2001, leading to the rediscovery of thousands of fragments and the lower portion, which remained at the chapel site. In recovering the missing lower portion and thousands of fragments from the cross-face, the excavations themselves contributed to the ongoing biography of the monument. In a material sense they fundamentally altered the context of the missing lower portion and fragments, unearthing them so that they once again became a focus of human engagement, for archaeologists, art historians, heritage managers, local residents, journalists and visitors. The lower portion is in excellent condition and is still carved on both sides.

although it has lost its tenon due to a natural fracture associated with its early re-erection at the chapel site.⁵ The thousands of small fragments have been removed to the Museum of Scotland, but the lower portion became entangled in conflicting claims of ownership and belonging and remains in the locality at Balintore to date (see Chapters 1 and 6.9).

Such a rich and compelling history cries out for a biographical approach. The Hilton of Cadboll crossslab seems to 'accumulate its own biography'; a characteristic that Gosden and Marshall attribute to the Parthenon and its fragmented marble sculptured reliefs as well as the Bradbourne cross from Derbyshire.⁶ The fragmented, displaced and contested life-histories of these latter monuments have a particular resonance with the Hilton of Cadboll cross-slab. In his analysis of the cultural biography of the Parthenon marbles Hamilakis stands back from the restitution debate and illustrates the ironies and ambiguities surrounding their deployment in a variety of projects.7 Not least of these was their contribution to the construction of classical antiquity as the cornerstone of Western European civilisation and the emergence of Hellenic nationalism, projects which interlocked with one another. Moreland's exploration of the biography of the late eighth-century Saxon cross from Bradbourne reveals how medieval parishioners, iconoclasts, and members of the 18th- and 19th-century antiquarian/ archaeological community each 'contextually constructed their own monument'.8 In exploring the biography of the Hilton of Cadboll cross-slab, our aim is to reveal something of its rich social life and explore the wider social interactions and processes in which it has been entangled. The result, we hope, is a glimpse of life on the Tarbat peninsula of Easter Ross through the centuries as expressed through the relationship of its residents and visitors with a monument that is singular both in terms of its cultural significance and of our unique capacity to begin to tell its story.

We begin our biography with the 'birth' of the monument and its early medieval context, and then explore its active reverence in later medieval society. This is followed by an examination of a turbulent period in its life during the 16th and 17th centuries, which resulted in the fragmentation of the monument and creation of a chasm between past and present. Its rediscovery as a 'romantic ruin', a piece of national heritage, and a form of historical evidence, by 18th- and 19th-century tourists and antiquarians is discussed, followed by further phases of displacement and re-presentation surrounding its removal to

Invergordon Castle and then the British Museum. Finally we explore its meanings and values in later 20th- and early 21st-century society. The approach is highly contextual. Every effort is made to situate our analysis of the monument's biography in relation to the specific social worlds that constitute different phases in its life. To explore how meanings are negotiated and transformed, we also need to consider all of the ways in which people have engaged with it, whether or not they are considered 'informed' or 'uninformed' when measured against scholarly orthodoxies.

Of course our sources of information and depth of understanding vary over time. To begin with we rely entirely on material evidence for our primary information about the biography of the monument and the chapel. Documentary sources and existing archaeological and historical research are used to set the wider context. The upper portion enters written history in the 17th century if the obelisk which toppled in the extraordinary winds of 1674 recounted by Sir George MacKenzie is indeed the Hilton of Cadboll crossslab. However, reference to it by name does not occur until the late 18th century when it is 'rediscovered' by antiquarians and travel writers. From this point onwards we have an increasing number of documentary sources pertaining directly to the monument, particularly the 1921 episode and the last two decades leading up to the present. For the modern era we also have folklore and oral history, with the addition of ethnographic material from 2001 onwards. This is the result of the fieldwork carried out by one of us (SJ) in the village of Hilton of Cadboll and its vicinity between 2001 and 2003.9 We have endeavoured to complement this ethnography with visitor research in the Museum of Scotland, focusing on the upper portion and the Early People gallery where it stands. The evidence generated has provided new insights into both the ways in which people engage with the various fragments of the monument and the diverse, complex and often intangible meanings that are produced through them. In pulling together a range of sources that fall within the expertise of a variety of disciplines we have made every effort to be attentive to their methodologies and theoretical frameworks whilst also exploiting the potential of an interdisciplinary approach.

6.2 Early medieval Hilton of Cadboll: 'birth' of the monument

Late eighth-century Easter Ross witnessed the birth and use of a series of spectacular ecclesiastical monuments

that linked the length of the Tarbat peninsula. The sculptures from Portmahomack, Hilton of Cadboll, Shandwick and Nigg are the survivors of a short, singularly intensive period of intellectual and artistic creativity, outcomes of highly localised political and social circumstances in which considerable resources were directed to produce a coherent programme of quite outstanding monuments.10 Their monumental context and artistic origins lie in the cross-marked stones and symbol stones of the area, some of which show a masterly control of the incised line in abstract and animal designs. While they stand out because of their grouping, their quality is paralleled elsewhere, and it would be a mistake to isolate them from the rest of Pictish sculpture (see Chapter 5). Stone and timber structures may also once have existed alongside the tall cross-slabs. This was no marginal or peripheral area. Indeed, it has recently been convincingly argued that Fortriu, the core territory of the Picts, was north rather than south of the Mounth, and we know that in the late 16th century, at least, the royal court was based somewhere near Inverness.11 It should therefore not surprise us that there were people living here who had wide intellectual horizons and extensive connections and were active participants in the social and artistic developments that were taking place in other wealthy parts of Pictland.

To begin we will therefore consider our knowledge of the organisation of the Pictish church in the eighth century and the functions of cross-slabs. In this context we can then review what we know of the early medieval church on the Tarbat peninsula and the range of options for how this might have been organised, with its implications for what was happening at Hilton of Cadboll. Then we can begin to think about the realities of creating this slab: the vision for the programme of sculpture and its patronage, the procurement of stone, process of carving, and impact of the creation and use of the monument on its intended audiences (see Chapter 5).

6.2.1 The bigger picture: the church in Pictland

Our meagre knowledge of how the church developed in early medieval Scotland derives primarily from archaeology but also from documentary sources, place-names and sculpture. Ideas continue to evolve as we acquire more evidence or reinterpret the existing sources, informed by the ideas that are developing elsewhere in better documented parts of Europe, particularly Ireland and Anglo-Saxon England.¹²

Parts of Scotland were certainly Christian by the late fifth century and thereafter we can trace a picture of Christian influences on Pictland from various directions, notably from the Columban church in the west, with its base at Iona, and the Northumbrian church in the south. Early Columban activity was probably concentrated in those areas under control of the sixth-century king of the 'tribes of the Tay' (Bridei son of Mailcon)¹³ in territories lying north of the Grampians.14 From the seventh-century writings of Adomnán the inference is that within about 50 years of Columba's death his followers, and perhaps those of other pioneering missionaries, may have organised an infant church centred on the Moray Firth.¹⁵ From the earliest introduction of Christianity, a recurring feature is the close association between the church establishment and the local secular elites, a synergy apparently reflected in a correspondence between their mutual territories of authority.16

The early eighth century saw the establishment of a Pictish church in which kings played a more pro-active role (in comparison to what was happening in the Irish church). Religious and political motives appear to have lain behind a conscious effort to introduce continental liturgical practices and customs (as practised in Northumbria) rather than the insular ones. In around 716 Nechtan sought advice from Northumbria on how to make his changes of the Pictish church from Columban to Roman observance more effective. Gaelic Columban clergy who had accepted these changes assisted him in this process.¹⁷ The conscious introduction of a reformed church may have been an effective way of consolidating and extending royal authority. It reflects the type of symbiosis between king and Church that was a recognised phenomenon throughout north-west Europe in the eighth and ninth centuries, a relationship in which kings came to recognise their responsibility to protect the church in their realms and for the spiritual well-being of their people.¹⁸ Nechtan's reforms were apparently very effective. In northern Scotland bishop Curadán (Curetán) may have carried them out, apparently basing his mission at Rosemarkie, on the Black Isle, the next peninsula south of Tarbat.¹⁹ Here the impressive surviving assemblage of carved stones includes architectural sculpture that testifies to the existence of a very elaborate stone church with a treasury.²⁰

In practice we have very little reliable evidence for how the Picts and their neighbours organised their church in different parts of the country and how/if it provided a pastoral service for the wider community.²¹ It is realistic to assume that a diverse range of ecclesiastical establishments might have co-existed, including: seats of bishops (some of which may have been monastic); monasteries (of all sizes including nunneries), some of which might be mother-churches; churches dependent on mother-churches, some of which might be proprietorial; ²² free-standing proprietorial churches; and hermitages. As mentioned above, the role of royalty and local nobility in providing political and economic support (through grants of estates, assignment of taxes collected from an area or relief of payment from dues)²³ would have been critical, whatever the structure in question.

6.2.2 The role of cross-slabs in Pictland

The appearance of symbol-bearing Pictish crossslabs is possibly a direct outcome of the innovations introduced by Nechtan.²⁴ If so, it is a measure of his success, for we may interpret their extensive distribution and content as a direct reflection of the support that local aristocracies were giving the church in their areas.²⁵ The extent to which much of their imagery (such as hunting scenes) is secular is now called into question (see Chapter 5).26 However, the view that some of the symbols on them might represent Pictish names is gaining favour, 27 and it is recognised that secular rulers would have seen the advantages in being associated with such public monuments, even if the lead for their production came from the Church. As expressions of shared social ideals, there would have been mutual advantages in the ecclesiastical and secular authorities supporting their erection.²⁸ The evidence for the eighth/ninth centuries therefore points to a shift in monumental patronage that focuses on the embellishment of churches (the main focus of attention, but sadly something we know virtually nothing about) and their immediate surroundings (with sculptures, some of which have survived, and, we presume, other crafts that have fared less well). This is part of a wider phenomenon throughout the British Isles, where we see royalty recognising the propaganda value of associating themselves with churches and sculptures, 29 notably in the context of family burials, enshrinements or anniversaries.

But to appreciate the context of an individual sculpture it is important to know exactly where it was first erected and to understand the local conditions, since each circumstance is different.³⁰ When we look more widely at the early medieval evidence for how cross-slabs, and their Irish equivalent of free-standing

crosses, were used, we can detect a host of potential contexts for cross-slabs such as Hilton of Cadboll,³¹ for example, marking entrances to burial grounds or monastic enclosures, or areas of special significance within them (might include being within a church); focuses for worship in the absence of a church; in monastic contexts, a role in elaborate liturgical rites and processions as focus for prayer, confession and penitence, and so on; a focus for burials; to commemorate events; and to make a claim and validation.³² So far there is no conclusive evidence in Scotland for cross-slabs being erected to mark the graves of individuals, although some kind of memorial function may be likely in some cases,³³ as seems likely for the inscribed Apostles' Stone at Portmahomack. As we shall see, we can suggest alternative and more complex functions for a cross-slab such as Hilton of Cadboll which reflect the complexities of their content, including biblical imagery.

6.2.3 The Tarbat peninsula: the immediate context for Hilton of Cadboll

Turning now to the Tarbat peninsula, how does the evidence for its church organisation relate to the above? We suspected a monastery at Portmahomack because of the inscription found in the 19th century and the large ditch seen on cropmarks to surround the church.³⁴ Excavations by the University of York have now produced good archaeological evidence for a substantial but undocumented Pictish monastery. This can make strong claims to be one of the early Columban foundations (an 'Iona of the east'), a site that becomes very wealthy and thrives until at least the ninth century when it, or a part of it at least, was destroyed.³⁵ We therefore have reasonable grounds for suggesting that this was the principal church for a defined region in Easter Ross. The present-day parishes of Tarbat, Fearn and Nigg were effectively an island at this time, and there is a suggestion that the whole peninsula formed a coherent monastic estate.³⁶ The location and extent of any monastic paruchia beyond this can only be a matter of conjecture. But we should remember that the peninsula possessed two later medieval parishes (Tarbat and Nigg) and Nigg is associated with two 'annat' place-names. There is some evidence to associate such names with future parishes; it certainly suggests that, when the name was coined (between around 800 and 1100), Nigg was a superior church in its own right that could have had a separate patron and local ruling kindred and community.³⁷ While the sculpture of the

peninsula suggests a very close relationship between Nigg and Portmahomack in the late eighth century, their evolving relative function and status throughout the early medieval period (indeed that of Hilton of Cadboll and Shandwick too) is far from clear. We need to be open to the possibility they formed a joint monastery at some point.

The relationship of the very wealthy monastery at Portmahomack to Rosemarkie, a possible early medieval bishopric only 32km to the south-west, is also highly relevant. We do not know if there was a church at Rosemarkie prior to the early eighth century (only archaeological work could determine this). We also do not know how the development of Rosemarkie as an episcopal centre, with its cult of Curádan (later Moluag), impacted on the fortunes of Portmahomack and its associated sites. is

At Portmahomack we therefore have a context for the 200-plus fragments of sculptures that have been recovered, including the several fragments of crossslabs that are on a par with Hilton of Cadboll in their scale, content and execution. The high intellectual content of the Nigg, Shandwick and Hilton of Cadboll sculptures alone argues for their production stemming from within the walls of an erudite monastery such as this. But, with the exception of the sculptures, we know nothing of what existed at Portmahomack's neighbours' sites in early medieval times, although the promontory of Nigg is redolent of the topographic location of early medieval monasteries elsewhere in the British Isles, the Hilton of Cadboll chapel site has amphitheatre-like qualities, and each is associated with later burials and churches.40

6.2.4 Hilton of Cadboll in early medieval times

At Hilton of Cadboll we have evidence for ninth-century activity of some type (on the basis of radiocarbon and OSL dates) and for pre-Setting 1 activity of an undetermined nature in the form of dated early medieval human bones, iron-slag that probably derives from redeposited midden and, interestingly, a dressed stone that may relate to a structure (see Chapter 3.5).⁴¹ There is also a well-carved relief ringed cross (Chapter 7.5.1). Based on existing evidence, the simplest explanation is that the cross-slab was first erected in Setting 1. (However, reasons for modification of the lower projections remain unknown: see Chapter 3.5.)

The proximity of a holy well to the chapel site is very interesting in this context since early Christian sites were frequently located at places of earlier pagan significance, including wells, that might have been used for worship and offerings. There is a 1610 reference to 'Oure-Lady-Well', situated at the angle of the 'kailyaird dyke' occupied by Andrew Denoon of Balnakok. According to Watson, Tobar na baintighearna, Lady's Well, is known to have been near a small graveyard east of Hilton used for unbaptised children.⁴² This seems more likely to be the unnamed well 580m north-east of the chapel (ie close to Lady's Rock 'under Cadboll') rather than that 290m SSW of the chapel.⁴³ None of this helps us to assign a definitive function to the Tarbat peninsula cross-slabs, but it further underlines the importance of being able to envisage the precise landscape context of a monument at any given point in time before we can comprehend the changing relations and meanings that adhere to it.

We do not assume that the monks found an uninhabited peninsula when they arrived here. A secular power centre at Hilton, perhaps on the cliff-top near the later Cadboll Castle, might also be a factor in siting of the cross-slab.

Carver has suggested that the Hilton of Cadboll cross-slab was originally erected somewhere on the cliff above the chapel site. This is because he believed the cross-slab to have been re-erected at St Mary's and this led him to suppose it would have moved from elsewhere and, by analogy with Portmahomack, Nigg and Shandwick, the most obvious place would be a nearby hill. He also suggests that each of the Tarbat peninsula monuments might be 'seamarks and portals', boundary markers deliberately sited where they could guide travellers arriving by sea to landing places and an official reception.44 Leaving aside the new evidence for early medieval activity at the Hilton of Cadboll chapel site, this does not explain why visitors might want to arrive here, rather than at the monastery. But such monuments could have acted as beacons defining the coastal extent of the monastery's estate to those travelling along the shoreline. This would be analogous to Ireland where they used (simple) crosses to define the lands over which a church might claim direct jurisdiction.⁴⁵ However, it is only in close proximity that the architectural impact and the complex messages of the cross-slabs would have been legible to the visitor. We must also consider who the audiences for these messages might have been: the monks, the local farmers, or visitors? Either way, were people intended to encounter them in a structured way as part of their use of a liturgical landscape (going from one to the other, such as at times of pilgrimage or in association with the events in the ecclesiastical calendar)?⁴⁶ Or

were they primarily intended to inhabit an integrated sacred and secular landscape, serving the needs of the farming community who would come across them as they moved through the landscape during the course of their work? Was a conscious decision made to appropriate places that were significant in the pre-existing sacral landscape (such as wells), transforming their meaning and use?⁴⁷

It has been argued that these monuments are too elaborate to be simply prayer crosses, but that they could be mass-crosses, the types of place that later attracted burials and churches. An alternative model for the Tarbat peninsula is of a liturgical landscape that contains burial grounds and churches functioning in different ways. Each cross-slab also has a distinct function and is therefore different, but each glorifies the cross: Shandwick as a public focus for dispensing the Sacraments; Nigg with its a depiction of the Mass designed for the use of a knowledgeable community within an enclosed space; Portmahomack with its inscription to stand in a monastic church; and Hilton for a context where its deep theological significance could have been contemplated and appreciated (see below and Chapter 5).48

The slender slab from Nigg and the beautifully inscribed monument from Portmahomack seem likely to have stood in buildings, but we cannot say yet whether this was the case for the large, robust monuments at Shandwick and Hilton (although note the evidence for a dressed stone structure at Hilton, see Chapter 3.5).⁴⁹ With such different functions, the individual places could have had a role in liturgical events that extended across the peninsula and that were intended to attract external visitors and revenue to the monastery, as well as asserting the rights of the monastery to these rich agricultural lands.

6.2.5 Creating the Hilton of Cadboll monument

How then can we begin to translate our various strands of evidence into a story for the Hilton of Cadboll cross-slab? We must start by envisaging a highly intellectual, extensively connected ecclesiastical world, fed by the support of equally well-travelled leaders, whose family members were often found in the most important positions in the Church. At Portmahomack, a wealthy monastery with a treasury and scriptorium decided to invest significant resources in the production of a group of highly impressive cross-slabs. Iconographic content, function and location within a defined block of landscape links these. The stimulus for their

creation can only be guess-work but is likely to be a coincidence of highly specific ecclesiastical, political and cultural objectives. Possibilities include marking a significant ecclesiastical event, such as the anniversary of the foundation of the monastery or the death of its saintly founder and confirming an aspect of the relationship between the Portmahomack church and the local elite. The ecclesiastical communities could benefit the souls of the secular patrons, who in return could take satisfaction in dedicating their resources to such a holy work. The result, a bold physical expression of ecclesiastical identity, would distinguish Portmahomack monastery from its ecclesiastical neighbours, adding to the pride of the principal church and its local patrons.⁵⁰

At Hilton itself, the result is that an artistic genius, aware of current, particularly east coast Insular, tastes, created a unique monument, the prime aim of which was to venerate the cross, the central symbol of Christian belief, and illustrate through complex iconography the benefits of Christian belief, such as salvation at the Day of Judgement. Such a creation will have involved much planning. Considerable discussion must have preceded the inception of the project to scope out who was to be involved in the project, what its objectives were, who was responsible for what, what the intended products were to be, and subsequently to agree on the finer details of every stage of production. Its apparent creation as part of a scheme leads us to suggest that the monastery (perhaps the abbot himself) specified, commissioned and directed the work, and his colleagues procured and monitored the sculptors. However, this does not preclude political patronage.

Whether the secular elite influenced the design of cross-slabs is a moot point, and the new art-historical interpretation of Hilton of Cadboll's back-face makes this more unlikely. None the less, hunting scenes do evoke an aristocratic ethos and may have also conveyed general meanings about the relationship of the secular and ecclesiastical powers in the context of the Pictish church as a whole, and the local church in particular.51 And if the Pictish symbols are names (see Chapter 6.2.2), we have to explain whose, why they are included so prominently on such cross-slabs,⁵² and what their relationship with the hunting scenes may have been. The designs of Pictish symbols employed on the Tarbat peninsula are of regional significance, if the surviving distribution of their use is anything to go by, and they are clearly invoking specific and important messages relevant to the local context in the later eighth century, as befits their elaboration (see Chapter

5.4.2). While the Tarbat peninsula monuments were created within a short period of each other, they each bear different combinations of such symbols, and thus by inference they name different individuals. Could these be the names of local aristocrats, ecclesiastics or saints who played a significant part in the life of the local church or helped create this monument?⁵³ If monuments with such symbolism are also in some way political and expressions of ethnic identity, the sculptors played a particularly important role in affirming the Pictish presence in the landscape.⁵⁴

In this non-monetary economy our sculptors were presumably supported.⁵⁵ If we are correct in assuming that there was a close relationship between church and secular powers then joint 'ownership' of such ambitions might be a reflection of the *Realpolitik* in which the church authorities and secular lords provided mutual support and legitimisation for each other. Such co-operations could provide the networks by which well-travelled, high-status artistic metalwork, manuscripts, textiles and ivories came to fill monastic treasuries providing the material that the patron could admire and craftsmen could interpret, synthesise and make their own (see Chapter 5.5).⁵⁶

The production of a sculpture such as Hilton of Cadboll required enormous technical skill (from the procurement and transport of the massive blocks of stone, to their dressing, erection and all stages of carving, including careful layout). It is likely that a patron in Easter Ross, probably the abbot of Portmahomack monastery, commissioned a master sculptor and his team to produce a programme of sculptures that would embellish his monastic estate. Several people would have had a hand in quarrying, transporting, erecting and carving the Hilton of Cadboll cross-slab, but our master sculptor had full control of the design layout, imagery and decoration.⁵⁷ The local secular patrons supported this project, and possibly assisted in some way with resources. Our understanding of how early medieval sculptors worked is poor,⁵⁸ but one suggestion is that such sculptural expertise, including training, developed at key centres as the result of localised patronage. The secular master craftsman and his team were free to move on to undertake work elsewhere once their contract was finished (the sculptures at both Nigg and St Andrews can probably be ascribed to the same sculptor with access to some of the same highstatus models).⁵⁹ In this way sculptors brought their experience and were exposed to new ideas and sources of inspiration, resulting in further inventiveness.⁶⁰

Prehistoric archaeologists increasingly recognise the importance of the act of construction of a monument in terms of the construction of the identity of the community who built, used and lived around it, rather than simply its end-use.⁶¹ Similar processes are likely to have surrounded the production of monumental sculpture, particularly if it took place within the landscape (see below). Its likely intersection with politically motivated patronage and propaganda, as well as the way in which it may have been involved in appropriating pre-existing sacred sites,62 suggests that such processes might also have been contentious and subject to negotiation. We do not know who lived where modern Hilton now is, or how large this community might have been, but we can infer at the very least a series of small farms, tenants who paid dues to the monastery at Portmahomack. Conceivably such dues might have included assistance with construction, such as procuring stone or timber, or helping with building projects. We must wonder, therefore, about their role in quarrying and transporting the stone to where it was carved and erected, and how they engaged with the religious enterprise that had initiated and directed its creation. Our sculptors may have lived for months in and around Hilton, sharing their life with its local residents, whether monks or local farmers. It is interesting to note how late 20thand 21st-century Hilton residents engaged with the sculptor Barry Grove during the carving of his replica.⁶³ Who in the early medieval period looked over the sculptor's shoulder as the designs emerged? Whether or not they understood the multiple levels of meanings underlying the designs, and to what depth, it is likely that the process of carving of the cross-slab would have acquired significance and acted as a focus of social memory and construction of community. Although obviously located in a very different social and cultural context, these processes were certainly at work in relation to the carving of the Hilton of Cadboll replica (Chapter 6.8). Witnessing the process also provided the latter-day inhabitants of Hilton with a sense of revelation and growth as the designs emerged from the block of stone. Many other ethnographic studies attest to the social significance surrounding artistic and technological production and the metaphors of growth and transformation which often surround it.64 For the early medieval context we have little evidence of the precise meanings and processes surrounding the production of monumental sculpture, but such analogies help to open our minds to the social realities associated with such an enterprise.

6.2.6 Hilton of Cadboll to the 12th century

The fate of the Hilton of Cadboll cross-slab between the late eighth and 12th centuries, and any associated activities around it, is inextricably linked to the fortunes and destiny of the monastery at Portmahomack. Since 13th-century sources do not mention a monastery at Portmahomack we can be confident that it no longer existed at this stage; rather, the documentary sources suggest that we would have found a parish church here at this time that served the area including Hilton of Cadboll. Working back in time from this is rather more difficult, for we know nothing about the organisation of the church in ninth- to 12th-century Ross and the ideas we might present for what could have happened to Portmahomack depend on our very shaky understanding of the politics of Ross during these centuries.

There are good grounds for suggesting that an effectively run Pictish kingdom may have encompassed both Easter and Wester Ross.⁶⁵ In the ninth to 12th centuries this was to find itself a frontier zone between the territories of the Gaelic Cenél Loairn dynasty (centred on Moray), the kings of Alba based in the south, and from the Norse who moved in from the north and west following their conquests of Orkney and the Hebrides. The chronology is not known, but it seems likely that the Cenél Loairn dynasty, who came from the south-west, were able to take advantage of the disruption caused by initial Viking attacks to conquer the whole of northern Scotland, including Ross, perhaps by around 870.

The area came under attack from the Vikings from the late ninth century, and by the late 10th to mid-11th centuries the dominion of the earls of Orkney and Caithness extended into Ross, where the woodland resources are thought to have been a particular attraction. During this period the province of Ross was effectively outside the Gaelic power structures that were being brought together to create the kingdom of Alba in the south. Norse place-names in the inland areas of Ross, including several settlement names on the Tarbat peninsula, seem likely to date to the period of the 1040s and 1050s.⁶⁶ The presence of a Viking hoard at Tarbat dating to around 1000 should be noted. The -bol of Cadboll is a *ból*, a 'farmstead' name, but the full derivation of the name is uncertain.⁶⁷

By the 1070s Moray was under the control of the Scottish king, Malcolm III, and it seems likely that he also asserted power in Ross, probably through a provincial governor. But the 12th and 13th centuries

were a period of strife in which it is clear that Alba's authority was contested by native Gaelic lords. This explains the absence of 'Norman' settlement in Ross at this time. However, by 1226 the situation had clearly changed when Alexander II established Ross as part of the Anglo-Norman world through his knighting of Farquhar MacTaggart as the Earl of Ross, an individual who appears to have had very strong associations with St Duthac and his church in Tain, only 14km to the west of Portmahomack.

Of Hilton of Cadboll itself there are of course no documentary sources. The archaeological evidence can be interpreted as suggesting that the cross-slab stood in Setting 1 until such time as it lost its tenon and was re-erected in Setting 2 (possibly after an attempt to re-erect it in Setting 1), just 0.3m to the west, its lower portion acting as the new tenon. Furthermore, if the monument had been erected elsewhere prior to our Setting 1 then this is unlikely to have been very far away. The nature of the fracture would suggest that the breakage was due to natural causes, and the dating evidence suggests emplacement in Setting 2 in the 12th century. We cannot tell how much time elapsed between breakage and re-erection, although the high quality of preservation of the carvings on the lower portion would suggest prompt re-use. We also cannot be sure of the original orientation of the cross-face. In the case of the St Martin's Cross on Iona, the figural face (back) would have been seen by visitors entering the church, its front face pointing east, but if we think of altars, on these the cross would have faced west.⁶⁸ The Shandwick cross-slab apparently survives this period intact and unmoved; the same may well apply to the Nigg cross-slab.69 We can therefore contrast the scene here on the southern parts of the Tarbat peninsula with the north, at Portmahomack, where destruction levels incorporate broken, fresh Pictish sculptures, interpreted by the excavator as the product of ninth-century attacks by pagan Vikings.70 The events observed here are far from simple to interpret. We know that the monastery on Iona and much of its sculpture continued through this difficult period, even if it moved its main religious base to Kells. Not all the fabric of the monastery at Portmahomack was necessarily destroyed at this stage, although that is the excavator's preferred interpretation.⁷¹ One cross-slab had certainly gone before the 12th century (re-used as building stone in the church) and one in the earlier destruction levels. The Ordnance Survey First Edition map of 1872 records the site of a 'Danish Cross', thought to be where a Pictish cross-slab had stood,⁷² and it is

possible that this cross-slab, or its base, had survived until the 18th century. Metalworking continued on the site until about 1000.⁷³

More subtle, local politics might also provide a context for the destruction of sculptures at Portmahomack. The Cenél Loairn may, like their Gaelic neighbours to the south,74 have promoted a particular saint as the evangelist for their territories, for it is suggested that Rosemarkie was adopted to become the main church of St Moluag.75 If Portmahomack was indeed closely associated with Columba, we might wonder how the new secular powers viewed this establishment and its inhabitants, and what impact this might have had, particularly on the fabric of churches and sculptures that were closely associated with particular saintly or political dynasties - destruction, or at the very least, dismantlement? Equally, if the monastery at Portmahomack was to survive in any way into the 11th century, this begs the question of what the impact of the Norse was in this area, and whether they introduced their church here at all.76

The specifics of what happened to Portmahomack and Hilton of Cadboll therefore elude us. What we can see is that the fate of the rich sculptural assemblage attached to the principal church at Portmahomack was quite different from that of its neighbours, including Hilton of Cadboll. It may be that the Norse spared Hilton of Cadboll, Nigg and Shandwick because of the relative unimportance of these sites and their location, or indeed their importance to the local community. But, of course, we have no means of knowing what losses and destructions may have take place at these sites because only Portmahomack has had its church and a significant area beyond this excavated. Such is the context to consider the later medieval biography of the Hilton of Cadboll cross-slab.

6.3 Later medieval Hilton of Cadboll: active later reverence

6.3.1 Active reverence

To quote Sandy Grant, 'speculation is essential when dealing with the early history of Ross',⁷⁷ and our attempts to understand the specifics of any one, small place such as Hilton are nigh on impossible without more extensive excavation. However, we can state with reasonable confidence that the Hilton of Cadboll cross-slab, having lost its original tenon, was re-erected, sometime in the 12th century, where its lower portion

was recovered in 2001. That very considerable efforts must have gone into re-erecting it is indicative of the value that the local community (secular and/or ecclesiastical) placed on this monument, despite the fact that it was 300 years old and damaged. We are unable to establish from the existing archaeological evidence whether or not the erection of the cross-slab in Setting 2 predates the construction of the visible chapel, but the excavator suggests this is likely (see Chapter 3.5), and the slab and chapel are not on quite the same alignment, which might also suggest a disjunction in date. This would therefore suggest that they re-erected the cross-slab close to where it had fallen because this monument was of particular significance in this particular place. This is most probably a reflection of the popular religious veneration still associated with it, as well as its part in helping to shape the personality of the place and its people.

Such demonstrable, active 12th-century reverence for an earlier medieval sculpture is difficult to find in Scotland, but the fact is how can we expect to recognise this? We can list plenty of sculptures which were clearly not revered, being quarried for use as building stone in later medieval churches or, as in the case of the St Andrews Sarcophagus, apparently buried not long after creation,⁷⁸ but recognising ongoing reverence (as opposed to passive tolerance of such monuments) is nigh on impossible unless they are constructed into later structures where they are still visible.⁷⁹ A possible example may be the cross-shafts laid in the basal levels of the west face of the east gable of St Andrews Cathedral, the re-use of which is possibly symbolic.80 We can demonstrate reverence for some early medieval metalwork, notably the personal relics of saints which we find being patched up and/or incorporated within later medieval shrines (eg bells and crosiers), or indeed manuscripts in which important inscriptions, such as land charters, are later recorded. The Bachul Mor (Great Staff, from Lismore), Guthrie Bell Shrine and the Book of Deer are good Scottish examples of this phenomenon, which is better documented in Ireland where kings and abbots are known to have worked hand-in-hand to promote the cults of the saints associated with their territories, such as St Patrick.81

Stone monuments do not readily lend themselves to such physical phasing which, when it does exist, is more to do with loss rather than addition of material, although some reworking, as at Meigle and Cossans, may have been to allow the addition of decorative metalwork.⁸² Likewise, detecting conscious curation, as opposed to passive or benign neglect, is impossible

if we know nothing of the archaeological context, and even then this may not be detectable (consider how we would have been able to interpret Setting 2 if the lower portion had not been there for us to find). We have consciously explored very few locations of *in situ* sculpture to modern standards, 83 and serendipity has not yet furnished us with other examples used in a later context in which they clearly still retained their full monumental qualities.

The types of early medieval objects that we know to have been revered in later medieval times therefore seem to have been those associated with particular saints (such as St Columba's Cathach). And they were the types of things for which there might have been a particular respect for the earlier workmanship ('the work of angels', in Gerald of Wales' felicitous late 12th-century description of an Irish early medieval manuscript). These were also the types of objects that famous churchmen might have made, which could have enhanced their sacred value.84 Clearly a sculpture could not be regarded as a personal effect of a saint, but it, and the place where it was erected, are likely to have been associated with a particular saint. In this way certain categories of sculpture could have come to embody some of the symbolic powers of the saint in question, particularly if they were part of a consciously determined liturgical landscape, as we have suggested for the Tarbat peninsula. The loss of the religious focus at Portmahomack could even have enhanced the religious value of those monuments that had survived, for the local community at least.

Of the designs on the cross-slab, the Pictish symbols were long out of date, in the sense that they do not appear on monuments created later than the late ninth century, and it is guess-work as to whether their original meaning was still understood, or what changed values attached to these designs. The other designs may have seemed old fashioned too, but the Christian symbolism of the cross, and perhaps the iconography of other panels, would be readily apparent. The slab's outstanding scale and workmanship may also have been a source of continuing respect and awe.85 The date of the Marian dedication of the chapel is unknown, including whether this association predates the visible chapel.86 Either way, whether or not the female on the hunting scene was originally intended to be associated with the Virgin Mary (see 5.4.3), this is an interpretation that may well have been applied in later medieval times.

There is no obvious liturgical significance for a chapel being located (6m) to the east of a cross-slab

(or vice versa), although such a general arrangement is known elsewhere.⁸⁷ But we can well imagine how the massive slab would have continued to make a major impact in the local landscape where the presence of a small, simple chapel may have enhanced, rather than diminished, its physical presence.

While we do not know what direction people commonly approached the chapel site from, or whether the orientation of the cross-slab changed between settings, we can say that it is now the crossface that would have been visible from the west, framed by the west gable of the church, and that the form of the cross could have been visible from some distance. Meantime, the symbols and hunting scene would only have been visible to those who walked between the monument and gable-end of the chapel - the significance of these designs appears relegated, perhaps due to dwindling appreciation of their meaning. The significance of this location would be enhanced if the chapel's entrance was in its west gable. (We do not know where the entrance was, but the RCAHMS survey could perhaps be interpreted as indicating an entrance for laity towards the west end of the south wall, and for a priest's entrance towards the east end of the south wall.)

6.3.2 Ecclesiastical and settlement context

As mentioned earlier, Hilton of Cadboll lay in the 12thcentury parish of Tarbat. There was a second parish on the southern end of the Tarbat peninsula based around Nigg.88 Both parishes were assigned to the bishops of Ross in 1227. The cathedral moved from Rosemarkie to Fortrose, a new site in the same parish. By 1274 the vicarage of Tarbat had been granted to the Canons of New Fearn, whose relocated Premonstratensian house, supported by earl and bishop, had lain within the parish since about 1238.89 This is the context in which we might expect the later medieval chapel at Hilton of Cadboll to have functioned, as a pendicle (dependent chapel) served by the vicar from the parish church, or perhaps on occasion by canons from the abbey. Since the chapel is unexcavated we cannot be sure whether it was built before or after the parish's association with Fearn Abbey. Very little of the medieval cemetery has been excavated, but the evidence to date is predominantly for child burial.

The chapel at Hilton is the only visible survivor of a 'comparatively large' number of sacred sites known, or thought, to have been on the Tarbat peninsula in later medieval times, some of which may be associated with

local aristocratic residences.⁹⁰ Of these, only Hilton still has visible medieval remains, although St Mary's, by Cadbollmount (illus 1.2b), was still visible in the mid-19th century.⁹¹ It therefore appears they built a stone chapel at a place of continuing religious significance, 6m away from an earlier monument that they continued to revere. The siting of later churches and chapels apparently reflects the continuing significance of all the earlier monuments of the Tarbat ecclesiastical landscape. In later medieval times Nigg was associated with the bishops of Ross and their demesne lands,⁹² further fuelling speculation that the early medieval foundation here was particularly significant.

The precise status of the chapel at Hilton through time is confused because of the blurry nature of the documentary sources. These do not distinguish which St Mary's Chapel they are talking about (as noted above, there was a second near Cadbollmount, 2.5 km to the north-north-east of the chapel at Hilton, that is thought to be the St Mary's confirmed to Fearn by Pope Clement VII in 1529)93 and they name various Cadboll settlements in the immediate vicinity. Records after 1478 refer to Catboll or Cadboll. Wester Catboll, Catboll-abbot and Catboll-fisher (with further variations on spellings).94 The lands of Cadboll were divided in the 13th century between Fearn Abbey and chaplains serving altars in Elgin at the cathedral kirk of Moray. The question is which of the lands referred to relate to Fearn and which to Moray, and on which does the chapel at Hilton lie (and why is there so much interest in this particular stretch of coast)? Cadboll Castle was certainly on lands held from the chaplains of Moray, and it is suggested that the other three names are designations of a Cadboll belonging to the abbot of Fearn. This division of land seems to have caused long-running disputes about who owned land in Cadboll, as we can see in the 16th- and 17th-century records of The Calendar of Fearn.95 In relation to modern settlement, Balintore is associated on later maps with Abbotshaven,96 and is therefore perhaps Catboll-abbot, while Wester Catboll/ Catboll-fisher seems likely to have been near modern Hilton. Even in medieval times, the settlement here may have had a cliff-top (as the name suggests) and coastal component.97 Geophysical survey conducted by Carver revealed a concentration of features to the north of the chapel which may represent the remains of Catboll-fisher,98 and medieval finds from the chapel excavations certainly suggest that there was some domestic activity not far away. It is reasonable to assume that the chapel was located here because

there was a community whose religious needs had to be provided for.

In terms of understanding the local landscape of the chapel and cross-slab in the later medieval period uncertainties must therefore remain. We do not know how far back in time any of the named Cadboll settlements go, although medieval pottery from the chapel excavations may be at least as early as the 13th century. We also do not know whether the chapel was directly associated with the lands of Wester Catboll/ Catboll-fisher or in fact had a connection with Cadboll itself, where the local lords lived. This affects whether it lay in lands owned by Fearn Abbey or the bishops of Moray. The former seems more likely if the chapel was supported by, and served the needs of, the local community, functioning as a dependent of the parish church at Tarbat; the latter if it fulfilled a proprietorial function. The 1561-6 rental of the Abbey states:

The mylne and otheris landis quhilkis are not sett in few payis as efter followis — . . . Item the fisharis aucht akeris of land, quhilk newer payit ane penny, bot giwin to thaim to dwell upon for furnishing of fishe to the place and cuntrie upon the cuntries expenss.

Local tradition has it that the chapel, which lies on open land now known locally as the 'Park', lies within the eight acres for which dues to the Abbey were exempted.⁹⁹ If correct, this would confirm the association of this area of land with Catboll-fisher. Either way, by 1643, after many transfers of the Abbey's land following the Reformation, the lands of Catboll-fisher became part of the barony of Cadboll, held by the Sinclair family who had earlier acquired the late medieval tower-house at Cadboll,¹⁰⁰ one of nine sub-medieval lordships in Tarbat parish before 1628.¹⁰¹

Only further excavation will be able to tell us if the chapel at Hilton continued in active use as a working chapel until the Reformation. As expected, Fearn Abbey ceased to exist as a working religious house after 1560 though it continued to act as a landholding corporation (see discussion in next section). Whatever the use of the chapel, the Hilton of Cadboll cross-slab stood beside it up to and beyond the Reformation. The altered meanings that attached to the designs on the cross-slab during the later medieval period must remain a matter of speculation. Our only detailed and direct indication of how the sculpture's content might have been viewed is to be inferred from the damage apparently meted out to its cross-face during the 16th-century Reformation.

FOR HATE EVES VEIL DOOES SAYE THIS OLOMONITE VYSE HEIR LYES A LEXANDERDY AND HIS THEFT



6.4 An act of Reformation? Defacement and re-use in the 16th and 17th centuries

During the early modern period the Hilton of Cadboll cross-slab was fundamentally altered, materially and socially, by a series of events resulting in its physical transformation and fragmentation. In his *Scenes and Legends of the North of Scotland*, Hugh Miller (see Chapter 2 and 6.5 below), offered a scathing retrospective account of the fate that befell the cross-slab:

The obelisk at Hilton, though perhaps the most elegant of its class in Scotland, is less known than any of the other two [Shandwick and Nigg], and it has fared more hardly. For, about two centuries ago, it was taken down by some barbarous mason of Ross, who converted it into a tombstone, and erasing the mysterious hieroglyphics of one of the sides, engraved on the place which they had occupied a rude shield and label, and the following laughable inscription; no bad specimen, bye the bye, of the taste and judgement which could destroy so interesting a monument [...]

He that lives weil dyes weil sayes solomon the wise heir lyes alexander duff and his thrie wives $[1676]^{103}$

As can be seen, the upper portion of the Hilton of Cadboll cross-slab stands testimony to this physical transformation. The back face has been re-dressed and inscribed with the following inscription: 'VEIL/HE THATLEIVES VEILDOOES/SAYETHSOLOMON THE VYSE/HEIR LYES ALEXANDER DVF AND HIS THREE WYVES 1676' (illus 6.1). Beneath the inscription is a quartered coat of arms flanked by letters (A DVF/KS/CV/HV), which represent the name of Alexander Duff and the initials of his wives. 104 Faced with this physical evidence, many have assumed, as Miller does, that the felling, defacement, re-dressing and inscription of the monument were all part of a single event carried out by Duff's 'barbarous mason'. 105 Furthermore, these actions have often been judged by later standards and condemned as representing vulgar taste and judgement and/or a crude utilitarianism. 106 As we shall see, however, Duff's actions were by no means out of keeping with those of his contemporaries. Rather than simply a poor act of taste and judgement

Illustration 6.1
Duff inscription and coat of arms (© Trustees of the National Museums of Scotland)

his appropriation of the cross-slab was informed by shifts in religious doctrine, which resulted in changes in the significance of medieval sculpture, as well as changing forms of burial and memorialisation.

The archaeological research carried out in 2001 reveals that the events surrounding the cross-slab during this period were more complex than previously thought and probably involved two or three separate incidents, rather than a single act of re-use. As discussed above, the Premonstratensian Abbey at Fearn had ceased working as a religious house after 1560, but it is unclear at what point the pendicle chapel at Hilton declined and went out of use, or precisely how it related to the Abbey. As regards the cross-slab, archaeological evidence suggests that there were three phases of activity dating to some time in the 16th and/ or 17th centuries. 107 First, there was an unsuccessful attempt to dig up the cross-slab up, as evidenced by a pit cut down alongside its western face.¹⁰⁸ This was followed by some selective defacement of the crossface whilst the cross-slab remained upright resulting in a distinct concentration of fragments around the base and within the pit. This activity has been dated to the late 16th century using the OSL dating technique (Chapter 7.3.2). Finally, after the cross-slab had broken across its body and the upper portion had fallen in the direction of the chapel onto its back-face, the entire cross-face was re-dressed and the burial memorial inscribed. Whether the cross-slab had been deliberately broken off/chopped down, leaving the lower portion in the ground, or whether it had broken due to natural causes was initially unclear. However, subsequent expert examination of the fracture suggests that it snapped under pressure and is thus consistent with a natural breakage. 109 Furthermore, the serendipitous discovery of a letter¹¹⁰ from Sir George MacKenzie (later Viscount Tarbat and 1st Earl of Cromarty) to Mr James Gregory, Professor of Mathematics at the University of Edinburgh, dated 16th January 1675, suggests natural causes. Reporting that 'the wind here on 21 December last [1674], was extraordinary' he goes on to note that

it broke a standard-stone that stood as an obelisk near an old church it was high about 12 foot, broad 5 and towards two foot thick whole woods are overturned and torn from the root, albeit in a low situation it blew from northwest and of a long time the wind had continued westerly.¹¹¹

The letter goes on to discuss equipment for studying wind and unfortunately does not provide any further information as to the identity of the obelisk concerned. Nevertheless, the dimensions provided, the context, the location, and the date, suggest that it probably was the Hilton of Cadboll cross-slab. 112 There would be few obelisks of similar dimensions in the area that would have stood near an old church and the timing of the event just a year or so before the date of Duff's inscription strongly supports such an interpretation.

The new archaeological and documentary evidence has important implications. It suggests that Duff did not have the monument taken down for the purposes of re-use as a burial memorial; rather he appropriated a prostrate and already damaged piece of sculpture. It also suggests that the activities surrounding the crossslab whilst it remained upright, the excavation of the pit and the first phase of defacement, may possibly have been discrete events. Thus, someone other than Duff may have taken an active interest in the monument prior to the storm damage of 1674. This may have been in the same year, but may also have been considerably earlier, perhaps in the late 16th or early 17th centuries if the OSL date is reliable. 113 The significance of these events surrounding the monument, and the question of how interconnected they all were, will be discussed in more detail below. Furthermore, the question of who Alexander Duff and his three wives were, why they might have selected the monument as a burial memorial, and where they were ultimately buried, will be explored. First, however, it is important to examine the wider social and historical contexts which might have informed the abandonment of the chapel and the appropriation of the cross-slab as a personal memorial; one that involved the removal of its most sacred religious symbol, the cross.

The early modern period saw radical changes in religious doctrine and practice associated with the Reformation, which spread across central and northwestern Europe during the 16th century. Crystallised by Martin Luther's protest in 1517, the Protestant religious movement emerged, marking a split with Rome and the beginnings of a long-running conflict with Catholicism. To reform the church it was deemed necessary to dismantle its liturgical and physical structure, which was manifested in a wealth of ecclesiastical art and architecture.114 This was justified in part by adopting a more literal interpretation of the biblical prohibition on images¹¹⁵ resulting in varying degrees of iconoclasm, although not all branches of the reformed church rejected imagery outright. Thus, as Moreland points out, images such as the cross, which had been regarded as sacred in the Middle Ages,

imbued with the power to counteract evil and facilitate salvation of the soul, became regarded, by some at least, as objects of idolatry and superstition which needed to be destroyed or desacralised and put to profane use. 116

The degree to which Protestantism took hold, and the forms of material destruction associated with it, varied between countries and within them. In Scotland, the crisis of the Reformation is usually associated with the events of 1559-60, but Lutheran influence was evident from the 1520s and 'reforms' went on throughout the later 16th and into the early 17th century. Iconoclasm was widespread around the crisis, with a further wave associated with the Covenanting movement of the 1630s and 1640s.¹¹⁷ Religious houses were 'cleansed' through acts of destruction against altars, pictures, statues, books, tombs and windows, and in some cases the very fabric of the buildings was 'cast down'. 118 However, support for Protestant reforms, including destruction of idolatrous images, was underpinned as much by political and economic interests as religious beliefs. 119 Furthermore, the popular response was complex and ambiguous with inconsistent and irregular stances being adopted in terms of both belief and practice within communities and even by particular individuals.¹²⁰ As a result, the impact of the Reformation on the material and visual culture of the church in Scotland was varied and complex. Rather than outright destruction and abandonment, many religious buildings, objects and images underwent complex processes of re-use involving the reconfiguration of their religious significance. 121

Where early medieval sculpture remained an important component of late medieval ecclesiastical material culture it is more than likely that its future would have been affected in one way or another by the Reformation. In England there are some wellcharted examples of deliberate iconoclasm, such as the 13th-century Cheapside Cross in London¹²² and the eighth-/ninth-century Bradbourne Cross in Derbyshire. 123 In Scotland, the Ruthwell cross provides a well-documented case. The latter was the focus of a late phase of iconoclasm following the expressed concerns of the Aberdeen Assembly in 1640 that many idolatrous monuments erected and made for religious worship were still extant.124 Within two years the Assembly at St Andrews passed an 'Act anent Idolotrous Monuments at Ruthwell' which recommended that the Presbytery 'carefully urge the order prescrived by the Acts of Parliament anent the abolishing of these monuments, to be put to execution'. The cross was pulled down and broken, the upper portion being

re-used for church seating, while the middle fragments including the cross were disposed of under table tombstones in the kirkyard. 126 A few other examples have been also been acknowledged as possible cases of iconoclasm on the basis that they display deliberate and considered damage to Christian iconography. These include the Woodwrae cross-slab, 127 where the cross was selectively chiselled off, the Nigg cross-slab, where low relief carving probably depicting scriptural figures has been damaged by someone using a blunt instrument, 128 and the Elgin cross-slab where the head of a figure, possibly that of Christ, has been removed. 129 The fact that there are not more relatively clear-cut examples surviving may well be due to either wholesale destruction in some cases, or, more commonly, the difficulties of determining the historical and cultural contexts in which damage and re-use took place. 130 It is worth highlighting that were it not for the historical records pertaining to the Ruthwell Cross it is unlikely that the fragmentation and re-use of this monument would be interpreted as post-Reformation iconoclasm. Similar forms of damage and fragmentation, involving crude defacement of aspects of the cross-head, or breaks across the cross-shaft, evidenced in some of the St Vigeans and Meigle sculptured stones may also result from Reformation destruction.¹³¹ Thus, we have to bear in mind that many more crosses and cross-slabs may have experienced deliberate damage, only to be subsequently obscured by re-use and loss.¹³²

It would be a mistake, however, to associate the impact of the Reformation on early medieval sculpture simply with explicit acts of iconoclasm. Whilst some forms of re-use may have been more strongly influenced by economic and utilitarian concerns than others, it is unlikely that those dating to the 16th and 17th centuries were ever entirely devoid of symbolic significance relating to religious doctrine. 133 Even the act of dismantling a religious building for re-use in profane contexts, such as the construction of roads or domestic buildings, would have had a profound significance in terms of the desacralisation of the material and negation of its sacred power. Furthermore, re-use in religious contexts would also have involved shifts in the symbolic significance of objects and buildings. Tarlow has emphasised the complexity of re-use and transformation of religious objects, focusing on how the meaning of crosses and relics was often transformed in a way which built on and re-interpreted older meanings and structures. 134

One aspect of the post-Reformation re-use of crosses and cross-slabs that is particularly relevant here is their

appropriation as personal grave-slabs and headstones. In 1581 the reformed church in Scotland forbade burial inside of churches. 135 To begin with, the wealthy negotiated this prohibition by using disused churches and abbeys for burial, 136 or building burial chambers in kirkyards.¹³⁷ From the mid-17th century, however, it became commonplace for monumental grave-slabs and headstones to be erected, 138 and, in some instances, earlier monumental sculpture was appropriated for this purpose. A 15th-century cross-slab in Kirkwall Cathedral was re-used in the 17th century as a personal burial memorial following modification of the cross and the addition of an inscription.¹³⁹ A substantial proportion of the extant early medieval slabs (but not hogbacks) at Govan were re-used for personal funerary monuments between 1634 and 1807.140 At Whithorn Priory churchyard a mutilated cross-shaft was inscribed in modern script with the initials A.M. (nd) within a small rectangular recess cut into the inter-laced work.¹⁴¹ In Argyll and Bute both early and later medieval sculptures were frequently re-used as later gravestones: Kilmartin is the classic site, with over 20 examples of re-use of later medieval slabs, but examples of re-use, sometimes undated, are found elsewhere, as at Kingarth on Bute. 142 Finally, closer to Hilton of Cadboll in north-east Scotland, there are two other isolated examples. The Reay cross-slab was appropriated in the 18th century and used as the burial slab for Robert McKay,143 and at Golspie, in Sutherland, a large ogham-inscribed cross-slab, now located in Dunrobin Castle Museum, was re-used as a burial memorial probably sometime in the 17th century.¹⁴⁴ In this case, the edge of the cross-face was dressed off and replaced with the following inscription: 'HEIR IS THE BURIAL PLEAC [sic] TO ROBERT GORDON ELDEST SON TO ALEX GORDON OF SUTHE[RLAND]'.145

Like purpose-made 17th-century burial memorials, the inscriptions applied to these earlier pieces of monumental sculpture are brief and often consist simply of the initials of the deceased sometimes with the addition of a date. These tend to be crudely incised in Roman capitals of a classical style resurrected during the Renaissance. For instance, at Govan most of the inscriptions applied to cross-slabs and recumbent slabs in the 17th and 18th centuries simply consist of initials, a few also have dates, and a small number have the full name of the deceased (or in one instance a place, 'Belliy Houstons') spelled out. In one case, a cross-slab (no 7) seems to have been re-used twice, first by someone called R.D and later by Will Bogle. At Whithorn

the cross-shaft was also simply inscribed, in this case with initials alone. Others include longer inscriptions, such as those cited above for the Golspie cross-slab and Hilton of Cadboll. Hilton of Cadboll is the only re-used example to include a heraldic device, although this is not inconsistent with purpose-made headstones and grave-slabs. In contrast with other sepulchral monuments of the 16th-18th centuries, however, the re-used early medieval and medieval sculpture do not appear to include emblems of mortality, immortality, trade, or symbolic scenes. This may be because the iconography of the early medieval sculpture has been deliberately selected to provide a different kind of symbolic statement.

Their suitability in terms of form, and their ready availability, probably played a role in the appropriation of early medieval sculptured stones for burial memorials, as quarrying fresh stone of similar dimensions would be a costly and time-consuming task. Nevertheless, utilitarian concerns are unlikely to have been the only factors, or indeed the chief ones, in the production of monuments so intricately tied to the negotiation of personal identity and status.¹⁴⁸ Indeed, it has been argued that the families who chose to re-use the recumbent and upright cross-slabs at Govan were landowners who used the iconography of the earlier sculpture to construct a connection between themselves and Govan's past – a symbolic expression of their right to their estates. 149 Such appropriation of the material and visual culture of the early medieval church would have had to be negotiated with care in the context of the Reformed church, and a wide range of strategies is evident. A few examples appear to utilise or respect the pre-existing iconography in terms of the layout of the modern inscription.¹⁵⁰ However, many show little respect for the underlying design, simply superimposing the modern inscription over the cross-face, and some suggest greater irreverence by partially or completely removing the pre-existing design, 151 or placing the modern inscription the opposite way up. 152 Some of these strategies no doubt served to transform the kinds of iconography that could have been associated with idolatry into more or less acceptable Protestant burial memorials.¹⁵³ However, they clearly demonstrate a range of individual responses, and whilst they all suggest a desire on behalf of the deceased or his/her family to create an explicit link with the past, the nature of this link and the manner in which it was expressed no doubt varied according to the specific contexts and stances of the individuals involved.

Developments surrounding the Hilton of Cadboll cross-slab thus took place against a background of religious reform associated with a range of strategies for engaging with the material and visual culture of the church. In the north of Scotland, the impact of the Reformation has often been assumed to be minimal and barely worthy of discussion in histories of the Reformation.¹⁵⁴ However, as Kirk points out in his analysis of the church in the Highlands following the Reformation, this is partly a product of the dearth of adequate historical evidence, which is particularly acute for this period. 155 In the ecclesiastical centres of the Highlands (cathedral cities, abbeys and college kirks), located in the lower lying areas, the language and customs of the Scottish Lowlands often prevailed. Furthermore, those who held important religious offices, such as bishops, abbots and commendators, were ambitious men fully conversant with political and religious life in the Lowlands. Many were involved in the suppression of heresies in the first half of the 16th century, and by the middle of the century some became advocates of Protestantism, as did many powerful landowners. There is no doubt that, in these respects at least, the Reformation had an impact in the far north-east in the dioceses of Ross and Caithness. 156 In Caithness the reforming bishop, Robert Stewart, championed the Protestant cause, and, although the diocese of Ross saw a succession of Bishops who remained loyal to Rome in the 1560s, the Provost of Tain and Commendator of Fearn Abbey, Nicholas Ross, took part in the provincial church council of 1549 and attended the Reformation Parliament of 1560.157 The latter is often said to have been motivated by economic and political interests and his religious position remains unclear, but a strategic ambivalence was by no means unusual at the time. Furthermore, one of the most powerful Easter Ross lairds, Robert Munro of Foulis, also attended the Reformation Parliament of 1560 and played an active role in promoting reform in the area. During the crisis of the Reformation, ecclesiastical visual and material culture in the region was perceived to be under threat. For instance, the Dominican house in Inverness handed over silverwork and vestments to the provost and bailies for safe-keeping, and the major relics of St Duthac's in Tain were placed under the protection of the Laird of Balnagowne. 158 Finally, despite a policy of gradual change based primarily on filling vacant positions with protestant ministers, exhorters and readers, Kirk argues that 'within a remarkably short interval, the kirk had more or less achieved the startling

distinction of having a presence in most mainland parishes in the Highlands'. ¹⁵⁹ In Ross, within a decade of the Reformation, this amounted to three ministers and 19 exhorters and readers, distributed across its 35 parishes. Some of these clearly had a presence in the Easter Ross area with the Bishop of Ross, Henry Sinclair, providing £50 per year for 'the prechar of the kirkis of Nyg and Terbat'. ¹⁶⁰ Furthermore, at one point the vicar of Alness and Nigg was also John Davidson, the reforming principal of Glasgow University. ¹⁶¹

Thus, Tarbat parish, Fearn Abbey, the Hilton of Cadboll chapel, and the cross-slab itself, were by no means isolated from the impact of the Reformation. As we have seen in Chapter 6.3, the Abbey was in decline from the early 16th century onwards. By the 1550s Ross of Balnagown had acquired a large section of the monastic lands and had a kinsman, Nicholas Ross, appointed abbot. Four to five canons probably remained living at Fearn after the crisis of the Reformation, but there would have been no new recruits and protestant reform would have been felt in the area from the 1560s onwards. The Abbey would have become increasingly secularised and was eventually granted in feu to Patrick Murray of Geanies in 1598, being subsequently annexed to the bishopric of Ross in 1609.162 It is not clear at precisely what date the Hilton of Cadboll chapel went out of use. The excavations uncovered evidence for the collapse of part of the west gable wall, but this particular incidence was probably of a later date (Chapter 3.4). Whether or not the chapel was in a ruinous state, it appears that the Hilton of Cadboll cross-slab was still standing at the site until 1674, if we accept that George MacKenzie's letter refers to its toppling in a winter storm that year. How then might the events surrounding the Hilton of Cadboll chapel site and the cross-slab before and after this event be interpreted?

It could be argued that the cross-slab gradually became desacralised up until the point when it fell as a result of natural causes, transforming the upper portion into a suitably sized slab that could be reworked to create a monumental grave-slab for someone of pretensions, in the fashion of the day. However, it has been argued above that the re-use of such material culture was unlikely to have been devoid of symbolic significance relating to religious doctrine. Given that the cross-slab displayed explicit Christian iconography and was located at a medieval chapel, there is little doubt that it would have been associated with the Catholic Church in the context of the Reformation. Moreover, the archaeological evidence suggests that the situation was

more complicated. It is clear that someone tried to dig down alongside its cross-face whilst it was still standing in the second setting. Furthermore, the fragment distribution analysis suggests that subsequently some of the fragments were removed from the cross-face again whilst the monument was still upright in the ground. The cross-slab then broke and fell probably as a result of natural causes in 1674 and subsequently the rest of the cross-face was dressed off and the burial memorial inscribed. The likelihood that the crossslab broke as a result of natural causes, suggests that the earlier activities were probably discrete incidents, rather than a linked sequence carried out by Duff's mason. Furthermore the late-16th-century OSL date associated with this initial defacement suggests it may have been up to a century earlier (Chapter 7.3.2).

If there were previous attempts to dig up and deface the monument we will probably never know who was involved or what their motives might have been. However, in light of broader social and historical contexts discussed above a range of possibilities can be considered. Whoever dug the pit may have been trying to excavate the monument in its entirety; perhaps in an attempt to remove it due to its idolatrous connotations, perhaps to appropriate it for another purpose as Duff was to do later, or perhaps even to protect it from iconoclasm by removing it or burying it, as was the case with more portable sacred objects. It is even possible that whoever dug the pit was not trying to dig it up at all, but merely seeking something they thought might be buried at its base. The subsequent removal of some of the cross-face whilst the monument remained upright could have been the result of natural causes; frost action and or storm damage leading to lamination of the surface. However, the presence of tool marks on many of these fragments suggests otherwise, and if they were removed by human agency then the possibility that they were knocked off as an act of iconoclasm involving deliberate and selective damage to the cross cannot be discounted. Whatever the case, the activities surrounding the cross-slab cannot be divorced from the Reformation in general and the decline and secularisation of the chapel site in particular. We have seen above that, whether or not objects of prior sacred significance were the victims of outright iconoclasm, their re-use and appropriation would have involved a change in their significance and possibly an active desacralisation.

To some degree these points also apply to Alexander Duff's appropriation of the upper portion of the crossslab in 1676. Although over a century had passed since the crisis of the Reformation, reform movements continued into the 17th century, not least of which are those associated with the Covenanting movement of the 1630s and 40s which led to a further wave of iconoclasm. Furthermore, we have seen that the Ruthwell cross was declared an idolatrous monument and destroyed as late as 1642. But who was Alexander Duff and what kind of perspectives and motives might have influenced his decision to turn the Hilton of Cadboll cross-slab into a burial memorial? We do not know when he was born and whilst it might be assumed that he died in 1676, the date inscribed on his burial memorial, a writ in the Calendar of Writs of Munro of Foulis refers to assignations carried out by Duff and his then wife in 1686, suggesting, if the manuscript and its reading are correct, that he was still alive 10 years on. 163 Preparing a gravestone in advance was not uncommon. It has been possible to identify two of his three wives, who are only referred to by their initials (KS/CV/HV) on the Hilton of Cadboll slab. CV refers to 'Crestane [Christian] Urquhart spouse to Alexander Duff and daughter to Alexander Urquhart of St Martins', who according to The Calendar of Fearn died on 2 September 1660 and was buried at Fearn on the 4 September.¹⁶⁴ HV, Duff's third wife, was Helen Urguhart, daughter of Thomas Urguhart of Kinbeachie, and widow of Hector Munro of Findon, 165 as well as Duncan Bayne of Delny, 166 prior to marrying Alexander Duff.¹⁶⁷ Campell-Kease's analysis of the coat of arms carved beneath the burial inscription complements this information, for the buck's head in the first quarter is a common emblem of the Duff clan in north-east Scotland and the three couped animal heads (possibly boars) in the third and fourth quarters are plausibly emblems of the Urquharts.¹⁶⁸ The coat of KS shown in the second quarter is not known to be that of any family. However, it shows a sinister hand issuing from dexter holding a banner. Since the chief of Scrymgeour was and still is Hereditary Bannerman of Scotland, this suggests she may be of this family. 169 According to Alex Maxwell Findlater, 170 the method of marshalling the four family quarters here is unusual, even novel, and at variance with the rules. Comparing Duff's armorial to that for the Duffs of Braco, he suggests it is probable that Alexander Duff was a member of the 'old' Duff family of the north-east.

Alexander Duff resided in the vicinity of Cadboll and acted as chamberlain to Lady Mey, wife of the 4th Laird of Mey, Sir James Sinclair.¹⁷¹ Earlier generations of the Sinclairs of Mey had been entangled in Reformation politics. Sir James' great-grandfather,

the 4th Earl of Caithness, was branded a papist by John Knox, whereas his grandfather, George Sinclair 2nd of Mey, entered the Reformed ministry at Rogart, prior to becoming Treasurer of Caithness in 1572. 172 At this point in time Duff was not a common name in this area, and it may be that Alexander was a descendant of Donald Duf who is mentioned in 1565 in the context of the Innes family who then occupied Cadboll Castle.¹⁷³ The Sinclair family acquired Cadboll in 1585, and by 1644 Sir James Sinclair was the largest landholder in Fearn parish, with additional lands in the parishes of Tarbat, Tain and Kincardine. Thus, Duff would have enjoyed reasonably high status, occupying an important office as chamberlain to the Cadboll Estate, and employed by one of the most powerful landowning families in the area. 174 This would explain his pretensions regarding his status, which are clearly signalled by the use of both an epitaph and a heraldic shield on the upper portion. Duff's epitaph 'He that lives well dies/does well, sayeth Solomon the wise. Here lies Alexander Duff and his three wives' also signals a strong Protestant faith. Although its source is unknown, such memorials, stressing the quality of an individual's life, became particularly important in the context of Reformation theology where, in the absence of a concept of purgatory, the fate of an individual on death depended on their virtue in life.175 The use of verse on gravestones is also apparent at St Regulus in Cromarty at around the same time. Here gravestones were apparently being used to reinforce the new social order, as well as being recognised as a form of 'public art'.176

How then can Duff's attempt to appropriate a piece of early medieval sculpture bearing what could have been regarded as Catholic iconography be interpreted? The storm of 1674 no doubt triggered an opportunistic appropriation of what seemed a very suitable piece of stone for a burial memorial, which lay on his employer's land. He may also have been influenced by knowledge of other examples of similar re-use, such as the Golspie cross-slab, which was re-used by Robert Gordon of Sutherland. 177 Even if he was not, the post-Reformation use of grave-slabs and headstones as an index of social position would have rendered the monumental Hilton of Cadboll cross-slab an enticing prospect. In his epigraphic analysis of the Duff inscription, Thomson argues that the crudely executed lettering should be classed as vernacular rather than formal in style, indicating that the mason had limited training or was only employed in masonry part-time.¹⁷⁸ However, even though Duff did not have access to the kind of skilled masonry evident on memorial inscriptions in more southerly urban areas such as Perth, Dundee, Edinburgh and Glasgow, he clearly had pretensions in that direction and the use of a heraldic shield indicates his concern to secure and legitimise his status. His desire to communicate his pedigree suggests a certain anxiety or insecurity at a time when Scotland was facing challenges to its traditional religious, political and constitutional values.¹⁷⁹ He may also have seen such a monument as a means to reinforce his status through the creation of a connection with the past, as suggested for the Govan examples.¹⁸⁰

However, Duff's re-use of the monument is far from straightforward. It differs significantly from other examples in the north-east and elsewhere in that his mason completely removed the early medieval design from the cross-face prior to carving the modern inscription. This may be simply because, in contrast to other examples, the cross-face was already badly damaged as a result of earlier human activity. Equally, though, given its history and iconography, it is possible that the Hilton of Cadboll cross-slab was a problematic choice for Duff. Certainly its potential to be regarded as an idolatrous object could not have passed someone like Duff by. Indeed, as indicated above, Duff's chosen epitaph expresses strong protestant overtones, stressing the moral virtue of his life in the face of death. Thus, Duff probably found himself in a compromising and ambivalent position, desirous of a monumental stone of some antiquity to emphasise and legitimise his status, whilst at the same time troubled by its historical associations. He, or his family, may consequently have felt compelled to have the entire cross-face erased, leaving evidence of its antiquity (in the form of the iconography on the surviving back-face) hidden from view once it was in use as a horizontal grave-slab, or as a parietal memorial.¹⁸¹

Yet, whether or not the cross-slab was ultimately used to mark the burial site of Duff and his wives remains open to question. What is clear is that the cross-slab remained at the Hilton of Cadboll chapel site¹⁸² and was not taken to Fearn Abbey, which had become the parish church and main burial ground. Given that the burial inscription was left intact facing upwards, it could be argued that Duff and his wives were actually buried at Hilton of Cadboll Chapel. Such an act would have been strange for someone of Duff's status, for the chapel is unlikely to have been used as a sanctioned place of worship at this time. Thus, if Duff and his wives were buried there, it could raise questions about his social standing or his religious

affiliation; we know, for instance, that there was a warrant of apprehension issued against him in 1665 for non-payment of dues. Alternatively, if they were buried at Hilton of Cadboll perhaps it was a deliberate statement on his behalf, asserting an historical family tie to the land around Hilton of Cadboll and what may have been seen as a family chapel. However, the archaeological excavations did not produce strong evidence in the form of skeletal remains to support the theory that Duff and his wives were buried at the chapel site. It would also seem strange that he was buried outside the chapel walls, as people who chose to be buried in ruined ecclesiastical buildings at this time often did so in order that the building itself could act as some kind of burial aisle or vault.

It seems more likely therefore that Duff and his wives were buried at Fearn Parish Church.¹⁸⁵ Taylor and Taylor cite an inscription to Duff, which they allege is at Fearn. The inscription quoted is similar, but not identical, to that at Hilton of Cadboll: 'Live well and die well, said Solomon the Wise, Here lies Alexander Duff and his three wives.' The Calendar of Fearn also states that one of his wives, Christian Urquhart, was buried at there in 1660.186 It has not been possible to locate her grave or that of Duff and his other wives, but perhaps this is not surprising given the poor state of preservation of the 17th- and 18th-century memorials. If we accept that they were buried at Fearn Church then the abandonment of the upper portion at the chapel site may have been due to the logistics of moving it. 187 Another possibility though is that the decision was influenced by the ambiguity of such a monument at a time when religious reforms and attitudes to religious iconography were still in flux and subject to negotiation. If Duff did live for at least a decade after 1676 then perhaps, he, his family, or even the Sinclairs of Mey, had misgivings about what the appropriation of such a monument as one's personal burial memorial would communicate to others. 188

6.5 A 'remarkable ruin': new ways of seeing and engaging with the Hilton of Cadboll slab in the modern era

A little more than a century after Duff's attempt to re-use it, the Hilton of Cadboll slab was rediscovered by antiquarians and travel writers who portrayed a very different set of attitudes towards it. These new attitudes altered the meanings attached to the monument, and contributed to its reconfiguration as a source of historical evidence, an object of aesthetic

A FRAGMENTED MASTERPIECE

value (see also Chapter 2.1), and an important piece of national patrimony. We shall return to these wider aspects of the biography of the monument and its changing significance below. First though it is important to consider what early antiquarians and traveller writers tell us about the physical location, context, and condition of the upper portion between the late 18th and the mid-19th century when it was taken to Invergordon Castle (see Chapter 6.6).

The first two accounts, dating to the 1780s, are provided by the Reverend Charles Cordiner, an antiquarian travel writer from Banff, in his two books, *Antiquities and Scenery of the North of Scotland* and *Remarkable Ruins and Romantic Prospects of North Britain*. From Cordiner we learn that

On a green plain near the beach, about two miles north from Sandwick, under the brow of the hill, on which the seat of Mr. McLeod, of Catbol, is situated; lies another very splendid monument, near to the ruins of a chapel, which was in early age dedicated to the Virgin Mary. 189

The upper portion was lying on its back face with Duff's inscription facing upwards, probably where he abandoned it a century earlier. Yet, the landowner, Macleod of Cadboll, clearly thought it worthy of Cordiner's attention, conducting him to the site, as well as to 'several fragments of other obelisks lying on Tarbetness'. Furthermore, Cordiner's account suggests that Macleod took a degree of care over such historic sites, noting that 'the proprietor, from veneration of the consecrated ground, has enclosed it with some rows of trees'.

However, Cordiner's two books provide little further information about the specific condition of the upper portion and its local context. He notes in reference to Shandwick and Hilton of Cadboll that 'these monuments are all said to have been erected in memory of defeats of the Danes', but it is not clear whether he is referring to a local source or merely the arguments of other antiquarian writers such as Gordon and Pennant. ¹⁹¹ Unable to find evidence for such an historical event amongst the 'hieroglyphics' on the monuments to hand, Cordiner instead eulogises about their aesthetic qualities and the great skill of those who carved them. Even the illustration included in *Remarkable Ruins* lacks the precision and detail needed



Illustration 6.2

The Reverend Charles Cordiner's drawing of the Hilton of Cadboll cross-slab (Cordiner 1788, title page, by permission of University of Glasgow Library, Archives & Special Collections)

to evaluate the condition of the upper portion and its immediate surroundings at this time (illus 6.2).

Following Cordiner, the next account of the antiquities of the area is provided by the *Statistical Account*, published between 1791 and 1799. Here the Reverend Alexander Macadam of Nigg Parish discusses the 'obelisks' of Shandwick and Nigg, noting that the former is said to have been erected in memory of three sons of the King of Denmark shipwrecked nearby and 'buried where the obelisk stands'. However, Macadam makes no reference to the Hilton of Cadboll monument in this respect and his counterpart, the Reverend John Urquhart of Fearn Parish, is either unaware of its existence or deems it

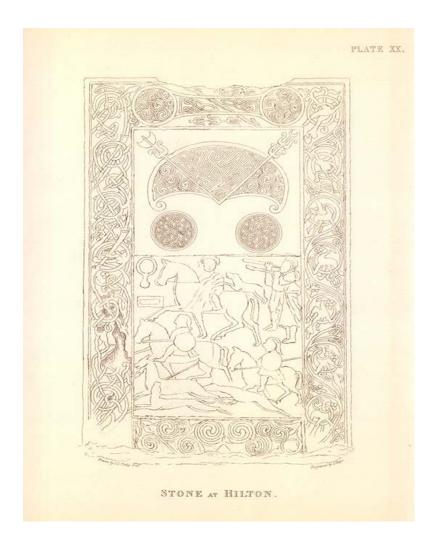


Illustration 6.3
Charles Carter Petley's drawing of the Hilton of Cadboll cross-slab in 1811/12.
(Petley 1857, plate XX)

insignificant in comparison to Fearn Abbey, and the parish's castles. Thus the next record of the Hilton of Cadboll slab is provided some 30 years after Cordiner by the antiquarian Charles Carter Petley who offers a more detailed and scholarly account based on two visits in 1811 and 1812. An account of Petley's findings was not read to the Society of Antiquaries of Scotland until 1831, and it was not until a quarter of a century later that this was published along with his etchings in *Archaeologia Scotica* in 1857. Nevertheless, despite the delay in publication his paper sheds important light on

the Hilton of Cadboll cross-slab at the time of his fieldwork.

Although Cordiner must have had the upper portion turned over in order to describe and illustrate the original sculpture, Petley found it lying once again on its back face at the west side of the chapel, 'a few hundred yards from the sea-shore'. 194 In contrast to Cordiner who discusses the sculptured stones in the context of a wider travel narrative, the stones are Petley's sole concern, and his aim is to describe and illustrate them, along with associated local traditions. The series of etchings which he produced of the Shandwick, Nigg, Hilton of Cadboll and Edderton cross-slabs are not without errors, but they are considerably more accurate than those of Cordiner. Furthermore, the separate detailed etchings based on wax casts provide an important record for Hilton of Cadboll,195 preserving information about parts of the design that were subsequently damaged by weathering. The illustrations suggest that the upper portion was in a relatively good state of preservation in 1811/12 (illus 6.3 & 6.4), with only two areas significantly affected by weathering; one along the top edge above the double disc and Z-rod, the other down the left hand side of the vine-scroll adjacent to the hunting scene.

Petley devotes a similar degree of care and attention to the local traditions surrounding the early medieval sculpture of the Easter Ross peninsula. He is the only antiquarian to record the Gaelic names attached to the chapel and

monument locally. The Hilton of Cadboll chapel is referred to as the 'chapel of *Mhuor*' meaning Our Lady's Chapel, whereas the term '*Bardvour*', translating directly as Our Lady's Park or Field, is directly applied to 'the stone near Hilton'. Although it might thus appear that *Bardvour* has been incorrectly used by Petley, it is possible that the monument was referred to as 'the stone of Our Lady's Park' in a similar fashion to the Shandwick cross-slab, which was known in Gaelic as '*Clach a Charridh*', the stone of the burial ground. 197

A FRAGMENTED MASTERPIECE

Petley also provides the only detailed study of the King's Sons folk narrative first outlined in the Statistical Account for Nigg Parish. Different variants are discussed and his favoured version of the folk narrative is recounted as follows:

A daughter of one of the Kings of Lochlin was married to a chief of this country. One day after dinner, in the presence of a large company, the husband (said to be an ancestor of the Balnagown family [Rosses of Balnagown]) being displeased, gave her a slap on the face. She, in return, replied, that if her nine brothers were present, he would not dare treat her so. She afterwards contrived to make them acquainted with his conduct, and they, coming over to take revenge, were slain one after the other by the husband; and a stone of this description was raised to mark the place where each fell and were buried. 198

The other main folk variant recited in Petley's published account accords more closely with Hugh Miller's whose work has already been discussed in Chapter 2:

In this [Viking] age, says the tradition, the Maormor of Ross was married to a daughter of the king of Denmark, and proved so barbarous a husband, that her father, to whom she at length found the means to escape, filled out a fleet and army to avenge on him the cruelties inflicted on her. Three of her brothers accompanied the expedition; but, on nearing the Scottish coast, a terrible storm arose, in which almost all the vessels of the fleet either foundered or were driven ashore, and the three princes were drowned. The ledge of rock at which this latter disaster is said to have taken place, still bears the name of the King's Sons [...]. The bodies of the princes, says the tradition, were interred, one at Shandwick, one at Hilton, and one at Nigg; and the sculptured obelisks of these places, three very curious pieces of antiquity, are said to be monuments erected to their memory by their father.199

Whereas Petley approached the folk narratives as a source of antiquarian evidence to aid understanding of the monuments, Miller's primary aim was to preserve the oral knowledge and local traditions of north-eastern Scotland as a matter of some urgency before they were lost.²⁰⁰ Consequently, he was less concerned with critical evaluation of the accounts and their sources, preferring to offer a single entertaining narrative of what he described as the 'doubtful and imperfect tradition' of the King's Sons.

It is unlikely that this oral tradition contains within it the kind of deep and continuous folk memory that Petley implied.²⁰¹ As we have seen in Chapter 1, subsequent art historical and archaeological research has firmly established the insular origins of the sculpture.

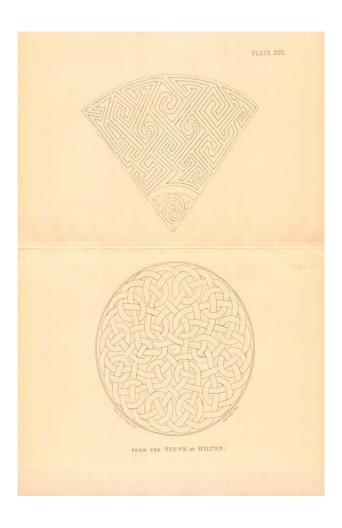


Illustration 6.4
Charles Carter Petley's detail of one of the large pair of discs in the upper panel taken from a wax cast (Petley 1857, pl XXII)

However, regardless of its lack of historical veracity, the King's Sons folk narrative became entwined with the biography of the Hilton of Cadboll monument at some point in the course of its social life. For those who engaged with this folklore it provided an origin myth for the three cross-slabs which ties places (on land and at sea) together, no doubt reinforcing their mnemonic potential. It also reflects post-Reformation ideas about the role of stone monuments as a means of commemorating the dead.²⁰² After the publication of *Scenes and Legends*, Miller's popular account no doubt served the purpose he intended, helping to perpetuate



Illustration 6.5

A Gibb's drawing of the Hilton of Cadboll cross-slab for John Stuart (Stuart 1856, pl
XXV; A Gibb's drawing is dated to 1853. By permission of University of Glasgow
Library, Archives & Special Collections)

the King's Sons folk tradition. Nevertheless, Petley's earlier research suggests that it was already a well-established oral tradition in wide circulation, 'for the most part found among the lower class'.²⁰³

The *New Statistical Account* again provides very little information about the upper portion of the Hilton of Cadboll cross-slab.²⁰⁴ The Reverend Hugh Ross's account for the parish of Fearn is virtually identical to Urquhart's in the earlier

Statistical Account and consequently omits any reference to the monument. The entry for Nigg parish was extensively revised, but only passing reference is made to existence of the Hilton stone in the parish of Fearn, before providing a detailed description of the Shandwick and Nigg cross-slabs. 205 The final source of information regarding the condition and immediate context of the Hilton of Cadboll cross-slab prior to its relocation at Invergordon Castle is thus John Stuart's Sculptured Stones of Scotland, which was published in 1856. The importance of Stuart's work lies in its integration of the Easter Ross monuments within a systematic and comparative art-historical study of early medieval sculptured stones (see Chapter 2). In terms of specific information regarding the condition and circumstance of the Hilton of Cadboll monument, we learn that by the 1850s the upper portion was lying 'in a shed, the wall of which is believed to form part of an ancient chapel'. Stuart's description is supported by archaeological evidence for the foundations of a lean-to structure outside of the western gable end of the chapel, which is likely to have been Stuart's shed (Chapter 3.5). Thus, at some point between Petley's visits in 1811 and 1812 and Stuart's fieldwork there was a significant shift in the treatment of the upper portion, suggesting both a desire to view the sculpture and to protect it. Given the interest that Cordiner attributes to Macleod of Cadboll this relocation is likely to have been at the landowner's behest, or at least subject to his approval. Yet despite the concern with preservation that the shed attests to, A Gibb's drawing reveals significant deterioration in the condition of the upper portion since Petley's visits in 1811/12. In addition to localised weathering along the top edge and down the left hand side of the

vine-scroll, there is damage to the spiral work within both discs of the double disc and Z-rod, substantial erosion of the interlace design within one of the pair of discs in the top panel, and erosion of the vine-scroll on the right hand side adjacent to the upper panel (illus 6.5). The use of a shelter may well have been a response to this deterioration, although paradoxically a desire to view the early medieval sculpture on the back face no doubt contributed to greater exposure

and thus weathering.²⁰⁶ Furthermore, display of the upper portion exposed it to other forms of human intervention, notably the desire to inscribe one's own identity onto the monument. Graffiti were a commonplace addition to ancient monuments during the 18th and 19th centuries and Hilton of Cadboll was not unusual in this respect. The letters TB/N on the Duff shield (specifically the banner) (illus 6.1) are of a different form and proportion than the rest of the lettering and were not cut by the same mason.²⁰⁷ These are unlikely to be contemporaneous with the Duff inscription but they could pre-date the display of the upper portion within the shelter. The graffiti on face C, beneath the crescent and V-rod, must, however, post-date the turning over of the slab for display in the early-mid-19th century and have taken place either whilst the upper portion remained at Hilton chapel or during its time at Invergordon Castle.

Thus, in terms of its specific material biography and its immediate local significance, we learn that the Hilton of Cadboll slab is embedded in an established folk narrative, but that it also becomes a focus of antiquarian study and illustration, alongside initial attempts at protection and display. The significance of these activities and narratives in terms of their contribution to later art historical and archaeological understandings has been discussed in Chapter 2. But what of the wider significance of the Hilton of Cadboll monument and the modes of representation surrounding it during this period? To explore this we must resist the temptation to retrospectively assess antiquarian activities in terms of good and bad scholarly practice and consider their place within 18thand 19th-century society.²⁰⁸ During the 18th century, antiquarianism was an integral part of a wider concern with landscape, the resources within it, and their exploitation for the 'improvement' of society in both material and aesthetic terms. 209 As Sweet points out 'its monuments and antiquities were there to be counted and recorded like houses, crops, and custom duties'.210 For instance, the remit of the Society of Antiquaries of Scotland, founded in 1780 by a number of 'gentlemen of eminence and learning' under the aegis of the 11th Earl of Buchan, included topographic and ethnographic surveys, examination of constitutional, military and ecclesiastical organisation, and documentation of tangible remains.²¹¹ Furthermore, Sir John Sinclair's Statistical Account of 1791-9 involved a series of parish accounts prepared by local ministers who had been directed to address geography, topography, natural

history, climate, population, agricultural production, and, as we have seen, antiquities. ²¹² Such organisations and projects were part of a 'large-scale expansion of national self-study' ²¹³ driven by elite patronage and concerned with the geography and history of the nation.

Nevertheless, as Peltz and Myrone have emphasised, antiquarianism still lacked the 'discursive coherence' bred by an institutional framework and as a result it was characterised by instability of methods and modes of attention.²¹⁴ Furthermore, it emerged in multiple spheres of 'polite', educated society: 'the private spaces of the study and the library; the middle ground of the club; and the public sphere of the metropolitan market for the printed word and image'.215 It was also a form of 'pleasurable instruction' which played an integral role in tourism, a sphere of activity which expanded rapidly during the 18th century with the development of better communications and the expansion of the leisured professional classes.²¹⁶ The nature of the records, publications, and illustrations produced also varied widely. Whilst some wrote about specific areas or types of monuments for restricted learned audiences, others produced popular guides for sale on the burgeoning market, which effectively repackaged the ancient as a kind of modern novelty for consumption.217 Antiquarian illustrations also varied enormously from the work of people like Richard Gough, the Secretary of the Society of Antiquaries of London (1771–97), who was concerned with accuracy and the development of standard stylistic conventions, to those of Francis Grose whose illustrations involved an imaginative engagement with the past and shied away from the dryness of detail.²¹⁸ Whilst the former approach leaned towards the ideals of precise recording, preservation and research that came to dominate archaeology and art-history, the latter was equally important in its day, aestheticising and popularising a national past for mass consumption.

The diversity characterising antiquarian research more widely is reflected in representations of the Hilton of Cadboll monument produced between the late 18th and mid-19th centuries.²¹⁹ From the mid-18th century, the remote parts of 'North Britain' became a subject of fascination, particularly for the English and Lowland Scots and this was accompanied by a burgeoning travel literature in which antiquities played an important role.²²⁰ Charles Cordiner's work can be located firmly in this context alongside that of others, such as Thomas Pennant's *A Tour in Scotland*, Francis Grose's *Antiquities of Scotland*, and Adam



Illustration 6.6

The Frontispiece from Cordiner 1780 (by permission of University of Glasgow Library, Archives & Special Collections)

Cardonnel's Picturesque Antiquities of Scotland.²²¹ Like other popularising antiquarian writers, Cordiner makes gestures towards a scholarly agenda and sees himself playing a key role in the preservation of a national past.²²² Yet, his books are not aimed at the specialist antiquary. Instead, they are intended for readers who wished to acquire a general knowledge of antiquities and topography in the form of pleasurable instruction. As such they address a wide range of subject-matter (antiquities, scenery, historic houses and local economy) framed by the fashionable topics of his day: the aesthetics of landscape and the nature and benefits of 'improvement' (illus 6.6). Parts of Antiquities and Scenery are set aside for commentaries on contemporary trade, agriculture and industry, such as the economy of Findhorn and improvements in industry and agriculture at Inverness. Acts

of improvement are also identified in the aesthetic sphere. For instance, during his stay at Forres he was impressed by the improvements that had been made to Gordon Castle and its picturesque scenery and prospects.²²³ Elsewhere he dwells upon the romantic and the sublime in nature. For instance, he muses about the decay and desolation of 'romantic' castles and ruined abbeys and with respect to Beaulieu explains that 'all is silence and desolation; decaying monuments of saints and heroes, are but as "the clouds of other times", and give a transient solemnity to the recollection of past ages'. 224 And in the interior near Helmsdale and Brora he encountered 'mountains, bleak, rocky and desolate' as well as 'wild and beautiful' cascades of water that bring to mind the songs of Ossian.225

It is not surprising to find that aesthetic evaluation is also one of Cordiner's main preoccupations with respect to early medieval sculptured stones. There is some discussion of the historical significance or associations of the monuments, but this is limited to either specific historical events, such as victories over the Danes,226 or his personal theories about the Egyptian associations of the mysterious 'primeval hieroglyphics'.227 Otherwise the commentary takes the form of a type of connoisseurship. Sueno's Stone, for instance, is described as 'the most stately monument of the gothic kind in Europe',228 and the Shandwick and Hilton of Cadboll cross-slabs as 'splendid' obelisks. Brief descriptions of the ornament

and 'hieroglyphics' are provided, but much of his discussion is taken up with more general statements about the 'mathematical accuracy', 'masterly' carving and 'genius of the artists'.²²⁹ Perhaps more surprisingly issues of improvement also enter the discussion of ancient art, just as they do in relation to Cordiner's evaluation of contemporary scenery:

The genius, art, and application, discoverable in the carvings of these monuments; the elegance of some of the ornaments, the mathematical accuracy of others, and the elaborate execution of the whole; as they bear testimony to the ingenuity and abilities of the artists of an unknown age; so they are some acknowledgement of the tranquillity, improvement, and happiness of this country, ages before our accounts of it commence. The ornamental arts are only practiced and admired when leisure, quiet, and security is much enjoyed; and they must have been greatly encouraged

and delighted in, before they could have come to such perfection. 230

This projection of improvement into the Easter Ross past is then mirrored in the present by his parting statement that 'now the whole ride round its eastmost extremity is through well-cultivated fields, and commonly pleasant seats of view'.²³¹

Undoubtedly Hugh Miller was of a very different stature to Cordiner, as both a writer and a scholar. Subsequent generations have praised his contributions to geology, folklore and social history.²³² Furthermore, he had an immense reputation during his life as a prolific writer, social commentator, and theologian. Scenes and Legends is primarily concerned with the folklore and oral history of the North of Scotland, and, whilst not about antiquities in the narrow sense, it is part of a broader tradition of research into 'popular antiquities' encompassing local customs and folk traditions. Furthermore, like Cordiner there is an aesthetic concern with scenes and landscapes even if these pertain as much to the social as the natural terrain. Miller was clear that the object of the book is to both preserve the folk traditions of the north of Scotland and to provide as wide an audience as possible with a form of entertaining instruction.²³³ It is the King's Sons folk tradition, rather than the 'curious pieces of antiquity' to which it refers, that is Miller's primary subject-matter. Nevertheless, Miller asks the reader to indulge him in a few descriptive notices of the sculptured stones themselves; 'their weathered and mossy planes, roughened with complicated tracery and doubtful hieroglyphics' being compared to 'pages of provincial history'. 234 His descriptions of the designs on the Hilton and Shandwick stones are consequently brief, and his more detailed description and analysis of Nigg, although demonstrating an observant eye, reveals a restricted knowledge of Christian art (Chapter 2). Interestingly, despite the suggestion that he considers the King's Sons folk narrative to be of dubious veracity, he arrives by way of a stylistic comparison at the same conclusion; arguing that 'their design and workmanship display a degree of taste and mechanical ability which the Celtae of North Britain seem never to have possessed', and 'the eastern shores of the German Ocean abound in similar monuments'. 235 Yet, irrespective of its validity in light of subsequent art historical research, Miller's book was immensely popular and, like those of Cordiner, would have brought the sculptured stones of Easter Ross to the attention of a wide audience.²³⁶ The writing of both

men was devoid of the dryness of technical detail which the experienced antiquarian might wish for, but they were instrumental in reconfiguring these monuments as part of the cultural, specifically artistic, patrimony of the nation.

Antiquarian scholars such as Petley and Stuart were also engaged in a project of national self-study through the antiquities of the nation. However, their approach to early medieval sculpture was very different. The very nature of the production and publication of Petley's article illustrates this. He focuses exclusively on a particular kind of monument in a specific area, which he visited over the course of two years in 1811 and 1812. His aim was to make a record of the monuments through the production of accurate drawings and supplementary descriptions, as well as to gather local country traditions pertaining to them; this latter information being, in his opinion, 'at least as good as any that could be collected from tourists or any other source'. 237 The drawings are detailed and display a high level of accuracy, something which is enhanced by Petley's use of wax casts for specific aspects of the design. Furthermore, Petley's approach to the folk narratives displays a scholarly concern with the nature of the evidence and a critical approach to evaluation. For instance, in discussing oral tradition he rightly notes that great allowances must be made 'for inaccuracies which must, of course, in so great a length of time (as from their erection) have crept in'. 238 Furthermore, he goes to the trouble of examining the veracity of one tradition which claimed that the three King's Sons were buried beneath a large flat stone on top of Nigg hill: 'I had this stone raised and the ground opened and removed to about three feet, when the natural soil appeared.'239 The difference between Petley's approach and that manifested in Cordiner's and Miller's books is further reinforced by the text itself. Although published after his death, probably on the basis of his fieldnotes, Petley's paper is characterised by an austere descriptive style, which displays none of the concerns with aesthetics and the pleasure of the reader which the latter two evince. After all, in contrast to the work of Cordiner and Miller, it was not intended for the commercial market, but rather took the form of historical research concerned with record and preservation. The fact that the illustrations and manuscripts remained in the private sphere of Petley's study until after his death, and were then committed to the safekeeping of the Society of Antiquaries of Scotland by his widow, is typical of this kind of antiquarian project.²⁴⁰ His work was very

much in the tradition of antiquarians such as Richard Gough and James Douglas, who promoted systematic and rigorous collection of data through fieldwork and emphasised the importance of accurate illustration and description.²⁴¹

If Petley's work, or that of Charlotte Hibbert around 20 years later,²⁴² represents the parochial and private end of antiquarian scholarship, Stuart's study of *The Sculptured Stones of Scotland* some four decades later combined this inclination towards accurate and rigorous collection of data with systematic comparison and interpretation.²⁴³ Stuart's two volumes were produced by the Spalding Club of Aberdeen, and covered all of Scotland, drawing upon T S Muir's attempt at a complete list and Patrick Chalmer's study of the sculptured monuments of Angus.²⁴⁴ The first volume included illustrations of almost 150 stones from all over Scotland and its object was

to furnish correct representations of the more ancient Sculptured Stones of Scotland, and such a collection of facts regarding their history as may prove a solid groundwork for comparison and further research.²⁴⁵

The descriptions accompanying the plates for the Easter Ross sculptured Stones are brief, but the illustrations themselves are intended to act as the primary source of evidence for other scholars. The imaginative and romantic stylistic conventions of Cordiner's drawings would have been anathema to Stuart who stressed the importance of accurate representation: 'no pains have been spared to secure accuracy, which, for the present purpose, is of primary importance' and that Mr Gibb's drawings are 'minutely accurate and trustworthy'. 246 The significance of Stuart's volume in terms of the wider meanings and values attached to the Hilton of Cadboll cross-slab is two-fold. First, it represents the first time in which the monument is 'collected' within a comparative national corpus of early medieval sculpture, one in which the Easter Ross sculptures are claimed to be 'perhaps, the most remarkable in Scotland for their elaborate finish and varied representation'. 247 Secondly, the Hilton of Cadboll sculpture, along with the other Easter Ross sculptures, was placed within a systematic, scholarly framework informed by extensive references to historical sources, in particular early Christian illuminated manuscripts.

As discussed in Chapter 2, Stuart's work was 'a great advance' in terms of subsequent art-historical comparative analysis and interpretation.²⁴⁸ It was taken forward by Allen and Anderson in their attempt to deal scientifically with the sculptured stones of Scotland 'in

the hope that some advance may be made towards a systematic knowledge of their peculiar characteristics, their sequence in time, and their relations to other classes of antiquities within or beyond their own special area'.249 Yet, it should now be clear that the significance of the early illustrations and written accounts incorporating the Hilton of Cadboll crossslab extends beyond its contribution to subsequent archaeological and art historical research. It also far outweighs the details that can be gleaned about the specific condition of the monument and its immediate local context as outlined at the beginning of this section. In terms of the wider significance of the monument the work of early antiquarians and travellers, parochial and anecdotal though it might be, contributed to a transformation of its meaning and value.

We have seen that the Hilton of Cadboll monument was embedded in an established folk narrative which interpreted it in relation to popular myths about the Danes and familiarity with the use of sepulchral monuments as forms of memorial. However, whilst providing a record of this folk narrative early antiquarian literature ultimately effaced any authority attached to it. Instead the monument became reconfigured as an object of aesthetic value, initially, at the hands of Cordiner, framed by wider concerns with the picturesque and the romantic in which medieval art occupied an important position. It also came to be seen as a piece of historical evidence, a fragment of the 'shipwreck of time', which if salvaged through accurate description and illustration, initially anecdotally and later within a systematic comparative framework, could help to uncover the truth about the past.²⁵⁰ Finally, it was constructed as an important component of national patrimony worthy of collection and preservation, whether materially or figuratively. This was achieved through systematic national surveys such as that of Stuart and later Allen and Anderson, which situated the cross-slab within a corpus of comparable material and provided an interpretive framework embedded in early Christian culture in Scotland. Yet this literature was both comparatively late and largely restricted in its audience to dedicated antiquarians, art historians and archaeologists. In contrast, populist books, such as those of Cordiner and Miller, would have brought the Hilton of Cadboll cross-slab to the attention of a wider audience. Cordiner in particular did not leave his readers in any doubt about its status as an important piece of national heritage, proclaiming it 'one of the most beautiful pieces of ancient sculpture that has ever been discovered in Scotland', 251 which is entitled to 'a

distinguished rank among the most valuable antiquities of the nation'.²⁵² Miller also singled out the Hilton of Cadboll 'obelisk' reflecting that it is 'perhaps the most elegant of its class in Scotland'.²⁵³ As Bending points out, such relatively cheap antiquarian books and the prints they contained may have been inaccurate and idealised but they offered the literate population the chance of

imagining one's place in the nation and of doing so without the aid of land or rank, and without the need to take action in the political arena. If prints transform the objects of the past into a commodity, buying into these representations of the past [...] is also, then, the chance to buy into a shared national heritage.²⁵⁴

Thus, through the activities of scholars and travellers, the Hilton of Cadboll cross-slab, like many other antiquities, became entangled in new discourses about taste, class and nation. As a result it also became subject to all the tensions and controversies which these engendered. As we shall see, some of these concerned the kind of taste and judgement needed to preserve and understand antiquities. Others concerned whether they belonged in the domain of the 'polite', leisured and ultimately land-owning classes, or whether they were a public concern of patriotic dimensions.

6.6 Appropriation and displacement: landscape, people and monument

The motives which have actuated owners in removing the monuments into their private grounds have been in most cases, let us hope, a desire to give them better protection than is afforded when standing in the open fields, but it will be observed that the fact of an owner doing as he pleases with the stones shows that he considers they are part and parcel of his property, and, like the serfs in olden times, can be sold with it.²⁵⁵

Contemplating the landscape did not merely involve restructuring it in the imagination; 'for those who owned the land, and had sufficient funds at their disposal, it also meant restructuring the land in reality'. ²⁵⁶ As Brewer points out, by the late 18th century, 'the countryside and nature were considered malleable, to be adapted, created or realised through human agency'. ²⁵⁷ Agricultural improvement changed the appearance and character of the landscape. In lowland areas this involved the enclosure of common lands and the creation of field systems, whereas in the Scottish Highlands it involved the 'clearance' of cottars and small tenant farmers to make way for

large-scale sheep farming. Furthermore, based on the increasing profitability of the land, landowners engaged in refashioning their country houses, the gardens and parks surrounding them, and even the ruins and monuments on their estates.²⁵⁸ In etchings and paintings the romantic ideal of ruins and monuments was drawn out through the addition of mosses and foliage as well as piles of gothic masonry and tomb stones. The prospects to, and from, ruins and monuments were also physically enhanced in reality by careful planting of stands of trees, hedges, and in some instances antiquities were even physically relocated. Thus, the improvement movement which dominated economic, political, philosophical and aesthetic agendas during the 18th and early 19th centuries in Scotland, resulted in extensive reworking of the landscape and the 'resources' within it, including both people and antiquities. As we shall see, these processes had a lasting impact on the biography of the Hilton of Cadboll monument and the people associated with it informing many aspects of its later biography.

We have seen that the upper portion of the cross-slab remained outside of the western gable wall of the Hilton of Cadboll chapel after the Duff memorial was carved in 1676, whilst the lower portion remained in situ in the ground. By the late 18th century, it seems there was a concern to enhance the presentation and preservation of the cross-slab. Lines of trees were planted around the consecrated ground, and subsequently in the 19th century the upper portion was placed in a shed which had been built against the chapel wall. Stuart describes its location as such in 1856 in The Sculptured Stones of Scotland, but by 1872 the Ordnance Survey Original Object Name Book states that 'it was removed a few years ago to Invergordon Castle by R.B.A. Macleod Esq. where it remains'. 259 Unfortunately the latter source gives little further information about precisely when and how the upper portion was transported to Invergordon. There are no documents in the Macleod family papers (Highland Regional Archive HRA/ D63) relating to this period. Furthermore, a search of the local newspapers proved unfruitful. However, one local resident of Hilton (D Macdonald) recounted how her grandmother had witnessed the event first hand when she was a young girl of about six to 10 years of age. As her grandmother was born in 1861 this places the likely removal of the stone in the late 1860s, which would also tie in with the account provided by the Hilton of Cadboll Estate Factor, J Young in the O S Name Book, where it is stated that the cross-slab had been removed a few years prior to 1872. A number of other oral historical accounts relating to the removal of the stone were gathered from residents of Hilton of Cadboll whose families have been associated with the village for four to five generations.260 These suggest that the upper portion of the cross-slab was placed on a cart pulled by oxen and transported to Invergordon by land, including one account derived from the greatgranddaughter of one of the farmhands involved. This evidence is supported by published sources in 1921 where local commentators have provided accounts (presumably derived from oral history) (Chapter 7.6). However, there is one conflicting version of events offered by a correspondent in the Glasgow Herald who claimed that the upper portion was placed on a smack at 'Our Lady's Haven' close to St Mary's Chapel and conveyed to Invergordon by sea.

Whilst the appropriation and relocation of archaeological monuments is relatively unusual,261 early medieval sculpture has a long history of relocation, which is documented by Allen in ECMS.²⁶² Landowners regularly removed carved monuments to their gardens, houses or private museums, as well as donated them to public museum collections. For instance, the Woodwrae cross-slab, following its discovery in the kitchen floor of Woodwrae Castle, was donated to Sir Walter Scott who erected it in his gardens at Abbotsford in the Scottish Borders.²⁶³ Another example, is provided by the substantial collection of carved Pictish cross-slabs and symbol stones brought together in the private museum of the Duke and Duchess of Sutherland.²⁶⁴ Perhaps the closest analogy to Hilton of Cadboll, however, is the relocation of the Ulbster cross-slab from the ruined church of St Martin to the grounds of Thurso Castle, 20 miles away, where it was placed 'in the most exposed position possible on the top of a high, artificial mound'.265 Thus, the upper portion of the Hilton of Cadboll cross-slab was far from unique when it was taken to the gardens of Invergordon Castle by the laird of Cadboll Estate, Robert Bruce Aeneas Macleod.

The Castle had been acquired by the Macleods of Cadboll in the 1790s and it continued as their main residence until the early 20th century. In 1805 it was substantially destroyed by fire, but the family continued to live in one of the wings, and between 1872 and 1874 a new mansion of Elizabethan style complete with a battlemented tower was built under the instruction of Robert Bruce Aeneas Macleod who had succeeded his father in 1853.²⁶⁶ Robert Bruce was known for his 'improving' work, in particular the landscaping of the Castle grounds and the creation of the 'American

Gardens'. It has been suggested that the Gardens were based on a wild garden that he encountered on a trip to America, 267 although 'American Gardens' were fashionable in the mid-19th century.²⁶⁸ Macleod's are described in the OS Name Book²⁶⁹ as 'a shrubbery within the pleasure grounds of Invergordon Castle, tastefully laid out and sheltered on the east side by two rows of ancient beech trees'. The Third Statistical Account retrospectively refers to them as 'a thing of beauty' with 'their profuse display of rhododendrons, stately trees, and flower-bordered walks being famed throughout the country'. 270 Situated next to the 'Ornamental Drive', which ran from Rosskeen to the Castle, guests would encounter the American Gardens on their approach. Further to providing a pleasing and tasteful approach to the Castle, they were also undoubtedly intended for leisure and contemplation, containing a series of cross-cutting pathways, an ornamental pond and metal benches to sit on. It is here that the upper portion of the Hilton of Cadboll cross-slab was re-erected and its precise location, adjacent to the Ornamental Drive, is indicated on the first edition of the Ordnance Survey map (surveyed in 1874) (illus 6.7). Here the monument, which as we have seen was already 'located' within an aesthetic discourse concerned with the romantic, gothic and sublime, would have enhanced the 'wild garden' and the romantic prospect that it was no doubt intended to create (illus 6.8). In this context the upper portion would have acquired a new form of agency, drawing the attention of visitors walking in the gardens, demanding their contemplation, and acting as a medium for the acquisition of knowledge and insight through such study. Indeed, one postcard shows a metal bench situated opposite the cross-slab to aid such contemplation/revelation. Furthermore, in contrast to the parallel use of classical antiquities in gardens, the upper portion of the Hilton of Cadboll monument would have referenced an axis of identity grounded in the local and the national rather than a discourse emphasising the classical roots of civilisation.

As documented by Foster,²⁷¹ such acts of appropriation and relocation were underpinned by the ambiguous status of sculptured stones on the cusp between art object and archaeological monument. With respect to the motivations underpinning acts of relocation, they have often been interpreted in terms of a straightforward desire to protect and conserve ancient monuments. Certainly antiquarian literature and organisations of the 18th and 19th centuries placed a great deal of emphasis on preservation, whether

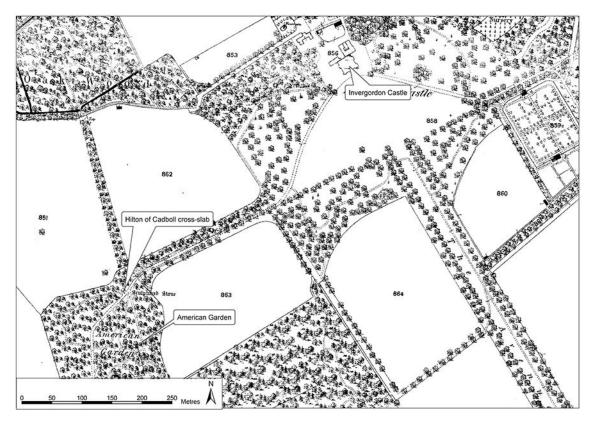


Illustration 6.7

Invergordon Castle and gardens as recorded on the 1st Edition Ordnance Survey map for Rosskeen Parish (reproduced by permission of the National Library of Scotland)

through appropriate custodianship of monuments, acquisition of portable antiquities, or preservation through accurate illustration. With respect to the early medieval sculptured stones of Scotland, the Society of Antiquaries of Scotland had long expressed concern over their deteriorating condition and vulnerability, leading to the establishment of a Committee on Sculptured Stones in 1890.272 Landowners also saw themselves as custodians of the antiquities on their land, often leading to clashes with antiquarian organisations, and with the state following the establishment of the Ancient Monuments Act in 1882. Indeed the parliamentary debate surrounding Lubbock's Bill in the 1870s revealed not only the hallowed status of private ownership, but also the strong sense of custodianship that many landowners (also Members of Parliament) felt. The idea that the state or antiquarian organisations might be better placed to look after an archaeological monument was seen as an insult to the taste and judgement which the landowning classes felt

they had inherited from their forebears. Through their land management and private collections, landowners saw themselves as acting as custodians for the nation, preserving antiquities for future generations. It is highly likely then, that when Macleod's relocation of the monument to Invergordon Castle was discussed in 1921, commentators were correct in attributing his actions to a preservationist intent.²⁷³ Ironically, it seems that the new location resulted in further weathering of the sculpture, which was a cause of great concern to Allen at the time of his visit,²⁷⁴ but Macleod no doubt saw himself as acting in a responsible manner, entirely compatible with his duties as landowner, and thus owner of the antiquities located on his land.

Nevertheless, the duties of custodianship that some landowners expressed towards antiquities also applied to their estates as a whole. Antiquities, like other resources within the landscape, were a visible expression of the wealth, taste and status of landowners; attributes that were often displayed through acts of



Illustration 6.8

An early postcard showing the upper portion of the Hilton of Cadboll cross-slab on display in the American Gardens at Invergordon Castle (HCA, number D565, © Highland Council Archives, Inverness)

improvement. The physical relocation of the upper portion of the Hilton of Cadboll cross-slab was an integral part of the 'improvement' of the grounds of Invergordon Castle through landscape gardening. We have to remember that from Cordiner onwards the Hilton of Cadboll cross-slab had been publicised as one of the finest examples of early medieval sculpture in Scotland. Thus, the decision to erect the monument alongside the main 'ornamental' driveway leading up to the Castle enhanced its visibility and effectiveness in the negotiation of taste and status. The same can be argued of the Tarbat fragments which Macleod had also removed to Invergordon Castle, all of which were located in prominent positions, one next to the Hilton of Cadboll Stone (Tarbat 1), two outside of the tower which provided the main entrance (Tarbat 9 & 10), and the rest in a room within the tower (Tarbat 2, 2a, 2b, 2c, 4, 5, 8). Other examples of relocation clearly

performed similar roles in the negotiation of wealth, taste and status amongst the landowning classes. For instance, the Woodwrae and Gask cross-slabs, were placed in highly visible locations in the grounds, the latter being positioned alongside the carriage-drive to Gask House.²⁷⁵ Others were brought together as collections within the house or private museums, such as at Dunrobin.²⁷⁶

The act of relocating early medieval sculpture in private grounds, houses, or museums, where access was restricted, thus both expressed and reinforced class relations and the exclusive position of the landowning elite in the conservation of antiquities during the 18th and most of the 19th centuries. The extent and nature of resistance to these practices is easier to gauge with respect to some sectors of society than others. It is clear that there was considerable disapproval in some antiquarian circles, and prominent individuals such as Allen and Pitt-Rivers were vocal about their views. Allen stated that

The only justifiable reasons for removing a monument from the position in which it is found are either that it may be better protected from injury or that it may be made more easily accessible for purposes of study. There can, however, be no possible excuse for taking a stone away from its original locality in order to make it a mere ornament for a garden, as has frequently been done.²⁷⁷

Pitt Rivers also campaigned fervently for the preservation of sculptured monuments on their ancient sites wherever practicable: in order that 'country places' are not deprived 'of their old associations, and of the objects or interest, which serve to draw people to the localities'.278 To what extent those who lived within these localities objected to their removal is less apparent due to the dearth of historical sources. However, several oral historical accounts gathered during the course of this research, suggest that some of the residents of Hilton of Cadboll were opposed to Macleod's removal of the upper section of the cross-slab and that a number of the men from the village had marched in protest behind the oxen and cart that had been used to transport it.²⁷⁹ Whether the impetus for such opposition was derived from a specific appreciation of the monument, or, more likely, was part of a broader concern with resources and a sense of communal ownership of, or at least rights to, the land on which it was situated is to some extent irrelevant. As the 18th-century landscape gardener Humphrey Repton explained, the activity of landscaping was about 'appropriation [...] that charm which only belongs to ownership, the exclusive right

of enjoyment, with the power of refusing that others should share our pleasure'. ²⁸⁰ But who were the people who are said to have protested against the removal of the Hilton of Cadboll cross-slab, and who were excluded from the pleasure it could offer by Macleod's act of appropriation? How was their biography tied to that of the monument, and indeed also moulded by the very historical processes that underpinned new approaches to antiquities and landscape?

We have suggested above (Chapter 6.3.2) that the modern fishing villages of Hilton, Balintore and Shandwick had medieval antecedents in the smallscale settlements of Catboll, Wester Catboll, Catbollabbot and Catboll-fisher. These communities were embedded within a nexus of power involving the Crown, its feudal vassals, and religious houses, which characterised medieval society in the north-east of Scotland.²⁸¹ The houses they lived in, the resources they exploited, the products of their labour, and even their labour itself, were owned and heavily controlled by local landlords and religious houses.²⁸² The development of the villages in their modern form, however, was substantially linked to the Improving Movement that dominated Scottish economic, political and philosophical agendas during the late 18th and early 19th centuries.²⁸³ As we have seen, the late 18th century witnessed widespread changes to the landscape intended to 'improve' its aesthetic appeal, as well as the development of more efficient communication, which enabled an expansion of tourism in the Highlands. These developments in turn informed a new concern with the description, classification and collection of antiquities such as the Hilton of Cadboll and Shandwick cross-slabs. However, the impact of the Improvement Movement was by no means restricted to aesthetic ideals regarding the landscape and antiquities; it also brought about profound transformations in social and economic relations that were intricately linked to the development of capitalism.²⁸⁴ The most significant of these in the Scottish Highlands was linked to agricultural change and the displacement of tenant farmers and cottars to make way for sheep farming. The rural poor were to be resettled in farming and fishing villages, in industrial urban centres, or encouraged to emigrate. In the 18th century it was commonplace for a laird to own a 'fish-toun', as well as a 'ferm-toun', and in most instances the laird also owned the boats which fishermen were bound to for fixed terms, usually for periods of five to seven years. Most of the catch was retained by the laird in lieu of rent for the boat, and the fishermen were allowed to

keep a small proportion. Fishing, like agriculture, became increasingly commoditised and the practice of mixed fishing and farming declined, contributing to a radical separation of 'fisherfolk' from 'landfolk' in respect to social relationships and identity.

The fishing villages of Easter Ross largely conform to this pattern of development. Later 16th- and 17th-century records suggest that the land associated with Catboll-fisher and Hilton of Cadboll chapel became part of the Cadboll estate.²⁸⁵ Catboll-fisher was apparently abandoned and replaced by another small settlement located on the southern side of the chapel.²⁸⁶ This latter village was referred to in the Cadboll estate maps and records of 1813 as 'Fishertown of Hilltown', and later became known as Hilton of Cadboll, undoubtedly referencing the rights of the laird over the village.²⁸⁷ Prior to the late 18th century, historical evidence concerning the development and scale of this, and the other two fishing villages, is slight. However, there are manuscripts which allude to local lairds' attempts to control the fishing communities on their lands. Ash recounts how in 1713 a group of lairds from the seaboard parishes of Tarbat and Tain, including Macleod of Cadboll, signed an agreement intended to consolidate ownership over the fishers and prevent them leaving their master's boat for another.²⁸⁸ Such documents underscore the role of landowners in the development of the fishing industry during the 18th century. However, their efforts were not as ambitious or as concerted as they were to the south of the Moray Firth.²⁸⁹ Consequently, at the end of the 18th century, the Easter Ross fishing villages were still very small, probably with about 8-12 families in each.²⁹⁰

It was during the 19th century that the fishing settlements of Easter Ross, Sutherland and Caithness expanded significantly as a result of the re-settlement of people evicted from the interior of Ross-shire and Sutherland (see Table 6.1 for population statistics). One of the most overriding transformations wrought by the Improvers in northern Scotland was the massive depopulation of the Highlands to make way for sheep farming, a process that involved the removal of people from what were densely populated straths and glens.²⁹¹ The remnants of the population left behind in the Highlands were pushed on to the most marginal land, often coastal fringes where they were expected to become part of the labour force for the fishing and kelp industries. 'The last gasp of the centuries-old enclosure movements depriving peasants of access to land in both Britain and the European continent', 292 the advocates of the Clearances saw them as a means

Table 6.1

Table of population and fishing statistics for Hilton of Cadboll, and the seaboard villages as a group $(Hilton, Balintore and Shandwick)^1$

Date	No of families/ households in Hilton	No of houses in Hilton	No of boats in Hilton	No of fishermen in Hilton	No of boats in all three villages	No of fishermen in all three villages	Source
1791–9	? c 8–12		3	18		77	Stat Acct, Vol 4, 292–3
1813	24+	24					Contents of Estimate of the Estate of Cadboll Belonging to R.B. Aeneas Macleod Esquire
1832	58	58 or less					Macdonald & Gordon 1971, 18
1855			33	120	70	256	Anson 1930, 271, based on Creek Returns for east coast of Scotland
1881			23 ²	70	68	180	Anson 1930, 274
1881	94	79					Census for 1881, Mormon Family History Library, microfilm 0208624
1918	105+	105					Particulars and Plans of the Estates of Cadboll, 1918, 40–1
1928					14	58	Anson 1930, 281

¹ The figures in bold are numbers provided by the sources whereas those out of bold are calculated on the basis of the figures offered in the sources. It is highly likely that the number of families would have amounted to more than the number of houses as it was commonplace in fishing communities for closely related families to inhabit different rooms within the same house as demonstrated by the 1881 census figures for Hilton (see also Anson 1950, 15).

to increase the productivity of both land and people. However, the process of clearing people from the land was often brutal, and usually forced upon an unwilling population, resulting in the pain of dislocation and, for many of those involved, greater poverty and powerlessness.

Thus, the 'Highland Clearances' provided a source of labour for the fishing villages of the far north-east of Scotland. The seaboard villages of Hilton, Balintore and Shandwick were not planned Clearance coastal settlements like Helmsdale and Golspie, but they

provided a refuge for displaced people particularly during the early to mid-19th century. The Cadboll Estate map drawn in 1813 shows two streets each running along the shore beneath the raised beach cliff. There are some 24 houses marked, suggesting at least as many families, ²⁹³ and an increase in numbers since the first *Statistical Account*. By 1832 there were 58 families suggesting a further significant increase in the population since 1813.²⁹⁴ Hilton continued to grow throughout the 19th century (Table 6.1) and by the time it was sold ('with the houses, land, feu duties,

² Anson's 1881 statistics suggest a sharp decline in numbers of boats and fishermen in Hilton. However, the figures for Balintore, the adjacent village rise sharply, with 12 boats and 36 fishermen in 1855 and 27 boats and 65 fishermen in 1881. The apparent decline in boats and fishermen from Hilton is likely to be a product of the shift in focus to Balintore in terms of landing and processing the catch during the later 19th century. A herring yard had opened in Balintore and the jetty at Hilton had been washed away in the mid-19th century. Anson (1930, 240) emphasises that whilst the boats were often based at Balintore, almost all the fishermen were from Hilton.

rental rights and others') as part of the Cadboll estate in 1918 there were 105 houses, including one hotel, three shops, a stabling yard and a schoolhouse. In their local history of the villages, Macdonald and Gordon suggest that Hilton provided a haven for the Mackays evicted from Sutherland, and Shandwick a refuge for the Rosses evicted from Glencalvie near Ardgay.²⁹⁵ Oral history and genealogy also attest to the important role of the Clearances in the 19th-century growth of the villages, and during fieldwork one of us gathered a number of personal testimonies as to connections between Hilton and Sutherland, particularly with regard to the Sutherlands, Mackays and the Macanguses.²⁹⁶

Thus the fishing villages of Hilton, Balintore and Shandwick were historically built up from the poorest sectors of the rural peasantry who were forced off the land by processes of agricultural reform and enclosure, and later by systematic clearance of the Highlands. Once incorporated into fishing villages they endured chronic poverty and hardship.²⁹⁷ Despite increased revenues and the prominence of the Scottish fishing industry during the 19th century, the prosperity of the Easter Ross fishing villages fluctuated according to international markets and the migration routes of the herring shoals themselves.²⁹⁸ However, one of the chief reasons for their poverty was the 'want of good harbours', which prevented them from investing in larger sea-going boats and thus competing effectively with their 'brethren-in-trade'. 299 The construction of harbours required substantial investment from either landowners or the state and little was forthcoming until the very end of the 19th century.³⁰⁰ The lack of critical resources, and the poverty and disempowerment attributed to them, also generated a variety of forms of resistance, and a growing militancy was evident towards the end of the 19th century.301 A group of 400 fishermen from Hilton, Balintore and Shandwick presented a petition to the Napier Crofting Commission in 1883, pleading for harbour facilities on the basis of their lack of land and consequent total dependency on fishing.302 Furthermore, in late 1884 and early 1885, fishermen from the villages were also involved in a number of meetings dealing with discontent about the introduction of steam trawling in the Moray Firth which was threatening the white fishing.³⁰³

The historical development of the fishing villages is important in understanding the negotiation of power and identity both within and out with the Seaboard villages. Ironically, their livelihood was rooted in Enlightenment values of industry and rationality and 'yet fishers themselves have experienced a public image

that depicts them as backward and prerational'.304 Furthermore, the very same Enlightenment values of improvement and progress that created the villages in their modern form also contributed to new ideas about antiquities like the Hilton of Cadboll crossslab, their aesthetic and historic significance, and their conservation. The final irony is that although there is little direct continuity between the modern villages and the Hilton of Cadboll cross-slab, the history of displacement and marginalisation that contributed to the growth of the modern villages informs the symbolic resonance of the cross-slab and the recent conflict surrounding it. For as the monument became increasingly located at the core of Scottish national heritage, the Hilton of Cadboll fishers became more and more marginal in social, economic and political terms.305

6.7 'Tangible expression of the national soul': Hilton of Cadboll as national patrimony

Ireland, a poorer nation than Scotland, has never dreamed of parting with the Book of Kells, the Cross of Cong, and the other priceless treasures that make Dublin one of the most interesting cities in Europe. Why should Scotland be in such indecent haste to write herself down a mere tributary province, and part with the tangible expressions of the national soul?³⁰⁶

The particular 'tangible expression of the national soul' at the heart of this Scotsman article is the upper portion of the Hilton of Cadboll cross-slab. On selling up almost all his property in north-east Scotland, Captain Roderick Willoughby Macleod offered some of the sculptured stones acquired by his father to the British Museum.³⁰⁷ By early February 1921, two of these, the upper portion of the Hilton of Cadboll cross-slab and a cross-slab fragment from Tarbat, 308 had been sent to London and accepted by officials of the British Museum subject to approval by the Trustees. Their removal from Scotland sparked a 'storm of protest' from Scottish antiquarian circles and extensive newspaper coverage (Chapter 7.6). The Society of Antiquaries of Scotland led the campaign and the National Museum of Antiquities in Edinburgh was widely favoured as the appropriate repository, although it was by no means the only option aired. Following much petitioning, political pressure, and, crucially, a little diplomacy, the Secretary for Scotland announced to the House of Commons on the 15 March 1921 that the Trustees

of the British Museum had released Captain Macleod from his original offer, and that the Hilton of Cadboll stone would be returned to Scotland. The Scottish newspapers had already been celebrating the fact that what seemed to be a 'very unpleasant incident now promises to have a satisfactory ending', 309 and 'all's well that ends well'. 310 By 10 November 1921 the cross-slab had arrived in Edinburgh at the National Museum of Antiquities, to where it had been transported by the North British Railway Company. 311

Reflecting on the incident, one newspaper editorial commented that the controversy over the Hilton of Cadboll stone exemplifies 'the power of public opinion, when it is brought to bear in a reasonable manner upon a just claim'. 312 Many aspects of this statement could of course be questioned. The Trustees of the British Museum clearly disagreed about the 'reasonable manner' when they referred to the 'hectoring tone' of the Scottish antiquarian establishment.³¹³ Furthermore, the phrase 'public opinion' glosses the complex role of the machinery of the state, scholarly societies, political pressure and diplomacy, in negotiating the restoration of the monument. Finally, whilst it no doubt reflected a widespread view, the perception of the 'justness' of the claim presupposes a relationship between historic relics and the nation, that is more complex than the editorial goes on to assert:

It [the Hilton of Cadboll case] settles finally and satisfactorily that historic relics of the sort are national possessions, and that the owner on whose lands they happen to be is really in the position of a trustee for the nation.³¹⁴

Although the Ancient Monuments Act was frequently cited by those protesting at its removal (see below), the Hilton of Cadboll cross-slab had not been scheduled, and as such it was still the property of the private landowner to dispose of it as he desired. Indeed, the debates enveloping this short-lived episode in the biography of the cross-slab are informed by, and provide insights into, wider tensions surrounding the claims of the nation and the rights of private landowners at that time. They are also revealing with respect to the relationship between contemporary Scottish and British national identities. As we shall see patriotism, class, morality, legality, authenticity and conservation were all brought to bear in the war of words that ensued from its removal to London. In the first instance, however, it will be helpful to discuss the events surrounding the cross-slab's brief sojourn in London and its return to Scotland in more detail.

These will be pieced together from a variety of sources including the minute books of the British Museum and the Society of Antiquaries of Scotland, letters from private individuals and antiquarian societies contained in the archives of the British Museum and the National Museums of Scotland, and a wealth of newspaper articles, editorials and correspondence (Chapter 7.6). The letters and minute books provide the most precise sources of information about the actual sequence of events, whereas the newspaper coverage, being more emotive and polemical in nature, provides fascinating insights into the symbolic significance of the monument, to which we will return later.

Captain Macleod sold his property, feus, farms, harbours and general estate at both Cadboll and Invergordon between 1918 and 1921, maintaining only about 50 acres of land near Invergordon.315 Invergordon Castle and grounds passed into the hands of Mr Jones of Larbert, a timber merchant who, it was claimed, had purchased it solely for the timber on the property. In 1922 the Castle was again sold, this time to a sugar magnate, Sir William Martineau, who, following a fire, had it demolished in 1928.316 As a result of the sale of his family home Macleod approached the British Museum offering to donate the upper portion of the cross-slab and at least one of the other fragments his family had acquired (Tarbat no 1).317 By 3 February 1921 the Hilton of Cadboll stone had arrived at the British Museum where Sir Hercules Read, Keeper of the Department of British and Mediaeval Antiquities and Ethnography, prepared a report for the Trustees. 318 The report recommended that this gift 'of more than usual interest' be accepted by the Trustees 'with special thanks' on the grounds that it had been weathering rapidly at Invergordon and 'it is well therefore that so fine an example should be placed under cover'. Furthermore:

These sculptured stones are commonly found in Scotland, many of them being still in the open as well as in the Museums, but so far as Sir Hercules is aware, there is in England no example of this ancient British art, so intimately related to the indigenous art of the pre-Roman Britons.³¹⁹

In the event, the Trustees postponed their decision on the 12 February 1921 at the request of the Secretary for Scotland, Mr Robert Munro MP. Munro had written to the Trustees on 10 February stating that intense public feeling had been aroused in Scotland and the volume of protest he had received made it clear that 'if so characteristic an example of Scottish early Christian

 ${\it Table~6.2}$ Table of known petitions of protest from Scottish bodies

Date	Author	Letter Recipient(s)	Response to SoAS campaign	Stance	Archive
03/02/1921	Society of Antiquaries	Circular letter to the antiquarian of Scotland	Campaign societies	Return of Stone to Scotland letter	NMS
08/02/1921	Society of Antiquaries of Scotland	Mr Robert Munro, Secretary for Scotland	N/A	Return of Stone to Scotland to be placed in National Museum if a local solution is unfeasible	NMS
08/02/1921	Society of Antiquaries of Scotland	Sir Lionel Earle, HM Office of Works	N/A	Return of Stone to Scotland to be placed in National Museum if a local solution is unfeasible	NMS
10/02/1921	Buchan Field Club	Mr Robert Munro, Secretary for Scotland	Yes	Return of Stone to Scotland	NMS
12/02/1921	Glasgow Archaeological Society	The Trustees of the British Museum; Secretary for Scotland; HM Office of Works; <i>The Scotsman</i>	Yes	Return of Stone to Scotland	BM
12/02/1921	Society of Antiquaries of Scotland	Sir Lionel Earle, HM Office of Works	N/A	Extending their protest to the Tarbat ragment, with the same demands	NMS
12/02/1921	Society of Antiquaries of Scotland	Mr Robert Munro, Secretary for Scotland	N/A	Extending their protest to the Tarbat fragment, with the same demands	NMS
17/02/1921	Stirling Natural History and Archaeological Society	Sir Frederick Kenyon, Director of the British Museum; Secretary for Scotland; three unnamed MPs	Yes	Return of Stone to Scotland – 'either to the neighbourhood of Cadboll where it could be suitably cared for, or to the Scottish National Museum, Edinburgh'	BM and NMS
18/02/1921	Scottish Ecclesiological Society	Sir Lionel Earle, HM Office of Works	Yes	Return of Stone to Scotland to be placed in National Museum if a local solution is unfeasible.	BM
22/02/1921	Perthshire Society of	Mr Robert Munro, Secretary for Natural Science	Yes Scotland	Return of Stone to Scotland – and erection 'near its local site in Hilton of Cadboll'	BM
24/02/1921	Glasgow School of Art	Sir Lionel Earle, HM Office of Works	Unclear	Return of Stone to Scotland	BM

 $Table\ 6.2\ (cont)$ Table of known petitions of protest from Scottish bodies

Date	Author	Letter Recipient(s)	Response to SoAS campaign	Stance	Archive
25/02/1921	Glasgow Celtic Society	Sir Lionel Earle, HM Office of Works	Unclear	Return of Stone to Scotland to be placed in National Museum or some other museum	BM
25/02/1921	The Institute of Scottish Architects	Trustees of the British Museum	Yes	Return of Stone to Scotland either to original location or, preferably, to the National Museum.	BM
28/02/1921	Buteshire Natural History Society	Sir Lionel Earle, HM Office of Works	Yes	Return of Stone to Scotland to be placed in National Museum if a local solution is unfeasible	BM
02/03/1921	Greenock Philosophical Society	Trustees of the British Museum	Unclear	Return of Stone to Scotland to be placed in National Museum	BM
10/03/1921	Paisley Philosophical Institution	Sir Lionel Earle, HM Office of Works	Unclear	Return of Stone to Scotland to be placed in National Museum 'where it would be readily accessible to Scottish craftsmen and students'	BM
ND (pre 11/02/1921)	The Elgin and Morayshire Literary and Scientific Association	Mr Robert Munro, Secretary for Scotland	Yes	Return of Stone to Scotland	NMS
ND (pre 14/02/1921)	Gaelic Society of Inverness	Mr Robert Munro, Secretary for Scotland; Mr Macpherson MP; Mr T. B. Morison, Lord Advocate.	Yes	Return of Stone to Scotland to be placed in National Museum	NMS
ND	Falkirk Natural History and Archaeological Society	Mr Robert Munro, Secretary for Scotland	Yes	Return of Stone to Scotland	NMS
Ω	Hawick Archaeological Society	Mr Robert Munro, Secretary for Scotland	Unclear	Return of Stone to Scotland (Information based on a report in <i>The Scotsman</i> , 24 February)	N/A
ND	Royal Philosophical Society of Glasgow	Mr Robert Munro, Secretary for Scotland	Unclear	Return of Stone to Scotland (Information based on a letter to <i>The Inverness Courier</i> , 14 Feb)	N/A
ΩZ	St Andrew Society of Glasgow	Mr Robert Munro, Secretary for Scotland	Unclear	Return of Stone to Scotland (Information based on a report in <i>The Highland Neus</i> , 12 March)	Z/A

art were allowed to leave the country, the resulting regret and disappointment would be extreme'. ³²⁰ He also pointed out that it had been the intention of the Ancient Monuments Board to have the stone scheduled in the immediate future and 'but for the war, this would have already been done'. Munro concluded by asking if the Trustees could postpone their decision about whether to accept the gift until he had had the opportunity of discussing the situation with 'the proprietor' (Macleod) who was seriously ill at present.

At the same time the Trustees also received a letter of protest from Glasgow Archaeological Society, the first of many from Scottish bodies.³²¹ The letter contained a copy of a Resolution passed by the Council of the Society in a special meeting which stated that

The Council of the Glasgow Archaeological Society, representing archaeological interests in the West of Scotland, expresses its strong disapproval of the action of the Trustees of the British Museum in removing from Scotland the Hilton of Cadboll Stone – one of the most highly valued monuments of Celtic Ecclesiastical art in this country – and respectfully represents that it should be returned to Scotland.

Both Munro and the Glasgow Archaeological Society had been urged to act by the Society of Antiquaries of Scotland who rapidly orchestrated what can only be described as a nation-wide campaign for the repatriation of the upper portion of the Hilton of Cadboll cross-slab. On 3 February the Secretary of the Society of Antiquaries of Scotland, R Scott Moncrieff, sent a circular letter to a large number of antiquarian and related bodies.322 The letter referred to articles about the removal of the Hilton of Cadboll stone in The Scotsman³²³ and The Glasgow Herald³²⁴ and stated that 'this is one of the finest of the early Christian monuments of Scotland, and, should it be allowed to remain permanently in London, the loss to Scotland will be irreparable'. Despite its unscheduled status, Moncrieff then went on to set the protest firmly in the context of the Ancient Monuments Act and its role in the preservation and protection of such monuments, stating that 'it is invidious that the stone should ever have been removed from the district to which it belonged' and that

It was undoubtedly for the protection, *inter alia*, of such monuments as this that the Ancient Monuments Acts were passed and the Ancient Monuments Board recently appointed, and every pressure must be brought to bear on His Majesty's Government to prevent the violation of the very principle which underlies these Acts of Parliament.

The letter concluded with an earnest appeal to societies 'to send a formal protest to the Secretary for Scotland against this reprehensible proceeding, with a request that the stone should be returned to Scotland'.

The Society of Antiquaries of Scotland is thus quite clear in instructing societies as to what their position should be and in providing a context for their protest.325 At least 18 societies joined the protest; some of them almost immediately and the rest within four to six weeks (Table 6.2). A few bodies addressed their protest direct to the Trustees of the British Museum, or its Director, Sir Frederick Kenyon. Most, however, wrote to the Secretary for Scotland, Mr Robert Munro, and/or Sir Lionel Earle at HM Office of Works, the latter forwarding them immediately to the British Museum.326 The Society of Antiquaries of Scotland wrote to both on 8 February 1921,327 and sent a further protest on 12 February regarding the removal of another fragment from Invergordon Castle. This, they mistakenly took to be Tarbat 10, with the Hiberno-Saxon inscription, whereas it was in fact Tarbat 1.328 Most of the other bodies registering a protest did so simply with respect to the upper portion of the Hilton of Cadboll crossslab, but they used equally strong terms, for instance, stating their 'strong disapproval', 'great regret', and 'formal protest', mostly aimed at the British Museum and its Trustees rather than at Captain Macleod.

The significance of the monument in national terms was stressed, mostly with respect to its historic value, but also as a source of inspiration for contemporary artists and craftsmen.329 Furthermore, many followed the Society of Antiquaries of Scotland and drew upon the Ancient Monuments Act in an attempt to lend moral authority to their demands for its return. However, whereas Scottish bodies were unanimous in appealing for its return to Scotland, there was some divergence of opinion about where it should be deposited were that to happen (Table 6.2). Of the 18 bodies that are known to have made formal written protests, one argued exclusively in favour of erection near its ancient site in Hilton of Cadboll; three argued exclusively in favour of the National Museum of Antiquities; seven stated that it should be placed in the National Museum of Antiquities if a local solution was not possible or feasible; and a further seven simply requested that the stone be returned to Scotland. Where explanations were offered as to these views, they focus on issues of conservation, authenticity and local character; issues which had been subject to debate since at least the late 19th century.³³⁰ For instance, The Council of the

Glasgow Archaeological Society was of the opinion

If the stone is in such a condition that it should be protected from the action of weather the proper resting-place for it is in the National Museum of Antiquities, Edinburgh.³³¹

Whereas the Perthshire Society of Natural Science argued that

While it might be necessary in some cases to put such monuments under cover either for their safe custody or for their preservation from the weather, the nearest museum or suitable public building should be selected for this purpose so that local interest might be retained. The Society, therefore, is strongly of the opinion that the Cadboll stone should be sent back from London and erected in or near its original site in Hilton of Cadboll.³³²

Aside from mobilising Scottish antiquarian, scientific and artistic organisations to register a formal protest, the Society of Antiquaries of Scotland campaign also set in motion a chain of further correspondence with individuals, societies, and important figures in public life. The NMS archive provides glimpses of this. For instance, R Scott Moncrieff, Secretary of the Society of Antiquaries of Scotland, wrote on instruction of the Council to the Earl of Rosebery enclosing the protest of the Society in the hope that he would be able to help in the matter.333 Lord Rosebery replied that it seemed to him 'an outrage that this ancient stone had been removed from Scotland, for which there can be no possible excuse', but he feared that he had no means of assisting in its restoration.³³⁴ Graham Callander, Keeper of the National Museum of Antiquities, had more luck with W Douglas Simpson of Aberdeen who forwarded the Society's circular letter to the Working Men's Natural History Society, with whom he was well-acquainted.³³⁵ He also recommended that the Society contact the Aberdeen Regional Survey Association and the Northern Arts Club, to whom he would be lecturing that Friday and would take the opportunity of pressing the issue personally. Finally he asked whether the Rev Archibald B Scott of Helmsdale, a 'Pictish authority', had been alerted as he is 'the sort of man to raise ructions in the North'. We can only imagine that officers of other societies also took it upon themselves to 'raise ructions' where they could, by writing to societies, friends and acquaintances, who they felt might exert influence. Politicians were also a target. The Gaelic Society of Inverness, for instance, wrote to T B Morison, Lord Advocate and MP for Inverness-shire, and Ian Macpherson, MP for Ross-shire. 336 As a result of the wide publicity and direct lobbying of MPs the fate of the Hilton of Cadboll cross-slab was also discussed in the Houses of Parliament. On 3 March 1921 Lieutenant-Colonel Arthur Murray asked the Secretary for Scotland for a statement regarding the Hilton of Cadboll Stone and its acquisition by the British Museum, 337 and on 15 March 1921 the latter announced that the British Museum had decided to release Captain Macleod from his offer by declining the gift of the Hilton of Cadboll cross-slab. 338

Press coverage was extensive and this was in no small part a result of the activities of the antiquarian societies and their members. Our research has identified 78 articles focusing on the Hilton of Cadboll cross-slab during 1921 in 8 newspapers: The Glasgow Herald (now The Herald) (16); The Glasgow News (1); The Highland News (11); The Inverness Courier (9); The Perthshire Courier (1); The Ross-Shire Journal (7); The Scotsman (28); The Times (2) (Chapter 7.6). 339 These articles varied in type and consisted of reports, commentaries, editorials, and letters to the editor. Most of the reports focused on recording developments from the initial removal of the cross-slab to its return to Scotland. 340 Some of these cited sources in official or prominent public positions, such as the Director of the British Museum, the Secretary for Scotland, the Office of Works, the Chairman of the Ancient Monuments Board for Scotland, the Duke of Atholl and others to lend authority to their reports (see Table 6.3 for a summary of their roles). The formal protests recorded by many of the antiquarian societies, along with the replies that they received, were frequently reported upon, cited at length, or summarised.³⁴¹ Other reports described the Hilton of Cadboll cross-slab and the Tarbat fragment, and discussed their recent history and state of preservation with greater or lesser accuracy.³⁴² Whilst all of these reports were written from particular perspectives, it is the editorial commentaries and letters which are most revealing about the stances of newspapers and individuals.

The Scotsman adopted a very clear position in favour of return of the monument to Scotland. For instance, an editorial on 9 February began with the statement that 'Scotland is threatened with the loss of one of her most notable historical monuments [...] unless the voice of public pinion makes itself heard promptly and in unmistakable fashion'. The same editorial went on to discuss Macleod's actions and cite examples of

repatriation, for instance of artefacts from the British Museum to Ireland. Furthermore, in a later editorial, discussing reports that Macleod wished to have the stone returned to Scotland, the author stated that 'what threatened to be a very unpleasant incident now promises to have a satisfactory ending'.344 The Glasgow Herald adopted a similar position by virtue of presenting the viewpoint of the Scottish antiquarian establishment that the stone is a 'national treasure', which should be returned to Scotland (usually naming the National Museum of Antiquities), pretty much to the exclusion of other arguments.345 The Inverness Courier adopted as staunch a stance as The Scotsman in favour of the return of the monument to Scotland, although its articles and letters were much more inflammatory.346 Initially reports focused on the wrongs of its removal from Scotland per se, but, once it became evident that the stone would be returned, the newspaper adopted a position in favour of a local solution, either at the ancient site or in Fearn Abbey.347 Leader and editorial statements in The Ross-Shire Journal also positioned the paper firmly in favour of the return of the monument to Scotland, specifically to Ross-shire. For instance, reporting on the intimation that Captain Macleod was prepared to hand over the Hilton of Cadboll stone to the National Museum of Antiquities, The Ross-Shire Journal stated that

This is infinitely better than that the stone should be housed in London, but it does not meet the objection that the stone after all, is really of Ross-Shire origin and that Ross-Shire is its native and natural home. Captain Macleod obviously is acting under advice not of Ross-shire origin.³⁴⁸

The Highland News adopted a more non-committal stance. It was the first to report on the disappearance of the upper portion from Invergordon, and it published a number of letters outlining the local background and context of the gift, but it did not take a strong editorial stance. Finally, *The Times* represented the opposite end of the spectrum from newspapers like *The Scotsman* and *The Inverness Courier*. There was not a great deal of coverage, but an article published on 1 March provided a series of arguments challenging Scottish demands for restoration and concluded by arguing that

While, out of courtesy to the Secretary for Scotland, the Trustees have postponed their decision, it is understood that it is their very decided wish to possess the stone, and it is hoped that it may find an honoured place in the Museum.³⁴⁹

A wider range of perspectives were of course represented in the newspapers in the form of individual letters to the editor. Correspondence frequently stemmed from fellows/members of the antiquarian societies and the Society of Antiquaries of Scotland was well represented. The purpose of a large proportion of these letters was to make personal protests about the removal of the stone, or to endorse those of particular societies. If condemnation of the British Museum had been strong in the formal protests of antiquarian and scientific bodies, this was often magnified in letters to the press and criticism also extended to the conduct of Captain Macleod. 350 There were also a handful of letters which defended the actions of The Trustees and Officials of the Museum³⁵¹ and/or Macleod himself.³⁵² On the subject of their actions, a number of correspondents also entered into debates with one another, as well as over the wider issue of national patrimony versus private ownership. Finally, a number of letters focused on the history of the Hilton of Cadboll cross-slab and the local background to the donation, 353 these also leading to minor debates between correspondents, usually over matters of factual accuracy. 354

Both the strong disapproval expressed by the antiquarian establishment and the rather more polemical and emotive statements published in the national media aggravated the Trustees of the British Museum, if Viscount Esher's public response is representative. In his letter to *The Glasgow Herald* he pointedly stated that

Some of the Trustees would have been glad to give consideration to the desire of Scotsmen to retain the stone in Scotland, but their task was rendered difficult, if not impossible by the hectoring tone of the documents to which I have alluded. [...] If Scottish antiquarians and archaeologists desire to press the very sound point that the stone should remain in Scotland, they should show courtesy and tact towards Mr Macleod and the Trustees of the British Museum or they are likely to be disappointed. 355

Despite this very thinly veiled threat, the public campaign of protest, courteous or otherwise, probably played a role in bringing about the return of the upper portion to Scotland, putting the Trustees under pressure and certainly placing Macleod in a difficult position personally. More importantly, however, the campaign no doubt mobilised certain individuals in prominent positions and informed the actions they took. Table 6.3 identifies these individual participants and summaries their actions. Some, such as Graham

Callander, Sir Frederick Kenyon, and Sir Lionel Earle were fulfilling their professional duties. Others such as Robert Munro and the Duke of Atholl were involved in direct negotiations between Macleod, the Trustees of the British Museum, the Society of Antiquaries of Scotland and the National Museum of Antiquities. As we shall see, their political persuasion and diplomacy was crucial in sealing the fate of the upper portion of the cross-slab; so much so that they both received formal letters of thanks from the Society of Antiquaries of Scotland. 356

The archives of the British Museum and the National Museums of Scotland do not provide a comprehensive record of these negotiations, but it is possible to reconstruct many of the key events. As we have seen, Munro had taken action immediately, writing to the Trustees of the British Museum in his role as Secretary for Scotland on 10 February requesting that they postpone their decision. His next step was to approach Captain Macleod and meet with him as soon as he was recuperating from his illness. However, he did not manage to do this until the 7 March and it was the Duke of Atholl who was the first to communicate with Macleod over the matter. A letter from Atholl had been published in The Scotsman on the 21 February in which he adopted a conciliatory tone sympathising with all parties over the issue, including the Trustees of the British Museum and Macleod. He had been in touch with Macleod apparently suggesting that the British Museum might be prepared to release him from his offer and asking whether he would be well enough to meet with someone to discuss the matter.357 Macleod responded on the 24 February, stating that whilst he was sceptical about the outcome it was worthwhile approaching the Museum and that

For my part I am quite willing to let it be known that if I had realised what was the feeling of Scottish Antiquarians with reference to the stone, I should never have thought of allowing it to leave Scotland.³⁵⁸

Atholl forwarded a copy of the letter to Sir Lionel Earle who in turn communicated with Sir Frederick Kenyon over the matter. Earle's role was largely one of mediation, forwarding documents and liaising with the British Museum and the Society of Antiquaries of Scotland through Lord Carmichael and R Scott Moncrieff. He was, however, important in pursuing guarantees that the National Museum of Antiquities would be prepared to accept the cross-slab and also that Macleod would be prepared to offer it to them, were the British Museum to release Macleod from his

gift.³⁵⁹ The latter issue it appears was again resolved by the Duke of Atholl.³⁶⁰ Thus by the time Robert Munro was to meet with Captain Macleod on 7 March 1921 much of the ground-work had been prepared and he was able to report Macleod's attitude as follows in a letter to Sir Frederick Kenyon:

If he had been aware of the provisions of the Ancient Monuments Act, or had he foreseen the strength of sentiment which has been expressed with regard the matter, he would not have dreamt of permitting the Stone to leave Scotland, and he now hopes very much that ways and means will be found for restoring it to Scottish custody.³⁶¹

Munro's letter, communications between Macleod and Hercules Read, and letters of protest from Scottish bodies, were considered at the next Standing Committee of the Trustees of the British Museum on 7 March 1921.³⁶² In light of this the Trustees bowed to Munro's hope that 'they may see their way to co-operating with Macleod in giving effect to his express wish' and recorded the following resolution:

[...] while considering the offer to have been made in the best interests of archaeology, and confirming the action of the Keeper in the matter, [the Trustees] resolved not to accept it, so as to leave Captain Macleod free to make such dispositions as he might now prefer.

Macleod formally took advantage of this offer on 15 February 1921 in a letter to Sir Frederick Kenyon in which he stated that

The Scottish antiquarian societies and others may seem to take a narrow view of the question, but from the various letters I have received I can see that the feeling is <u>widespread</u> in favour of this stone being returned to Scotland and therefore with many regrets I feel I must take advantage of the very generous view the Trustees have taken in allowing me a free hand and decide that it is sent back.³⁶³

It appears that Macleod did not communicate directly with the Society of Antiquaries of Scotland or the National Museum of Antiquities until prompted to do so by a letter from R Scott Moncrieff on 1 April 1921. Moncrieff thanked Macleod on behalf of the Council for agreeing to return the stone to Scotland. He went on:

They further hope that you will see your way to present the stone to the nation and deposit it in the Scottish National Museum of Antiquities where, with other notable Scottish relics, it would be for all time safeguarded.³⁶⁴

In his brief and rather cool response Macleod stated that, 'I suppose I cannot do better than agree to have it preserved in your national museum', concluding with a request that the expenses incurred by the British Museum be reimbursed by the Society. ³⁶⁵ Thus, the upper portion of the Hilton of Cadboll cross-slab was incorporated into the collection of the National Museum of Antiquities in Queen Street where it remained until the late 1990s when it was moved to the new Museum of Scotland in Chambers Street.

So far we have concentrated on the role of individuals, antiquarian bodies, museums and the media in the events surrounding the upper portion of the cross-slab in 1921. However, the debates surrounding the removal of the Hilton of Cadboll cross-slab to the British Museum are to a large degree prefigured in wider discourses about the relationships between antiquities, particularly early medieval sculpture, and the production of Scottish national identity. Indeed, it could be said that the cross-slab itself was already woven into narratives concerning the origins and history of the Scottish nation. In Chapter 6.5 it was argued that the national significance and aesthetic value attributed to the Hilton of Cadboll cross-slab in the work of popular authors such as Cordiner and Miller ensured its incorporation into the national imagination. It became a well-known and highly regarded example of a body of indigenous art associated with the spread of Christianity and the history of the Scottish nation. There were also prior connections between the cross-slab and the work of the Society of Antiquaries of Scotland. In the early 1830s, Charles Carter Petley's drawings and copper engravings of the upper portion were donated to the collection of the Society of Antiquaries of Scotland by his widow.³⁶⁶ A photograph of the Hilton of Cadboll cross-slab standing in the grounds of Invergordon Castle forms the frontispiece for the Second Series of Joseph Anderson's influential Rhind lectures, Scotland in Early Christian Times. 367 Furthermore, as part of a wider body of early Christian art, the Hilton of Cadboll cross-slab had been subject to extensive discussion and classification during the late 19th and early 20th centuries, not least in Allen and Anderson's seminal Early Christian Monuments of Scotland.

However, located in the grounds of Invergordon Castle, where it functioned as an accessory of power for an elite stratum of society, much of its national symbolism remained latent, implicit in its privileged position as an outstanding example of early medieval sculpture. It was only with its removal to London in

1921, relocating it in the sphere of state institutions and machinery, that its relationship to state and nation was fully realised. In the debate surrounding its removal, the monument was described as a 'national treasure', a 'precious Scottish treasure', a 'national relic', and its Scottishness (as well as its Celtic character) was repeatedly emphasised. Proclaimed as 'one of the most highly valued monuments of Celtic ecclesiastical art in this country, 368 its significance was further enhanced by its status as art, at a time when Celtic art was the focus of a modern revival which itself fed into the production of Scottish national identity.³⁶⁹ The international importance of this 'national treasure' was also highlighted, thus situating the art of Scotland in a pre-eminent position in relation to that of other European nations. For instance, it was described by one correspondent as 'one of the most exquisitely carved sculptured ancient stones in the world'370 and compared favourably with classical art in another article that cited Hugh Miller's view that the vinescroll border 'would hardly disgrace the friese of an Athenian portico'.371

The instrumental role of the Society of Antiquaries of Scotland in the whole affair also highlights the national status of the monument. As we have seen in Chapter 6.5, the Society of Antiquaries of Scotland was founded in 1780 with the aim of studying 'the ancient, compared with the modern state of the Kingdom and people of Scotland'. From the outset the establishment of a collection of Scottish antiquities was a principal objective, and one that was very much presented as a national endeavour. As William Smellie pointed out in his *Account* of the society:

They [the 'noblemen and gentlemen' involved in instituting the Society] considered that some useful materials, which had been amassed by eminent Antiquaries, were now perishing in the possession of persons who knew not their value; that others, still existing, in public libraries, depended upon the fate of single copies, and were subject to obliteration, to fire, and to other causes of destruction; and that it was an object of national importance to bring all these, either in their original form or in accurate transcript, into one great repository, which should be rendered accessible to the republic of letters.³⁷³

Initially, like other scholarly societies, the Society and its collections had been the preserve of the privileged. However, during the early 19th century, the Society became anxious to use the Museum to expand its public role,³⁷⁴ and by the early 1840s had started to appeal to the government for financial support in running

Scotland's 'national' museum. The creation of public museums and galleries was a characteristic of European nation-states in the late 18th and early 19th centuries. As Anderson has shown, the formation of modern nation-states involved the creation of large-scale 'imagined communities' based on a sense of common experience rooted in the intersection of a particular history and territory.375 The museum and the map were key artifices in producing such a consciousness, the former providing a repository of national tradition that could be displayed for public consumption utilising new forms of temporal classification to illustrate the history of the nation. In its new conception, the public museum was to be an instrument of instruction, a means to 'civilise' the masses, and, in the case of national institutions, a vehicle for visualising and promoting a collective national identity.³⁷⁶ However, research has shown that 'the process was as complex as it was protracted'.377 Their creation involved the transformation of earlier collections which had functioned as accessories of power for an elite stratum of society, into 'museums as cultural resources that might be deployed as governmental instruments involving the whole population'.378 Furthermore, the process frequently involved the negotiation of continuing elite influence in one form or another, for instance through maintenance of a degree of control over the classification and display of the collections, or negotiation of privileged access to them.

By 1851 an agreement was reached to transfer the collection of the Society of Antiquaries of Scotland to the Crown 'to be the nucleus of a National Archaeological Museum for Scotland'. 379 The Board of Manufacturers was to be responsible for providing accommodation, new display cabinets and employment of staff. However, the Society was to maintain the role of arranging the collection and appointing the curator.³⁸⁰ Their continuing role as 'custodians' of the National Museum of Antiquities undoubtedly informed the active part that Council members and Fellows played in the Hilton of Cadboll protest of 1921. In its press statements and correspondence the Society restricted itself to calls for the return of the stone to Scotland, stating that it should never have been removed from the district where it belonged.³⁸¹ However, in later negotiations more specific interests allied to the National Museum of Antiquities become evident, not least in the letter from R Scott Moncrieff on 1 April 1921 asking Macleod to present the stone to the Museum. Indeed it is clear that there were tensions between the

Society of Antiquaries of Scotland, representing the National Museum of Antiquities, and the Trustees of the British Museum over the acquisition of objects of Scottish provenance, as well as conflicts between the Directors and Keepers at the two institutions. On 1 March 1921 the Society of Antiquaries sent an excerpt of the Council Minutes to the Trustees of the British Museum stating that

The Council [...] warmly appreciate the manner in which the Trustees of the British Museum have dealt with the recent difficulty regarding the destination of the Hilton of Cadboll stone. The Council feel that the consideration which the Trustees have shown lays a corresponding responsibility upon themselves, and that they therefore regard it as a good omen for the future. If the incident should lead to a larger measure of co-operation, they are sure the best interests of both the institutions concerned would be materially furthered. The Council desire to place it upon record that they would welcome any practical steps towards the establishment of a closer understanding between the responsible officials.³⁸²

Little more than a fortnight later Graham Callander wrote to Sir Frederick Kenyon to advise him that the 'late Celtic bronze mask' from Torrs, Galloway, which had been preserved at Abbotsford, would be auctioned by Sotheby, Wilkinson and Hodge's. 'In case your Museum has been thinking of bidding for it, I have to inform you that the Society of Antiquaries of Scotland have arranged to try and purchase it for this Museum, as the relic is one of the finest of its period in Scotland'.383 The tension surrounding such negotiations is evident in the scribbled notes on the top of the letter between Sir Hercules Read and Sir Frederick Kenyon observing that this 'was no doubt the promised "collaboration" and that a 'polite letter' would not be amiss. The resulting telegram from Read was abrupt, asking Callander to what price the National Museum would bid in order that the British Museum could ensure that both Museums did not lose the piece.³⁸⁴

The reaction of antiquarian bodies and the terms of the media coverage also reflect, and provide insights, into the increasingly nationalistic character of Scottish archaeology in the later 19th and early 20th centuries. Romantic nationalism was evident in the correspondence and publications of archaeologists, who were becoming more and more explicit about the role of the past and antiquarian pursuits in the promotion of national identity. For instance, the Scottish archaeologist Daniel Wilson spoke of the

A FRAGMENTED MASTERPIECE

 $\label{eq:Table 6.3} \textit{Key individual participants in the return of the upper portion of the cross-slab to Scotland1}$

Name	Position	Action taken
The Duke of Atholl	No official position with respect to ancient monuments. He was a founding member and first chairman of the National Trust for Scotland, est. 1931 ²	Atholl played a crucial diplomatic role, negotiating with Macleod, and communicating the latter's wishes to Earle who passed them on to the British Museum and the Society of Antiquaries of Scotland. It is not clear what originally motivated Atholl to take on this role.
Graham Callander	Keeper of the National Museum of Antiquities	The Society of Antiquaries of Scotland represented the interests of the Museum and thus Callander's role on the surface at least was a minor one. He confirmed that the upper portion would be accepted by the National Museum of Antiquities.
Lord Carmichael	President of the Society of Antiquaries of Scotland	Carmichael signed the formal letters of protest from the Society of Antiquaries. Along with Atholl, he was also involved in the negotiations behind the scene between Macleod, the National Museum and the British Museum.
Sir Lionel Earle	Civil Servant, HM Office of Works. ³ He is known to have stayed with the Duke of Atholl ⁴	Earle received many of the formal protests from Scottish bodies. This was probably because the cross-slab was considered to be a monument, and many protestors attempted to bring the Ancient Monuments Act into the debate, even though it had not been scheduled. Earle acted as a mediator, forwarding protests to the British Museum and communicating with Atholl, Carmichael and Munro.
Viscount Esher	A Trustee of the British Museum	Esher provided the only public statement from the Trustees of the British Museum in his letter to <i>The Scotsman</i> (17 February), although there is nothing to indicate that he was offering an official view. His main agenda was to clarify Macleod's legal status as owner in the absence of scheduling.
Sir Frederick Kenyon	Director of the British Museum	Kenyon received a few of the formal protests direct from Scottish bodies, and was the main point of contact for Earle and Munro (who forwarded other protests to him).
Sir Hercules Read	Keeper of the Department of British and Mediaeval Antiquities and Ethnography, British Museum. Also President of the Society of Antiquaries of London making him a Trustee of the British Museum by office	It appears that Read played a key role in receiving the Hilton of Cadboll cross-slab. He wrote a report for the Trustees recommending that Macleod's gift be accepted. Macleod clearly communicated with Read privately although copies of the letters are not in the archives.
Captain Roderick Macleod	Proprietor of Invergordon Castle and by association regarded as legal owner of the upper portion	Macleod's actions and desires were crucial to the outcome. He initially offered the upper portion of the cross-slab to the British Museum. Following the diplomatic activities of Atholl and political pressure from Munro he agreed to return it to Scotland, donating it to the National Museum of Antiquities.

Table 6.3 (cont)				
Key individual participants in the return of the upper portion of	the cross-slab to Scotland			

Name	Position	Action taken
Sir John Stirling Maxwell	Chairman of the Scottish Ancient Monuments Board	The AMB was intending to schedule the cross-slab but had not done so by 1921. Maxwell resisted pressure formally to demand its return, but he did privately communicate to the Trustees and Macleod that the AMB desired its return either to the National Museum of Antiquities or to its ancient site at Hilton of Cadboll. Macleod took note of Maxwell's views in private correspondence with Atholl.
Robert Munro, MP	Secretary for Scotland	Munro received most of the written protests from Scottish bodies. He acted as an intermediary between Macleod, the British Museum and the Scottish antiquarian establishment. He also requested that the Trustees of the British Museum postpone their initial decision about whether to accept the gift and asked them to co-operate in giving effect to Macleod's capitulation.

¹ This table provides a summary of information that is discussed in more detail in the main text. References to supporting evidence can be found in footnotes to the main text.

role of antiquarian museums in the 'awakening' of 'genuine nationality'. 385 Furthermore, in the preface to his pioneering synthesis The Archaeology and Prehistoric Annals of Scotland, he traced the 'zeal for archaeological investigation which has recently manifested itself in nearly every country of Europe' to Sir Walter Scott whose literary, antiquarian and folkloristic endeavours were, he argued, instrumental in the production of a romanticised Scottish national tradition.³⁸⁶ By the late 19th century, archaeological enquiry was promoted as a national pursuit of the highest order. Furthermore, archaeological remains were not merely seen as national property, but as part of the very 'body' of the nation as an historical entity. For instance, in the first of his influential Rhind Lectures, Joseph Anderson, Keeper of the National Museum of Antiquities between 1869 and 1913, argued that

[T]he idea of nationality cannot be confined to the existing individuals (who have no monuments and no history), but includes the aggregate of all its relations of space and time. Strip the nation of its monuments and history, and what is there left to be signified by the term national? I think the inference from this is irresistible, and that it is scarcely possible to conceive of an object

more truly national than that which aims at illustrating the nation's infancy. 387

On this basis, Anderson zealously promoted the need to create an 'exhaustive collection' that is completely representative of the nation, encompassing the entire national territory and organised on a chronological basis to reveal the history of the nation. This national collection, he suggested, may be regarded as a 'great cairn', and 'every true-hearted Scotsman' should consider it his duty to hand the 'waifs and strays' that exist in private hands over to the collection; 'to add a stone to the cairn, by laying them as his offering on the altar of his country'.³⁸⁸

Given such eminent precedents, it is not surprising then that the commentaries and protests surrounding the removal of the upper portion of the Hilton of Cadboll cross-slab to the British Museum were couched in similar terms. The Scottish nation was portrayed as an organic entity with similar attributes to people.³⁸⁹ For instance, it is portrayed as one of the main actors in the drama in statements like, 'Scotland can ill afford to lose one of her interesting early Christian monuments'.³⁹⁰ Furthermore,

² SCRAN, http://www.scran.ac.uk/.

³ Oxford Dictionary of National Biography, Vol 39, where he is described as 'affable, handsome and well-connected' with a strong interest in fine arts, public memorials and statuaries.

⁴ Earle 1935.

Scotland was attributed a 'soul' or a 'spirit', and the removal of the Hilton of Cadboll stone was described as 'contrary [...] to the real spirit of Scotland', 391 or compared to the very 'soul of the nation', as we saw in the opening quote to this section. The nation is even ascribed personality traits, as in the case where one commentator argues that it is preposterous 'to imagine Scotland so callous as to allow this valuable volume from the Celtic Library of the North to pass to an untimely grave in the British Museum'. 392 Above all, however, it is the possession of cultural property which consolidates the idea of the nation as analogous to the individual; 'property' being central to the post-Enlightenment definition of the individual in terms of rights, liberties and identity.³⁹³ Some of the newspaper articles simply state that historic relics such as the Hilton of Cadboll cross-slab are 'national possessions'.394 More often the assertion of national ownership is embedded in accusatory references to the stone having been 'robbed', 'smuggled' or 'stolen', and the behaviour of the British Museum authorities as 'clandestine', 'conniving', 'furtive' and even 'shabby'. 395 Far from representing the views of uniformed members of the public or journalists intent on fuelling the skirmish, this inflammatory language frequently stemmed from members of the antiquarian establishment.396 Furthermore, Captain Macleod is castigated by some for failing to take the 'proper course of action', which a true Scotsman would take under such circumstances, basically neglecting to add his 'waif' to Anderson's 'cairn of the nation'. 397

Thus the debate surrounding the Hilton of Cadboll cross-slab in 1921 reveals continuing tensions surrounding the rights of the private owner versus the rights of the nation with respect to cultural patrimony. Such tensions had been a focus of political debate since at least as early as the 1870s when Sir John Lubbock's Ancient Monuments Bill stimulated the first parliamentary debate on archaeological monuments in Britain. 398 There were 21 Scottish sites listed on the schedule of the first Ancient Monuments Act in 1882, seven of which were early medieval sculptured monuments.399 A further six sculptured monuments had been taken into guardianship by 1900.400 As pointed out above, the Hilton of Cadboll cross-slab had not been scheduled or taken into guardianship prior to 1921. The Ancient Monuments Board for Scotland established under the 1913 revised Act had been preparing a list of monuments to be scheduled, including the Hilton of Cadboll crossslab. However, as the Chairman of the Board, Sir

John Stirling Maxwell explained, the policy had been to await the preparation of a complete list of this class of monuments rather than schedule individual examples in a piecemeal fashion. The upper section of the cross-slab thus remained the private property of Captain Macleod in legal terms, a point that was emphasised by the British Museum and in particular by one of its Trustees, Viscount Esher. In his letter to *The Glasgow Herald* Esher emphasised the implications of this legal status:

The stone is the private property of Mr McLeod, and as it is not scheduled as an ancient monument under the Act of 1913 he is free to dispose of it, sell it, give it away, or destroy it as he pleases. [...] Mr McLeod is free to offer and the Trustees [of the British Museum] are free to accept a valuable and important gift. If Scottish antiquarians and archaeologists desire to press the very sound point that the stone should remain in Scotland, they should show courtesy and tact towards Mr McLeod and the Trustees of the British Museum, or they are likely to be disappointed. The stone, not being scheduled, could be sent to America tomorrow if the Trustees refuse the gift [...].

An unattributed article in *The Times* adopted a similar stance and elaborated with respect to Scotland's national claims:

There is no question of Captain Macleod's legal right to offer the stone and the Trustees' legal right to accept it. The only question involved seems to be whether the principle is to be adopted that everything Scottish must stay in Scotland, or whether it is reasonable that the art of Scotland, like that of most other countries, should be represented in the British Museum. There might be something to be said for the argument that the stone must not be removed from Scotland if it was the only representative of its kind, but it is only one of a very considerable number. 403

In contrast, a letter from the Duke of Atholl to the Editor of *The Scotsman* exemplifies the opposing view that the Hilton of Cadboll stone represents national property:

This stone, an upright cross-slab sculptured in relief is one of the most beautiful of our Early Christian monuments, and also one of greatest interest to our archaeologists, and, like many others, I feel that no effort should be spared to get it returned to its native land. It is obvious that a stone of such antiquity is morally a national possession, and should be in Scotland, either in our National Museum, or on its former site, properly safeguarded from depredation or weather by the Office of Works. 404

Such a view was echoed in many Scottish newspaper articles and editorials. 405 The debate surrounding Hilton of Cadboll thus provided a microcosm for the expression and negotiation of tensions between national patrimony and private property, but also between moral and legal conceptions of ownership. Interestingly, distinctions between legal and moral conceptions of ownership would also become the focus of tensions between national institutions and the local community some 80 years later following the rediscovery and excavation of the lower portion of the cross-slab.406 In 1921, these tensions were played out with reference to arguments about patriotism and morality as much as they were about the legality of ownership and the machinery of the state. Ultimately, however, it was powerful class alliances and the intervention of elite members of society, such as the Duke of Atholl and Lord Carmichael, which appears to have been decisive in bringing about the return of the upper portion to Scotland and its acquisition by the National Museum of Antiquities.

6.8 Marginalisation and regeneration, reconstruction and discovery: the Hilton of Cadboll cross-slab and the seaboard villages

If I were to go into any of the three fishing villages on the East Coast [Hilton of Cadboll, Balintore, and Shandwick], I would find that nine out of ten know very little about the ancient relic and care not a 'haddie' whether it be presented to the art loving natives of Lapland or set up in a Scottish museum in Edinburgh. [...] What material benefit [do they] enjoy now that trouble and expense have been involved in the restoration of this primitive specimen of Celtic sculpture to its appropriate place amongst Scotias richest collection of rarities? [...] Their life is both arduous and dangerous. Amenities which, if improved, would facilitate his continual grind are allowed to go from bad to worse. Not a word is spoken on their behalf, and not a finger is raised to help them live comfortably: yet where the object is an extraneous one the interest displayed by promoters of the public weal is immense.407

Whilst the Hilton of Cadboll cross-slab was being incorporated into one of the principal Scottish national institutions, the seaboard villages of Easter Ross became increasingly marginal in social and economic terms. The *Highland News* correspondent lists a number of hardships facing Hilton of Cadboll in 1921, including the absence of a water pump, a

scarcity of milk for children, and the poor condition of Balintore harbour, which, due to silting and illrepair, had become 'virtually useless from the point of view of commerce'. 408 However, the claim that, faced with adverse circumstances, people are largely ignorant of ancient relics such as the Hilton of Cadboll cross-slab, and care little about what happens to them, needs to be qualified. It is not possible to ascertain the breadth of interest in the Hilton of Cadboll crossslab in 1921, but at least one 'Hiltonian' had written to the same newspaper in mid-February correcting misconceptions about its local history, which had been perpetuated in the press. 409 Whilst it is unlikely to have been the most pressing issue in people's lives, it seems that the cross-slab retained a place in people's social memory during the 20th century. Furthermore, during the last few decades activities relating to the monument increased. First, however, we need to return to the social history of Hilton of Cadboll, particularly with respect to marginalisation and regeneration. These processes are an important factor in the production of a sense of identity and place in the Seaboard villages. They are also crucial to understanding developments relating to the crossslab and its symbolic significance in local contexts (Chapter 6.9).

Until the 1960s the economy of the seaboard villages of Easter Ross continued to centre on fishing, with additional seasonal farm labouring. However, in the 1930s the introduction of seine-net boats decimated the white fish population in the Moray Firth and fishing declined from that point onwards.410 Today there are only a few boats berthed in Balintore harbour that engage in fishing on a commercial basis. There are also a number of active salmon-fishing stations along the coast, but most of those involved supplement their income by other means. For the most part, the small boats based in the harbour are used for recreational fishing during the summer, providing for personal consumption and informal exchange networks. Yet, despite its commercial decline, fishing remains a prominent feature of social discourse and maintains an important symbolic role in the production of identities.411

Between the 1930s and 1970s life in the Seaboard villages continued to be characterised by relative hardship, a feature that is prominent in oral histories and in literature relating to the villages. The post-War boom brought a slight increase in prosperity and improvements in village infrastructure and amenities. In the 1920s there was not even a water pump let alone

piped water and electricity, but these were supplied in the 1940s, and street lighting was eventually provided in the 1960s. 413 Many of the older residents who were born and brought up in Hilton stress the abject poverty which their parents and grandparents experienced, and suggest that 'scraping a living' or 'putting a square meal' on the table was the main priority. In other respects, however, many reconstruct life during their childhood in favourable terms, as a time when the villages had a strong sense of identity and solidarity. Experiences of past village life, for instance, when people had to go to the well to fetch water or when children played in the unlit streets at night, also serve to unite and distinguish those who see themselves as 'locals' from those defined as 'incomers', particularly recent settlers.

Aside from the influx of military personnel during the Second World War, and the growth of small-scale tourism revolving around the Balintore campsite during the 1950s and 1960s, there was still little intrusion from the outside world. Military staff and tourists were a temporary presence, and the few people who moved to live in the villages did so largely because they had married into the community. 414 Throughout much of the 20th century a consciousness of difference continued to be based on a fishing way of life, and the pervasive symbolic opposition between fishers and farmers, between those who lived below the cliff and those who lived above it. Such symbolic boundaries remain important today and intersect with class distinctions. However, by the 1970s, industrialisation in Easter Ross and the development of the oil industry brought about considerable economic and social change, 415 to some extent reinforcing these boundaries, but also leading to greater complexity.

By the late 1960s national and local government bodies had prioritised Easter Ross for industrial development. The first large-scale industry to arrive in the area was BA Co's aluminium smelter in 1967. This was closely followed by two oil-related developments. The oil-rig platform contractors, Highland Fabricators, set up a yard in Nigg in 1971, and an oil pipe coating firm, M K Shand, established a factory in Invergordon. 416 This led to a rapid increase in prosperity and aspirations, as well as substantial population growth.417 Despite the population growth, there was little corresponding increase in services and facilities. 418 Furthermore, the new industries proved to be far from reliable employers leading to a boom and bust style economy, which ultimately led to long-term decline and increased social disadvantage.

Unemployment rose in the seaboard villages with the recession of the 1980s. Many young people moved away to seek employment with the knock-on affect that local business and service provision declined.⁴¹⁹ The two remaining shops in Hilton (a general store and a bric-a-brac shop) closed, along with the butchers in Balintore. For all three villages the main services are now located in Balintore: a post office and grocery store, the Spar, a fish and chip shop, a hairdressers, two public houses/hotels and a bed and breakfast. For most other major services residents must travel to Tain. The Highland Council and Ross and Cromarty District Council identified the seaboard as one of the most deprived areas under their remit during the late 1980s and early 1990s. 420 In response, the seaboard became the focus of a number of development initiatives and surveys. These include, 'Community House' established in 1986-7,421 the Seaboard Community Development Group established in 1989,422 and the Seaboard Learning Information Centre in the late 1990s.423

These late 20th-century developments have had considerable impact on the production of identity and place in the villages. Until the mid-20th century the three villages were geographically distinct with open land between them. However, with the industrial development of Easter Ross there came a rapid increase in population and the construction of additional housing, on the Balintore camp site, above the cliff behind Hilton, and in the gaps between the villages. Furthermore, the development initiatives of the 1990s have focused on the seaboard villages as a whole and indeed encouraged the adoption of the term as a joint place-name. As a result, pre-existing village identities have become more complex and contested. However, rather than a straightforward decline in distinct village identities, there is now arguably greater emphasis on their laborious and deliberate construction through social and symbolic processes. Furthermore, the production and negotiation of village boundaries through the act of drawing distinctions between 'locals' and 'incomers' is part of everyday social discourse. Tradition, social memory, genealogy and experience, all have significant roles to play in these processes.

The effects of deprivation and associated development initiatives on people's consciousness are also palpable. The lack of services is a common focus of conversation in the villages, as is the differential distribution of services between them. Thus, Hilton was described by one local resident at a meeting as

a 'backwater on a backwater on a backwater' and in interviews, carried out by SJ in 2001, people frequently digressed into discussion of the lack of shops and pubs within the village. For instance, Duncan, who was born and brought up in the village, stated that 'Hilton's got nothing, it doesn't have a pub, it doesn't have a Post Office, it doesn't have a shop, it had all of these, and Hilton's got nothing'. And Alan noted that

The village itself, you know it's changed a bit over the years and in some ways it has become a bit of a backwater, it's a quiet place, it hasnae got very much in the way of amenities, nothing in fact and in some ways it annoys me in the fact that you know as time goes past there's lots of things could have happened in the village which didnae happen [...] but you know we've always been aware of our past, the past that's been handed down.

A strong sense of loss and anger pervades these commentaries. There is a sense in which Hilton, and the seaboard generally, is perceived as a 'non-place', bypassed by the rest of the world, marginalised not only geographically but also socially and economically.424 However, at the same time there is an equally strong sense of pride in Hilton and the seaboard generally, with an emphasis on its special qualities, beauty and history. For instance, one woman, Kathleen, who has lived there all her life, stated forcefully, 'I mean I can't imagine ever living anywhere else. I can't imagine ever wanting to live anywhere else'. In discussing the appeal of the villages, residents also point to the powerful hold it has on certain 'incomers' who have moved there and over relatives abroad who return again and again. The articulation of this pride is also influenced by the development initiatives discussed above, with many people emphasising what has been achieved within the villages in terms of fund-raising, local events, community action, and so forth.

This background of marginalisation and regeneration is important in explaining the place of the cross-slab in people's consciousness. Its continuing significance in terms of social memory within the village⁴²⁵ was undoubtedly reinforced by the presence of cross-slabs in other nearby villages and the well-known King's Sons folklore recounted in Miller's popular *Scenes and Legends* (Chapter 6.5). However, the wider sense of socio-economic deprivation and loss undoubtedly added greater poignancy to the absence of the cross-slab. A number of local residents were involved in attempts to locate the missing lower portion, and were joined by the late Mrs Jane Durham, who was Chair of Tain and Easter Ross Civic Trust



Illustration 6.9

The reconstruction after erection adjacent to the Hilton of Cadboll chapel showing phase 1 of the project (© Siân Jones)

and a Commissioner of RCAHMS. Some believed that it still rested at the chapel site, while others claimed it had been incorporated into the lintel of a house. 426 Jane Durham commissioned a dowser who located a point just outside the west gable end of the chapel similar to that noted on the first edition of the OS map. 427 By the early 1990s activities surrounding the cross-slab were taking on a more concerted vein. In 1994, the Highland Council was asked to approach the National Museum of Antiquities to explore the possibility of returning the stone to Hilton. 428 When this request failed, a reconstruction project was developed with the aim of providing an incarnation of the missing monument at the chapel site. As we shall see, individuals and organisations

A FRAGMENTED MASTERPIECE



Illustration 6.10

Barry Grove engaged in phase 2 of the reconstruction project,

August 2005 (© Siân Jones)

from outside of Hilton and the seaboard were to play important roles in this respect. Nevertheless, the wider context of active regeneration, and the development initiatives and funding associated with it, was a significant factor. A growing sense of pride in place, and active involvement in local development initiatives, undoubtedly made local residents more pro-active in their reaction to events.

Between 1994 and 1997 the reconstruction project was spearheaded by the late Mrs Jane Durham with strong local support and the help of Martin Carver who had been undertaking archaeological research at Tarbat since 1994. Jane Durham and her brother, Jim Paterson, took an active interest in Hilton, bordering on a sense of ownership, as Cadboll House and farm, including the land on which the chapel is located, had been bought by their family from Captain Macleod. 429 The Tain and Easter Ross Civic Trust (initially under the Presidency of Jane Durham and later Richard Easson) took a lead role in negotiations regarding the project, in consultation with the Fearn, Balintore and Hilton Community Council, the Highland Council, Historic Scotland and the National Museums of Scotland. In discussions with the National Museums of Scotland, the idea of a fibreglass replica cast from the original was rejected in favour of a carved reconstruction, and, on the recommendation of Martin Carver, Barry Grove, a sculptor who had been carrying out work at the Tarbat Discovery Centre, was commissioned to

produce a full-scale reconstruction (illus 6.9). The first phase of the carving was carried out over a period of 14 months during 1998-9 in a large secure industrial unit on the premises of William Paterson & Son in Hilton of Cadboll. This 'studio' became a feature of daily life amongst residents in the village who would call in to watch the carving and to see the stone 'come alive' and 'grow'. The project was also publicised through local newspapers and at museums in the area and there were more than 2000 visitors to the 'studio' in total. 430 By the time it was erected in 2000, with an official opening ceremony on 2nd September, the reconstruction had become a source of great pride locally, and many local residents refer to it as one of the most significant happenings in the recent history of Hilton, at least prior to the 2001 excavations (illus 6.9).

Phase 1 of the reconstruction project involved carving the reverse of the cross-slab based directly on the surviving face of the original sculpture. Whilst working as closely as possible with the original design, sympathetic interpretation was necessary in reconstructing the missing lower part of the design and other sections where weathering had resulted in damage. 431 Phase 2 of the project, carving the remaining side of the cross-slab, took place after the reconstruction had been erected near the chapel site. There was never any intention to reproduce the 17th-century Duff memorial, which replaced the original cross-face. Earlier designs for the other side of the reconstruction had been based either on a sympathetic interpretation in the Pictish style, or a format which incorporated images relating to the biographies of the cross-slab and the village, including, removal of the crossslab to Invergordon, a fishing boat, and an oil rig platform. 432 However, the discovery and excavation of the lower portion of the cross-slab and thousands of carved fragments from the cross-face resulted in the production of a new design informed by the sculptor's interpretation of the archaeological evidence as it was at the time (that is prior to the completion of the research to reconstruct the missing cross-face) (illus 6.10). This new design was carved between 2003 and 2005, the completed sculpture being unveiled in September 2005 (illus 6.11).

The reconstruction has undoubtedly developed its own significance within the village. The fact that it was carved in Hilton is an important aspect of this, giving it authenticity and meaning. In the absence of a shop, or a pub, the reconstruction project provided a focus for social interaction and communal activity. The studio for phase 1 (William Paterson & Son's industrial



 ${\it Illustration~6.11}$ Unveiling the cross-slab at the opening ceremony, September 2005 (© Siân Jones)

unit) loomed large in people's daily comings and goings as they stopped by to observe progress. It also served as a place where people met one another and engaged in conversation unrelated to the reconstruction itself. The reconstruction was also significant in terms of symbolically redressing the sense of disadvantage and loss that, as we have seen, had come to pervade people's consciousness. Thus, in reflecting on the impact of the reconstruction on the people of Hilton and the other seaboard villages one local resident, Christine, suggested that

I think people in Hilton were proud although they hadn't got the original stone they had something at last that they could associate with the Hilton stone. Because they had nothing and all they could say was oh, it's in Edinburgh. But now they've got something, they can go and look at it and it is part of them. [...] I think Hilton became whole. Something was missing. So, at long last something came back to what was taken away.

Interjecting between phases 1 and 2 of the reconstruction project, however, the excavations of 2001 had a profound impact on the significance of the cross-slab in the village. The history of archaeological research at the Hilton of Cadboll chapel site is fully documented

in the introduction of this volume and only the salient aspects relating to the local context will be discussed here. As early as 1994 the local Community Council had approached Ross and Cromarty District Council enquiring about the possibility of an excavation at the site. By 1997, a non-invasive archaeological evaluation and project design was underway led by Professor Martin Carver of University of York, with Tain and Easter Ross Civic Trust acting as grant-holder and co-ordinator. The resulting project design integrated the reconstruction project and development of the site for public presentation, with an ambitious long-term programme of research into early historic Easter Ross. Before full investigation of the ruined chapel site could take place, however, Historic Scotland commissioned a small-scale trial excavation at the site in 1988 prior to erection of the reconstruction. This resulted in the retrieval of 462 carved fragments. The reconstruction was thus erected further away from the chapel in a less archaeologically sensitive area. Meanwhile, further excavations in 2001 led to the recovery of thousands more fragments and the discovery of the lower portion

Despite local attachment to the reconstruction, these archaeological discoveries, particularly the location

of the lower portion, re-ignited controversy over the ownership and display of the original monument. By late spring, concern was already emerging about what would happen to the lower portion; whether it would be excavated, and if so who would be the owners and where would it be located. A local petition reportedly raised over 200 hundred signatures from Hilton alone, a campaign leaflet was produced, 433 and an informal local action group, 'Historic Hilton', was formed. At a public meeting led by Historic Scotland in August 2001, an agreement was reached that the lower portion would not be removed from the village until decisions about its ownership and display had been taken through appropriate legal channels. 434 Thus the lower section was raised and placed in Mr William Paterson's industrial unit which had been the 'studio' for phase 1 of the reconstruction project. It remained in a temporary display at this location until the spring of 2005 when it was moved to a display cabinet in the new Community Hall on the boundary between Hilton and Balintore.

The complex and fraught issue of ownership has been discussed elsewhere. 435 Here we wish to concentrate on the question of why the absence of the cross-slab and subsequently the discovery of the lower portion was a source of such concern in local contexts. In part this can be explained in reference to the history of socio-economic disadvantage and regeneration discussed above. Heritage and tourism on the Seaboard have been significant components of social and economic development initiatives since the 1990s. Specifically, the Hilton of Cadboll cross-slab, the reconstruction, and the chapel site had become prominent features of local and regional development initiatives. For instance, the Seaboard Environmental Action Plan, SEA 2000, produced in 1995, identified tourism as an important basis for social and economic development. Initiation of archaeological research at the chapel site was identified as an aspect of 'interpretive provision' and the production of a replica of the Hilton of Cadboll cross-slab as one aspect of the provision for recreation. 436 Subsequently, the Seaboard Initiative's Economic Development Plan of 2001 identified the Pictish stones as an important aspect of the area's 'built assets' and presented a plan for promoting the Pictish heritage. Amongst other things this included: the completion of phase 2 of the reconstruction; the creation of a 'local home' for the recently discovered lower section; and the possibility of branding Easter Ross as a Pictish peninsula as a means to attract tourists.437

To some extent these issues informed the perceptions and reactions of local residents in 2001. Some interviewees perceived the reconstruction and the new archaeological finds as a direct means of economic regeneration through tourism. For instance, Julie who has lived on the seaboard for just over 10 years noted that it would be nice if the entire stone was reunited at Hilton 'because I think it would be a tourist attraction and we need tourist attractions [...] because we are a depressed area in many ways, it would help'. Another local resident, Stuart, argued that

People have been so interested that they have taken the time and effort to come here. And there could be a lot more of that and you know tourism locally is not good and never has been. You know there's not a lot of industry around really with Nigg [oil rig fabrication yard] having closed down so it would be a help to the local economy if that piece of stone stayed. I'm quite sure that that would be the case because it just creates so much interest that you know there would be money coming into the local economy just because it's there.

Such views are reinforced by the initiatives of local development officers and Highland Council staff and councillors, whose agendas are very much oriented towards economic regeneration. Both the reconstruction project and the new discoveries have raised the profile of the villages, in the north-east of Scotland at least, and demonstrably increased the number of visitors. For instance the reconstruction project was publicised through local newspapers and at museums in the area. The erection of the reconstruction in 2000 and the unveiling of the cross-face in 2005 were accompanied by much ceremony and celebration, and there were more than 2000 visitors to the original studio, 438 as well as many more to the temporary studio erected around the reconstruction whilst the crossface was carved. With respect to the original lower section, the excavations of 2001 generated much publicity and interest with the result that there were many visitors to the site. Subsequently, the display of the lower section in the village has also drawn visitors. Historic Scotland funded public viewing of the lower portion in Paterson's industrial unit every Saturday afternoon throughout most of the winter of 2001-2, and during the summer of 2002 the Highland Council paid for a guide to show the lower portion to visitors, supported by additional staffing provided by the Historic Hilton Trust. Coach tours also included the lower portion on their itinerary and some 1,127 visitors were recorded over a period of two and a half months in the summer of 2002 (mid-July-September).

To what extent this interest will be maintained in the long term is debateable, as is the direct impact that such visitors can have on the economy of the villages, when tourist infrastructure is so weak and there is little opportunity for visitors to spend money with the exception of the café in the new Community Hall. However, to some extent this is beside the point. For many residents the relationship between the monument and the village is less about direct economic value and more about the need to make Hilton a place of significance and thus counter the pervasive sense of marginality. For instance, Val who had lived in Hilton for about 10 years wearily recounted:

Since I've moved here they'll say, oh you don't live in Inverness anymore and I'll say no. Where do you live? [they ask] And I know before I tell people where I live they haven't a clue where I'm talking about. [...] I mean you mention a little place like this and they think well, you know, where would that be now, whereas if for any reason this sort of took off or kicked off on a big scale, well people would know where Hilton was, oh that's that place where that dig's going on or that's where they've built that thing, oh maybe we'll go along there on a day off and then by that time hopefully the hall will have been finished along in Balintore and then they can go further along the road to Shandwick and see that stone.

Another example is provided by the following extract from an interview with Mary and her middle-aged son, Ken:

sj: Why do you think that keeping the stone here is so important to people?

MARY: Yes, yes, it's important to the next generation as

sJ: But why is that?

MARY: Well, it's part of your heritage and you, you feel, well, I think it belongs and it's like the fishing, you know the salmon fishing. I've been in it all my life and there's, we had lots of times we had

to fight for ...

KEN: Och aye, it's difficult.

MARY: Because there was hardly any fish.

KEN: Life's no easy.

sj: Do you think it's the same with the stone? I was just asking why the stone is so important to

keep it.

MARY: Yes, it's part of our ...

KEN: Well, it's part of the village really and let's look at it this way, if you take the stone away from the village the village is no different from any other village in the country but that's why if you put the stone there then that's Hilton stone and Hilton village.

Finally, Alan evokes a more abstract relationship between the presence of the monument and the regeneration of community. Discussing his desire to see the return of the upper portion from Edinburgh at some point in the future he states that

I feel that while that stone is in Edinburgh museum it's a dead stone but it could be made live [...] And when it's alive it'll be back in Hilton and the stump of the stone is a catalyst for this and it's you know, I feel our community in some ways is dying because you know we don't, as you say we don't have a post office or a shop or whatever, we don't have an awful lot of work about us, we don't have power, we don't have high tech industry, we don't have anything really in a way, but we do have a wee bit of community spirit and we do have an appreciation of what the past was.

In these last interview extracts many aspects of the connections made between the developments surrounding the monument and the marginalisation, decline and regeneration of the community come together. However, Alan's words also suggest that the social and economic values attached to the monument are inseparable from the symbolic and metaphorical meanings surrounding it in both national and local contexts. It is these latter aspects of meaning that we wish to turn to now

6.9 Hilton of Cadboll and the symbolic construction of communities: local and national tensions

... it's a very important stone, and not just important in the sense of being iconic, it's very important because it's also one of the symbols of the nation's rights to it's own treasures.⁴³⁹

... it belongs to the village, it is Hilton, and I suppose Hilton looks on it a different way than Shandwick would or anything, I mean anyway Shandwick's got their stone, they aren't really very interested in ours. 440

The attribution of meaning, significance and value to archaeological remains has a long history within the discipline of archaeology, heritage management and museums. For the most part, attention has focused upon eliciting the correct original meanings and uses of the monuments or objects concerned, and

attributing value to them on this basis. In attempting a biography of the Hilton of Cadboll cross-slab we have not neglected these original meanings and uses. However, we have also tried to put aside an overriding preoccupation with origins in order to examine later phases in the social life of the monument. In doing so we have shifted away from 'asking which narratives about a historical site are "correct" ... [as] we can learn a great deal more by examining how the various interpretations of that site are used by interested factions and individuals'. ⁴⁴¹ Furthermore, we have tried to grapple with the metaphorical, symbolic, and other connotative meanings which are a dynamic and often contradictory part of its social life.

In this penultimate section, such an approach will become more pronounced as we try to elicit some of the symbolic meanings and values surrounding the monument today. Of course different fragments of the monument are located in different contexts; the upper portion in the Museum of Scotland in Edinburgh, the lower portion in the Seaboard Community Hall, and the thousands of small fragments in the archive of the National Museums of Scotland. In these locations the fragments stand for the whole in terms of 'presencing' the monument and providing a focus for the production of meanings. The situation is further complicated in Hilton of Cadboll by the presence of the reconstruction, erected adjacent to the medieval chapel in 2000.442 The research underpinning this section is consequently multi-sited, focusing on two main locations: the Museum of Scotland and the seaboard villages, in particular Hilton of Cadboll.

Research at the Museum of Scotland was carried out in August and September 2002 (by SJ) and involved visitor tracking and qualitative semi-structured interviews.443 25 visitor interviews were conducted (with 36 people), and 64 visitor groups (151 visitors in total, including three tour groups) were tracked in the gallery where the upper portion is located. The Keeper of Archaeology and two front-of-house staff were also interviewed. On the seaboard of Easter Ross, ethnographic research was carried out by one of us (SJ) between 2001 and 2003.444 This research established qualitative methodologies from anthropology and sociology, including semistructured, person-centred interviews and participant observation.445 Some 52 interviews were conducted involving not just local residents, but also heritage professionals, field archaeologists and those involved in socio-economic development.446 The participant observation involved living in the villages for a period

of about 6 months in total in order to both observe and participate in daily life. Extensive field notes were produced focusing not merely on events surrounding the cross-slab and the reconstruction, but also the negotiation of social relationships and identities, the cultural meanings and values attached to places and things, and the ways in which these were reproduced and transformed through social practices.

As with any form of social research the results are a product of the mutual engagement between the researcher and the people who she worked with.448 As far as possible, both the nature of the social engagement and the impact of the researcher are taken into account as part of the interpretative process.449 However, it would be a fallacy to assume that a pristine or authentic cultural context existed prior to the influence of a researcher. In the case of the Hilton of Cadboll cross-slab, we have seen that the meanings and values surrounding it over the course of its social life are, to greater or lesser degrees, dynamic and transient. The excavations of 2001 and the events surrounding them undoubtedly provided a charged social situation in which meanings and values were produced and transformed. Yet, it was not just members of the local community that were involved in the creation of meanings and values, but also heritage managers, field archaeologists, art historians, local government officers, politicians and journalists who engaged with the monument. 450 Indeed, most of the principal authors in this volume had an influence on the production of meaning and value in relation to the monument during the excavation and the events surrounding it. Part of the value of in-depth qualitative research is that it can provide insights into the social production of meanings and their relationship to the kinds of social and historical contexts that have been discussed in previous sections.

The upper portion of the Hilton of Cadboll cross-slab remained in the National Museum of Antiquities on Queen Street in Edinburgh for about three quarters of a century. In the 1990s it was moved to the new Museum of Scotland, adjacent to the Royal Museum on Chambers Street, which was opened 28 November 1998. The origins of the new Museum preceded political devolution and the establishment of the Scottish Parliament. Furthermore, Cooke and Maclean's research suggests that, although most of the curators agreed that the Museum should 'be telling a story of Scotland', many also felt that it should be non-prescriptive and tried to avoid what they saw as nationalistic overtones. However, framed by

the nation and with a mission to 'present Scotland to the World', the new Museum inevitably became entwined with national narratives and nationalistic interests. The late Donald Dewar, Scotland's First Minister until 2000, emphasised its importance in terms of national identity and linked it explicitly to the new Parliament arguing that there had been two momentous happenings:

One was the opening of the Museum of Scotland, and the other was the reinstatement of the Scottish Parliament. The future interplay between these two key institutions will help shape both our cultural identity and constitutional destiny in the next millennium.⁴⁵⁴

The Museum has more than 10,000 artefacts on display, mostly in glass boxes, contextualised by illustration and text. These are structured chronologically in the first instance, starting with 'Beginnings' (geology and natural history) and 'Early People' (mostly prehistory) in the basement (Level 0), and moving through time as one moves up through the building to 'The Kingdom of the Scots' (Levels 1 & 2), 'Scotland Transformed' (Level 3), 'Industry and Empire' (Levels 4 & 5) and 'Twentieth Century' (Level 6). Within each chronological slice there are secondary themes, for instance, religion, power and so forth, which vary in their prominence at different levels. However, chronology is the primary structure and it is reinforced through architecture. A visitor following the intended route thus enacts a tour through the history of Scotland from its origins in the basement to the very recent past on Level 6. Cooke and Maclean's visitor research reveals that most visitors recognise this national narrative, but there is no clear agreement on what kind of image is being attributed to the nation. 455 Some of their interviewees felt that part of the intention was to promote a kind of pride or confidence, 'showing Scotland at its best', but others, especially visitors from south of the border, perceived more nationalistic tones, especially relating to the treatment of historical documents and events, such as the declaration of Arbroath and the Jacobite uprisings.

The Hilton of Cadboll cross-slab is located in the 'Early People' section in the basement of the Museum, which focuses on how people lived in Scotland from around 8000 BC to AD 1100. Although the 'Early People' section is embedded in the overarching chronological structure of the Museum, period or ethnic sub-divisions are eschewed internally in favour of a strong thematic structure. The themes include: 'A

Generous Land', focusing on resources and how people used them; 'Wider Horizons', exploring the theme of contact and the movement of people, goods and ideas; 'Them and Us', dealing with issues of conflict, power and status; and 'In Touch with the Gods', concentrating on spiritual life. Text panels focus on the themes of the exhibition and draw out one or two aspects of the multi-dimensional objects on display. 456 Chronological information is provided on a time-line located at the bottom of each text panel and likewise geographical provenance is indicated by the use of find-spots on a standardised map of Scotland. The latter device is very much indicative of the national framework of the Museum. 457 The same base map is reproduced on each text panel, and the provenance of artefacts is indicated by dots on the map. 458 The standard provenance maps never shrink below the nation, or pull back to include regions beyond the nation.⁴⁵⁹ In the absence of images of landscape contexts for most objects, the nation is also implicitly represented as a homogeneous space with little indication of topographic diversity or the specificity of particular places. The thematic structure, which is intended to provide a more meaningful narrative than chronological periods, or ethnic sub-divisions, also produces a homogenising effect, with the exception of the Romans and the Vikings who are singled out as self-conscious incomers. Here the politicisation of the design process added a further dimension as education focus groups stressed the need for a sense of who the Scots are, leading to the adoption of a personalised narrative using the terms 'we' and 'they'.460 The Romans and the Vikings thus become substitute 'others' as in the following extract from a text panel introducing 'Gods of the Frontier, God of the Book':

To hear the soldiers tell it, there were never gods so powerful as those of Rome. Jupiter of the lightening bolt ruled the heavens as their emperor ruled the world. [...] How they loved their gods of war, commanding and pitiless fighters. Even our gods they honoured, because they always wanted more gods on their side. No small thing for them, this religion of vows made and contracts struck, of temples, shrines and altars. 461

In contrast, the text panel goes on to state that

The Christians had but one god and he was *our* father. As he was father of Jesus who died on the cross for us. *Their* message found message with *our* leaders. So *we* followed them into the church.

As an important component of the exhibition, the Hilton of Cadboll cross-slab is embedded in these

national narratives. On descending the main stairwell to Level 0, the visitor encounters a spacious, open area, lit by both natural and artificial light. This area, called 'People', introduces visitors to the exhibition's absentees, the anonymous people of prehistory, through the abstract human figures sculptured by Sir Eduardo Paolozzi. 462 It also includes some of the relatively rare visual depictions of Scotland's early people, including the Roman marble head from Hawkshaw and the Hilton of Cadboll cross-slab. Having lost its most obvious Christian symbolism with the removal of the cross-face in the 17th century, it is the hunting scene which is emphasised in the exhibition design. 463 The small, discrete text panel next to the Hilton of Cadboll cross-slab provides an approximate date and a location map showing its find spot. The text reads:

A FEMALE ARISTOCRAT

Before the Romans invaded Scotland, images of people are very rare indeed. From then onward, there are more of them, almost always seen on monumental sculpture. Here a female aristocrat, riding side-saddle, is the central figure in an elaborate panel depicting a hunting scene. Hunting was a favourite aristocratic pursuit; and this scene is more concerned with honouring the aristocracy than with picturing a real hunt. The sculptor's placing of the woman in the scene is a tribute to the person who commissioned the cross — a woman of some importance.⁴⁶⁴

The information provided is typical of the approach discussed above; one aspect of the multidimensional nature of the object is pulled out and used as a component in the exhibition narrative. Within such an approach other dimensions and interpretations are inevitably ignored, for example, the Anglo-Saxon stylistic influences, the Christian symbolism, such as the vine-scroll referencing the Eucharist, the Duff memorial and coat of arms, and the 1921 events surrounding the cross-slab. Henderson and Henderson are critical of the approach, which they argue detracts from an understanding of the original Christian symbolism which few visitors now recognise. 465 Whilst there is an inevitable selectivity in terms of what kind of interpretation is offered, there seems to be an implicit attempt to minimise the physical fragmentation that the monument has experienced. The side with the 17th-century burial inscription is placed at the back in the Museum and visitors are discouraged by the architecture and the signage from viewing it from that angle. The missing lower portion is physically replaced by a copper plinth, to suggest the original height of the monument, and provide an interpretation of the missing carving which is etched onto the copper surface, thus giving a sense of wholeness and completeness.⁴⁶⁶

The significance accorded to the cross-slab within the Museum is evident in its physical location and treatment. It occupies a particularly prominent position at the end of a walkway created by the four groups of Paolozzi sculptures, where it stands on a raised and wired-off platform (illus 1.1). David Clarke, the Keeper of Archaeology, refers to the monument as an iconic piece and emphasises that it has been used as an architectural element within the exhibition: effectively people are directed towards it, but it also acts as a barrier encouraging visitors to turn to the left, whereupon they are meant to enter 'A Generous Land' through an opening in one of the internal walls of the building.467 The cross-slab is identified as one of the Museum's 50 'Most Treasured Objects', which feature prominently on the Museum's audiotour where it is described as 'an impressive carved stone'. 468 Its eminence is signalled by its raised wiredoff platform and its juxtaposition with the sculptures produced by one of Scotland's most prominent 20th-century artists, Eduardo Paolozzi. 469 Whether intentional or not this juxtaposition dislocates the cross-slab from other early medieval sculptured stones, 470 and creates a relationship between past and present Scottish art; alluding to an indigenous national artistic tradition. Moreover the politics of representation in the new national Museum informed the selection of the cross-slab for this location. David Clarke explicitly tried to evade a nationalist agenda when designing the exhibition. Yet he acknowledges that it was important to have something monumental and indigenous confronting the visitor at the entrance to the exhibition, something that corresponds to the 'we' in the narrative on the text panels. In contrast, an object like the Bridgeness commemorative inscription from the eastern end of the Antonine Wall would have provided a problematic representation of early people with its themes of Roman conquest and domination.

The special treatment afforded to Hilton of Cadboll within the 'Early People' exhibition may be evident to the Keeper of Archaeology and other Museum staff. Indeed, for those who work in the museum and heritage sectors its sojourn in London and restoration to Scotland adds to its symbolic capital in respect to national patrimony. Nevertheless, for many visitors to the Museum it is one object amongst thousands which serve to produce a representation of Scottish

heritage and an account of the history of the nation. The interviews conducted in the Early People gallery in 2002 revealed that most visitors had come to the Museum to gain some insight into the history and identity of Scotland through its material heritage.⁴⁷¹ Some had a specific interest in archaeology and early history, whereas others had simply come down to the 'Early People' Gallery because they felt they should start at the beginning and had been directed there by the Museum literature or staff. A few were there to see specific artefacts, such as the Pictish silver chains, the Whithorn sculptured stones, and one person in the interview sample had come specially to see the Hilton of Cadboll cross-slab. The movement and behaviour of visitors reflected these diverse interests. A small proportion engaged in very systematic and detailed inspection of the objects on display and read the text panels in some detail. Others wandered through the exhibition at a leisurely pace, gazing on the objects from a distance, selectively engaging with some in greater depth if they attracted their interest. Still others wandered though in a disinterested fashion and left quickly, while others flitted about rapidly taking in as much as possible, but still leaving after a short period. A strikingly small proportion of visitors took the 'official' route that had been built into the exhibition design, and despite its deliberate architectural prominence within this route only about half of those visitors who were tracked actually stopped to look at the Hilton of Cadboll cross-slab.

Both the interviews and the tracking revealed considerable diversity in terms of the kinds of objects that visitors were drawn to and hence focused on. However, the sculptured stones (Neolithic, Roman and early medieval) and the jewellery stand out in contrast to one another, suggesting a polarity in terms of the scale of the objects that people were attuned to as well as an attraction to different kinds of materials. 472 The objects that were highlighted most frequently by visitors prior to being asked about any in particular were the Paolozzi sculptures and these were also the most controversial objects. Almost all visitors saw them as an anomalous presence and were divided roughly equally about whether that presence was a positive or negative one. Some found them interesting, stimulating, novel and/or attractive. Others saw them as an ugly modern intrusion so off-putting that rather than draw them in to the exhibition they actually felt repelled. Indeed, the tracking revealed that a significant proportion of people when faced with the Paolozzi sculptures actually turned away and entered the Early People exhibition through the end of the religion section called 'In Touch with the Gods'. Thus whilst it can be argued that the juxtaposition of the Hilton of Cadboll cross-slab with the Paolozzi sculptures, serves to emphasise its aesthetic value as a form of high art, in practice the distinctive and contentious nature of the Paolozzi sculptures actually detracts attention from the cross-slab.

Nevertheless, for those visitors who did engage with it, the cross-slab produced the kinds of impressions that one might expect of an object that has been attributed such national significance. It was described as: 'a high form of art'; 'very, very attractive'; 'handsome and well-preserved'; 'an outstanding object'. One visitor also noted that as you come down the steps 'it hits you in the eye', but, as we have seen above, many visitors failed to engage with it at all for one reason or another. In general the early Christian sculpture has a strong appeal for visitors, particularly with respect to its aesthetic value and as evidence for the adoption of Christianity. Most spoke favourably of the collection and display of such sculpture in the Museum emphasising that it allows people to gain access to it and to place it within the story of the nation. However, whilst emphasising the importance of protecting it from the elements many visitors also expressed a strong sense that such monuments had a 'proper' or 'natural' place, which they imagined to be associated with specific types of topography and weather. This sense of a 'natural' place was explained further in terms of atmosphere, belonging and age, and is clearly tied to ideas of authenticity. Interestingly many people commented favourably on the natural lighting that falls on many of the early Christian sculptured stones in the Museum, which ties in with this sense of the authentic.

Whatever the appeal of the objects in the exhibition, for the majority of visitors interviewed they represented Scotland as a whole rather than specific localities or regions. Foreign tourists in particular paid little attention to provenance and when asked about the location maps stated that the dots on the map were mostly meaningless to them; 'you need a little geography to use things like that' and 'more or less I know it's Scotland and that's all'. As might be expected for these visitors the distinctiveness and specificity of the objects now lies with Scotland as a nation in contrast to say Italy, China, or England. In contrast, there was another group of visitors whose experience of the Museum was informed by attention to specific localities and regions. Most of these visitors identify

themselves or their ancestors with specific places and thus seek out objects derived from the same area. For instance, one visitor explained that she came from Fife originally and that she was quite interested in 'anything from around my area [...], maybe more so than if it had come from somewhere else'. Another visitor, a Trustee of the Whithorn Trust, emphasised the importance of regional comparative displays which contribute to a sense of regional identities within Scotland. Furthermore, the visitor who had come specially to see the Hilton of Cadboll cross-slab had grown up in Tain and his father had taken him to see the Easter Ross monuments as a boy. Nevertheless, with the exception of visitors like the latter example, it is clear that in the Museum of Scotland the meanings surrounding the Hilton of Cadboll cross-slab are inextricably tied to the idea of Scottish national heritage and to the story of the nation as a whole. Furthermore, rather than being tied to a specific locality, as its name suggests, the Hilton of Cadboll cross-slab has become an integral part of an exhibition that stands for the abstract space of the nation.

We now wish to return to the seaboard of Easter Ross. Here, the Hilton of Cadboll cross-slab is also associated with an array of meanings, many of which intersect with its wider significance in both contemporary and historical contexts. Undoubtedly the national and international significance attached to the monument, and the prominence of the upper portion in the Museum of Scotland, contributes to its value in local contexts. From the late 18th century onwards, the monument has been described as 'one of the most beautiful' pieces of early Christian sculpture in Scotland, and a monument of national importance. As we have seen in Chapter 6.8 the monument, in its various fragmented forms, has the potential to make the village a place of significance and this is predicated on its national significance and symbolism. The excavations of 2001 provided a contemporary context in which that symbolism and significance was made manifest; they were publicised in the national media, attended by prominent scholars, and were clearly a matter of concern for national heritage institutions. Thus they contributed to the production of meaning and value. A number of narrative frameworks also inform the production of meaning in local contexts. Perceptions of the monument's Pictish origins are significant, being associated in some people's minds with a kind of ancestral or descent relationship. The King's Sons folklore which was recorded in depth by Petley and popularised by Miller is widely known and

also provides an important narrative framework, tying together the villages of Nigg, Shandwick and Hilton through their cross-slabs. Finally, the cross-slab is bound up in family stories and genealogical accounts in the context of local oral history on the Easter Ross Seaboard, providing more intimate associations and in many cases tying the past affectionately to the present. However, it is also associated with a range of metaphorical and symbolic meanings in local contexts, which are not immediately evident.

One of the most striking aspects of this symbolism is the way in which the cross-slab and the reconstruction are conceived of by many local residents as 'living things'. 473 For instance, the cross-slab and the reconstruction are both referred to as having been 'born', 'growing', 'breathing', having a 'soul', 'living' and 'dying', even having 'charisma' and 'feelings'. A few informants and interviewees were more explicit about this symbolic dimension of the monument drawing direct similes rather than relying on metaphor. For instance, one local resident, Christine, noted that the cross-slab (specifically discussing the large carved section of the base after it had been excavated):

... was like something that was born there and it should go back [...] It's like people who emigrate or go away, they should always come back where they were born and I feel that that stone should go back.

Another, Duncan, remarked that if the main part of the cross-slab returned from Edinburgh

there'll be a party maybe and there'll be things going on here that'll be absolutely unbelievable like a, how would I put it now, an ancient member of the village coming back, if that came through here on a, on a trailer and everybody would be here. [...] Coming home where it's always been. [...] If the stone had a soul it would be saying oh there's the Porst Culac you know, there's so and so's house you know I'm going over to the park and there's, there's the other bit of the stone and it broke off a hundred and fifty year ago or whatever.

Furthermore, as the last quote highlights, the monument is not merely conceived of as a living thing, but as a living member of the community. Not only is a direct analogy drawn between the cross-slab and an 'ancient member of the village', but it is also attributed the kind of social knowledge which is essential to establishing a person's membership within the community, knowing who lives in which house, recognising local landmarks and beauty spots, and so forth.

Not everyone participated in this kind of discourse about the monument. It was particularly prominent

amongst those with long-term, often multi-generational, associations with the village; people who defined themselves and were defined by others as 'locals'. People who had moved to the village from other parts of the Highlands, Scotland or the UK tended to place more emphasis on the economic marginalisation and the role of the cross-slab in making Hilton a place of significance. Nevertheless, the application of discourses of kinship and 'belonging' to the cross-slab by the 'locals' reinforces its place as a living member of the community. 'Belonging' is one of the key concepts in the identification of kinship and other relations of identity, particularly amongst the older generation who were born in Hilton and/or have spent most of their lives there. 474 Thus the term regularly crops up in daily conversation, for instance, in an interview with Maggie: 'she belongs, they're both Sutherland in their name', or 'it was the first of the Sutherlands that belong to my granny'. 475 Such statements do not simply relate to actual kin relations, but are also extended to others who are considered part of the community. Indeed rather than a reflection of static relationships they provide a means of articulating and negotiating 'who is and who is not "part of the place", and who is and is not authentically "local". 476

The concept of belonging is also extended to the cross-slab by local residents, for instance as used by Mary, 'I still think that the stone *belongs* to the people here', and Janet, '... it's still not where it should be, it should be back up home where it *belongs*'. It can be argued that the use of the concept of belonging in relation to the stone symbolically confers it with the status of kin. Indeed the kinship metaphor is further reinforced by the following interview extract where Duncan is musing on what it would be like if the upper portion returned to the village:

... there'd be a ceilidh, there'd be pipe bands, there'd be absolutely amazing, [...] that stone *belongs* here and that's part of the village so that would be, that would be one of the happiest days of my life to see that coming back to the village.

Here the cross-slab even becomes the focus of celebratory events and performances, which typically accompany key events in a person's life, or the lives of their family and friends.

One event, or rite of passage, that is of particular importance in terms of 'placing people' within a network of social relationships, and in particular negotiating degrees of 'belonging' is that of birth. Being born in Hilton, or related to someone who was

born there, is an important aspect of establishing one's position as an insider or a 'local'. Again, this process of social identification is applied to the cross-slab. Like people, the cross-slab belongs in Hilton because it is 'like something that was born there', and 'that's where it was created'. The close association between the monument and the soil, which local residents witnessed during the excavation of the fragments, is also important metaphorically in terms of the life-force attributed to the cross-slab. One woman commenting on the lower portion after it had been lifted and placed in the Paterson's industrial unit explained:

CHRISTINE: I think being in the ground gave it some-

thing [...] whatever was in the ground was good for it [...] I feel if it is back in the

ground it'll breathe.

sj: You think it can't breathe when it's out

here?

CHRISTINE: It's just a cold piece of stone.

Of course, the archaeological research revealed that the lower section was not in its original position having been broken and re-erected at an early date, probably around the 12th century, a facet of its biography that most local residents acknowledged. Nevertheless the metaphorical association between the monument and the village and the perception that it was 'born' in the vicinity remained powerful, especially whilst the lower portion was still in the ground.

There is thus a whole body of metaphorical and symbolic meaning which surrounds the monument in local discourse, concerning its place within the community. In this way it facilitates the negotiation of identities and the expression of boundaries. Once symbolically conceived as a living member of the community, the cross-slab itself (through its various fragmented forms) becomes a medium for the reproduction and negotiation of relationships. Thus, in the debates that surrounded the future of the new discoveries in 2001, 'locals' negotiated relative positions of authority and status through their association (and their forefathers' associations) with the biography of the monument. 'Incomers' on the other hand negotiated greater degrees of 'insiderness' through adopting, or respecting, the socially constructed authentic position of 'the village' demanding that the new discoveries remain there. Indeed, those 'incomers' who played an active role in the informal local action group established at the time of the excavation became almost honorary 'locals' and their position was subject to special comment, such as, 'she's only lived in the village for [X] number of years but she feels for the stone as much as we do'. In contrast, the few local residents who publicly asserted that the base should go to Edinburgh were cast as 'incomers', thus questioning the authority of their opinion.⁴⁷⁷

Given the way it mediates the symbolic construction of community, it is perhaps not surprising that the Hilton of Cadboll cross-slab also plays an integral role in the production of a sense of place. Conceived of as a living member of the community, the monument provides a mechanism for expressing the relationship between people and place. Place, and indeed placing people, is an important aspect of social life in Hilton and the other Seaboard villages. There are frequent references to who is related to whom, particularly amongst the elderly who were born and brought up there. People are said to 'belong' to places as well as to each other, for instance, someone might comment, 'she belonged over to the Nigg area', or ask 'did he belong to here, or did he belong to Portmahomack?'. Thus, discourses of belonging incorporate a strong spatial dimension, and when people assert that the crossslab 'belongs' to the village they are simultaneously referring to both community and place; 'it belongs to the village, it is Hilton'.

Furthermore, the monument not only 'belongs' to the place, it is simultaneously constitutive of place and therefore perceived as part of the fabric of people's existence. Associations between the monument and other aspects of the landscape, such as rocks and sea, serve to place it as an integral component of the landscape. For instance, one interviewee, Màiri, commented:

the Hilton stone, you almost feel attached to it, it's almost like being attached to rocks or the sea or it's always been here, it's part of the place and for generations, I don't know, it was a close community you know ...

Such a conceptualisation of the monument, as one of the physical constituents making up the 'world', enables it to act as a metaphor for the relationship between people and place, here referencing the closeness between people and the landscape, as well as the closeness of the community as a whole.

However, as we have seen in Chapter 6.8, processes of 'place-making' in Hilton, and the Seaboard generally, are fraught and problematic. There is an ambivalence associated with local residents' consciousness of place, for Hilton is both a place of deep significance and value and a marginal place associated with deprivation,

particularly as refracted through the eyes of those involved in social and economic development. Such processes of displacement, decline of community institutions, and blurring of community boundaries, often lead to a more explicit and urgent emphasis on the production of a sense of 'community as place'.⁴⁷⁸ It can be argued therefore that these wider socioeconomic processes are crucial to understanding the significance attached to the lower portion in 2001 and anxiety about its possible removal from the village.

The history of the cross-slab means that it is wellsuited to the task of metaphorically dealing with dislocation between people and place, the resulting fragmentation of communities, and the sense of loss surrounding such processes. Many local residents made connections between the cross-slab and issues of loss and decline, whether that be related to the fishing industry, the lack of shops in Hilton, high levels of unemployment, or a more abstract sense of marginality. Furthermore, current concerns about decline and marginality, as well as the need to fight against them, are framed by past events and injustices, such as the Clearances. 479 The Highland Clearances provide the most prominent locus of displacement and fragmentation in terms of social memory and the frequent uninitiated references to them in conversations about the Hilton of Cadboll monument highlight the symbolic role of the monument. Such references take the form of a slippage between those with power and authority today, such as landowners, politicians, and Edinburgh professionals, and their perceived counterparts in the past, namely lairds and ministers. Or sometimes they even seem to involve a direct relationship between people's longing to reconstitute or reconstruct the Hilton of Cadboll cross-slab, and their desire to destroy other monuments associated with the Clearances and their landlords. 480

Of course these concerns with control, ownership and power also intersect with class identities which remain particularly strong in this part of Scotland. Condemnation of the Clearances often focuses on landowners and the political and cultural elites of Edinburgh, and to a lesser extent Glasgow. The manner in which class oppositions are articulated by different individuals is complex. However, as noted in Chapter 6.8, Hilton, Balintore and Shandwick, which are, for the most part, impoverished communities whose economic mainstay revolved around the fishing industry supplemented by seasonal farm labouring, have histories that play an important role in the construction of village identities for

many residents. The oil and aluminium industries contributed to a temporary increase in affluence and a growth in the population, and the growing number of people settling there during retirement has had a similar effect.⁴⁸¹ However, there are still few middleclass professionals living in the villages, and there is an air of well-intentioned paternalism, sometimes implicit, sometimes explicit, in the attitudes of many landowners, councillors, and professionals (especially those from the social, economic and development sectors). This is fiercely resisted by a number of the local inhabitants and frequently leads to tensions, usually expressed in terms of 'what's for the likes of us', and what are considered to be appropriate ways of acting and feeling. The symbolic nature of the topography of the raised beach cliff in drawing a class opposition between those who live above the cliff and those who live below it also remains important, and can lead to tensions about where meetings are held and where geographically the balance of power lies. Layered on top of this, however, is a broader opposition between Edinburgh and an unspecified 'us'; a flexible category that can expand and contract across a number of levels: Hilton; the seaboard villages; Easter Ross; and even the Highland region. Again this has a spatial dimension, in that Edinburgh as a place is attributed an agency, as in the not infrequent statements: 'Edinburgh's coming' or 'Edinburgh wants ...'.

These complex sets of oppositions relating to power and identity also frame people's responses to the cross-slab and its ownership and display. In the perception of many inhabitants on the seaboard of Easter Ross, the displacement of the upper part of the cross-slab in the mid-19th century, and the recent excavation and possible further displacement of the new fragments, represent the power of certain individuals and organisations, notably landowners and national institutions, to forcibly move people/things against their will. It can be argued that opposition to the recent excavation of the base of the crossslab, and to its potential removal to Edinburgh, provides a means symbolically to resist past wrongs, as they are constructed through social memory. The historic processes of displacement encompassed by the Clearances clearly play an iconic role in this respect, standing in for a complex history of events associated with perceived abuses of power. We must not forget, however, that there is also a redemptive dimension to the role of the monument in place-making. The historical association of the monument with a wealthy

and aristocratic group of people in archaeological and art historical accounts, as well as the national significance attached to the sculpture in heritage discourses, are actively appropriated in making Hilton a 'place of significance'; a place worthy of such a 'fine stone'. Of equal importance is the way in which, when conceived as a living member of the community, it provides a means to metaphorically restore the community, to make it 'whole' again, against a historic background of fragmentation and decline.

In Chapter 6.7 we saw that Macleod's offer to donate the upper portion of the cross-slab to the British Museum in 1921 precipitated an outcry from Scottish antiquarian bodies and the Scottish press. Much weight was placed on the symbolic significance of the monument as a national possession and a moral claim of ownership or belonging was asserted in contrast to the legal situation regarding unscheduled monuments. This reaction is not unusual, for as Barkan and Bush point out:

The experience of [...] alienation from part of our patrimony [...] stands at the core of our dilemmas over group identity and cultural property. However, paradoxically, it is always the case that being alienated from the identity or cultural property of one's group helps precipitate our sense of belonging or ownership.⁴⁸²

It would not be correct to suggest that the monument held no significance in terms of Scottish national identity prior to its removal to the British Museum. We have seen that antiquarian literature and illustrations, along with more systematic and scholarly art-historical and archaeological studies, had highlighted its beauty and historical significance prior to this point. Nevertheless much of its symbolic value remained latent until the events of 1921.

The excavations of 2001 precipitated very similar processes, but this time at the level of the local community rather than the nation. The discovery of the lower portion resulted in considerable resistance and protest on the seaboard of Easter Ross. In this charged context, the monument undoubtedly acquired greater symbolic capital and became the locus for the production of community and place, just as the upper portion became a site for the production of an imagined national community in 1921 and to some extent remains so today within the Museum of Scotland.⁴⁸³ As at the national level, in Hilton of Cadboll these processes were framed by pre-existing identities and power relations, as well as the history of the villages and their social and economic decline. The parallel can be

extended further, as the discovery of the lower portion also led to the assertion of moral claims of ownership or belonging which contrast with legal conceptions of ownership, although local activists have also explicitly engaged with legal frameworks. 484 A moral high ground is claimed in relation to past injustices, often framed by class oppositions, relating to the removal of the monument itself and rights to resources, most notably land. However, this research also revealed a deeper symbolic dimension underpinning these moral claims to ownership. For the discourses of 'belonging' in which the monument is embedded in local contexts create the perception of an inalienable relationship between the monument and the community, a relationship which is symbolically defined in terms of birth, soil and kinship.

6.10 Conclusions

[T]he greatest glory of a building is not in its stones, nor in its gold. Its glory is in its Age, and in that deep sense of voicefulness, of stern watching, or mysterious sympathy, nay, even of approval or condemnation, which we feel in walls that have long been washed by the passing waves of humanity.⁴⁸⁵

The Hilton of Cadboll cross-slab brings to mind Ruskin's eloquent argument that the value of a building, or in this case a monument, lies in the sense of voicefulness that we can feel in walls that have long been washed by passing waves of humanity. All too often in archaeology, art-history, and heritage management the original meaning and use of objects, images, buildings or monuments is privileged. Yet if we follow Ruskin, it is the effects of human engagement over time which produces their voicefulness or sense of authenticity. In this chapter we have endeavoured to reveal some of the substance of that human engagement by focusing on the entire cultural biography of the Hilton of Cadboll cross-slab right up until the present time. Here, in conclusion, we wish to highlight a number of themes: meaning, identity, place, centre-periphery relationships, and fragmentation and displacement.

Tracing the cultural life of the monument has revealed the diverse frameworks of meaning in which it has been situated. Even in its original early medieval context the Hilton of Cadboll cross-slab is unlikely to have been located in a single or uncontested framework of meaning. Most of the iconography of the cross-slab is certainly of an exclusively religious nature, derived from an early medieval intellectual

and spiritual milieu that embraced Insular visual and literary culture already well-established in the treasures and libraries of ecclesiastical institutions locally, and in other major Pictish ecclesiastical centres. The religious meanings embodied by the cross-slab were probably reinforced by its location within a liturgical landscape and the acts of contemplation and devotion associated with it. However, some of the symbolism, notably the ornate Pictish symbols, and possibly the hunting scene, may have had more localised political significance relating to secular power and an aristocratic ethos. Furthermore, there may have been highly localised meanings, secular and sacred in nature, associated with the specific landscape context in which the monument was erected. Certainly, whatever the intentions of those who commissioned, designed and produced it (and even here there is room for multiple meanings and agendas), levels of understanding of this iconography and the messages it conveyed are likely to have been highly uneven amongst those who gazed upon it. Despite the likely role of such monuments as pedagogical tools enabling forms of religious instruction and social commentary, deeper levels of Christian symbolism would have been restricted to those acquainted with the wider intellectual culture of the ecclesiastical elite. Ambiguity and multiple levels of meaning may well have facilitated relationships between the secular and religious elites, whilst simultaneously being conducive to the role of monuments like the Hilton of Cadboll cross-slab in asserting power and authority over others. In which case, for some, whose access to deeper levels of meaning was restricted, the cross-slabs may also have come to represent symbols of elite power.

This multivalency and ambiguity of meaning was set to continue throughout the social life of the monument to the present day. We have emphasised the continuing reverence with which the cross-slab appears to have been treated throughout the medieval period, as evidenced by its re-erection in the 12th century and its close association with the Hilton of Cadboll Chapel. However, whilst it is reasonable to expect some continuity of meaning in respect to its Christian symbolic components, it is less likely that the meanings originally attached to the ornate Pictish symbols remained current in the later medieval period. Furthermore, the religious and political contexts in which the symbolism of the cross-slab would have been read were far from static, in fact they were frequently characterised by turbulence and conflict. Thus the Reformation of the 16th century is by no means the first time that the frameworks of meaning in which

the cross-slab was embedded were subject to change. Nevertheless, it was associated with radical shifts in attitudes towards religious iconography, in which formerly sacred images became regarded by some as objects of idolatry and superstition which needed to be destroyed, desacralised, or at least carefully negotiated. The archaeological evidence suggests there may have been some selective damage to the crossface of an iconoclastic nature prior to Duff's attempt to convert the upper portion into a personal burial memorial. This earlier damage may have informed his, or his mason's, decision to use the cross-face for the inscription, or the removal of the cross may have been Duff's attempt to negotiate the potentially idolatrous connotations of the monument. Indeed Duff's subsequent abandonment of the upper portion as a burial memorial may have been due to continuing ambivalence about its Catholic associations. Had his plans been carried out, the upper portion of the crossslab might still lie as a recumbent burial slab in the graveyard of Fearn Parish Church, its early medieval sculpture hidden from view. Instead, it was left at the Hilton of Cadboll Chapel where it was 'rediscovered' by antiquarians and tourists when the Highlands were opened up in the later 18th century.

Early antiquarian accounts recorded an established folk narrative suggesting that for the local inhabitants of the Easter Ross seaboard the monument needed no rediscovery. Within this framework of folk meaning the Hilton of Cadboll, Nigg and Shandwick cross-slabs were embedded in popular myths about the Danes and contemporary expectations regarding the use of sepulchral monuments as memorials to individuals. Popularised through Hugh Miller's work, the King's Sons folk tale has persisted ever since as a framework of meaning which links people and places within the Easter Ross landscape. Nevertheless, the authority of this narrative as an historical account was brought into question by the mid-19th century, by which time travellers and scholars had reconfigured the Hilton of Cadboll cross-slab and others like it as objects of aesthetic and historical value. From this point onwards the upper portion of the cross-slab was incorporated into a radically different framework of meaning, associated with new aesthetic and historical values linked to ideas of national patrimony and identity. Macleod's appropriation of the upper portion as an ornamental fixture within his castle gardens situated the monument firmly within 19th-century discourses of taste and class. In the castle grounds it functioned as an accessory of power, symbolising the proprietorship,

authority and artistic heritage of the landowning classes. At the same time, however, it was being figuratively incorporated within the heart of the nation, perceived as one of its most beautiful and valuable antiquities. Its national symbolism was consolidated by Roderick Macleod's failed attempt, on selling the Cadboll estate and Invergordon Castle, to donate the upper portion to the British Museum. In the context of the furore that ensued it was portrayed not only as the property of the nation but as part of its very being, having an intimate relationship of belonging encapsulated by one correspondent's description of the cross-slab as 'the soul of the nation'.

With its return to Edinburgh and incorporation within the National Museum of Antiquities, the upper portion, which at this time stood for the monument in its entirety, was firmly located within national narratives and its status as an icon of Scotland's artistic heritage was consolidated. Its national significance was further reinforced by its recent incorporation within the Museum of Scotland, where visitors encounter it as an integral part of the national story represented in the Museum's permanent exhibition. However, the monument continues to evoke meanings of a quite different nature on the seaboard of Easter Ross. Here the folklore and oral history surrounding it ensured its continued significance despite, or indeed because of, the absence of the upper portion. Its physical absence was often read within a wider set of concerns about marginalisation, displacement and disadvantage and the monument acquired additional meaning as a symbol of loss and disenfranchisement. This local framework of meaning helped to precipitate a variety of interrelated events, including local attempts to locate the lower portion and the production and erection of a full-scale reconstruction. The excavations and the recovery of the lower portion enhanced its symbolic potential providing a new forum in which people could engage with the monument. The meanings produced bear remarkable similarity in some respects to the national symbolism surrounding the upper portion. The tendency to view the monument as a living thing relates to a symbolic relationship of belonging whereupon the cross-slab is viewed as part of the body of the community just as it was described as part of the body of the nation in 1921. However, in contrast to its meaning in national contexts, its conception as a living member of the community also enables it to act as a metaphor of fragmentation and displacement, most notably tied to social memory regarding the Highland Clearances and subsequent marginalisation.

The biographical study of the monument also highlights the myriad ways in which it has been, and continues to be, integral to the production of identity and place. In the early Christian period it can be argued that it was involved in the expression and negotiation of religious and political identities, as well as possible regional or ethnic ones. By its very nature it would also have been intimately tied to place, quarried from a particular part of the landscape and erected in a place where it probably drew upon pre-existing secular and sacred meanings at the same time as expressing new ones. It would also have acted as a mechanism for the production of a sense of place in the context of various forms of contemplative, devotional and everyday practice, as well as acting as a focus for individual and social memories.

In the aftermath of the Reformation it seems that the cross-slab became tied up with new forms of religious and political identities. It is also the first time when we gain insight into the attempts of individuals to appropriate the monument in the construction of personal identities, although it is likely people also tried to do so at an earlier date. For Duff the upper portion clearly offered a medium for the negotiation of status and identity perhaps deliberately referencing his relationship to the history of a particular place. From the late 18th century onwards the monument's significance with regard to religious identity waned in contrast to its part in negotiating personal identities of the landowning elite and the 'polite' classes, as well as its increasing role as a medium for the production and expression of national identity which was to become fully realised in the 20th century. In these contexts the upper portion became associated with new forms of place-making, first in the grounds of Invergordon Castle where it was a focal point in a landscape designed for contemplation and revelation, whilst simultaneously highlighting the good taste and judgement of the laird, Robert Bruce Aeneus Macleod. His son's attempt to donate it, and the Tarbat fragments, to the British Museum was also bound up in the negotiation of personal identity and status. Roderick Macleod was no doubt conscious of the enduring relationship of identity that often pertains between donors and objects in the context of museum collections. However, his actions backfired when his use of the monument came into conflict with its role in the construction of national identities. The museums and antiquarian institutions that provided the backdrop to this conflict were essential components in the realisation of the monument's national symbolism and

its role in the imagination of the nation in Scotland. With its incorporation within the National Museum of Antiquities in Edinburgh in 1921, and within the new Museum of Scotland in 1998, it became embedded within new forms of place-making. Used as an architectural piece within the Early People galleries the upper portion structures visitor movement, whilst at the same time it contributes to the construction of an abstract national space for visitors whose progress through the museum can be described as a 'ritual of citizenship'.486 However, even in the Museum of Scotland, firmly embedded within the story of the nation, the upper portion of the monument informs more localised and personal identities for certain visitors whose backgrounds, experiences and memories lead them to engage with it in other ways. Meanwhile, in the village of Hilton of Cadboll in Easter Ross, the recently excavated lower portion, now located in the Seaboard Community Hall, acts as a medium for the production of community identities and processes of place-making, specifically in the construction of Hilton as a place of significance.

These recent developments highlight another important aspect of the social life of the cross-slab; the way it has been implicated in centre-periphery relationships. Over the last two hundred years the upper portion of the monument has been utilised in various projects relating to the emergence of the modern state and the production of a national identity. For instance, we have discussed how it became a focus of new forms of national self-study as well as the improving activities of the land-owning classes. Furthermore, the fate of the upper portion over the last 150 years highlights the role of the elite in the production of national culture as well as tensions between private ownership and national patrimony. Its eventual incorporation within the National Museum of Antiquities located it firmly within one of the core cultural institutions of the modern nation-state. Yet while the cross-slab has achieved a prominent position at the heart of the national museum, the Easter Ross peninsula has gradually declined in political importance and become increasingly marginal over time.

Our knowledge of both the early church and Pictish society in north-east Scotland is hazy, but it can be argued that the Moray Firth area was a centre of secular and ecclesiastical power during the early medieval period. Indeed, monuments like the Hilton of Cadboll cross-slab may well have been one manifestation of a conscious attempt to introduce a reformed church with the intention of consolidating

and extending royal authority. However, during the later medieval and early modern periods they became increasingly peripheral to ecclesiastical and political developments elsewhere in Scotland and Europe. By the 18th century the population of the Highlands of Scotland was portrayed as backward and primitive and the improvement activities that they were subjected to only served to reinforce their marginality. Much of the rural population was displaced in the context of the Highland Clearances and those who became involved in the burgeoning fishing industry were perceived to be even more marginal, effectively the nation's 'ragged edge'.487 Subsequent economic and social disadvantage associated with the decline of the fishing industry and later the changing fortunes of the oil industry have further reinforced this sense of marginality. It is against this background that the Hilton of Cadboll cross-slab became a means of resisting marginality and decline, and a mechanism to negotiate relationships between centre and periphery.

The biographies of the Hilton of Cadboll cross-slab, and those who have engaged with it, are characterised as much by fragmentation and dislocation as they are by continuity. The uncarved tenon was separated from the monument sometime in the early medieval period, its upper section broke off during the 17th century and the cross-face reduced to thousands of fragments by Duff's mason, a process possibly initiated by earlier iconoclasts. It has also been displaced at several points in its social life. Initially we have argued that this displacement was negligible, marked by the re-erection of the monument in the 12th century in the vicinity of its primary location. However, in the mid-19th century the upper portion was removed to Invergordon Castle and then subsequently, in 1921, to London and then Edinburgh dislocating it from its historical associations with place. The other fragments of the cross-slab became buried at the chapel site only to be displaced again with their excavation which allowed them to be located in new contexts: the small carved fragments in the Museum collection, and the lower portion first in William Paterson's industrial unit and then in the Seaboard Hall on the boundary between the villages of Hilton of Cadboll and Balintore. What is interesting is that these moments of dislocation and fragmentation have had a powerful impact on the meanings and values attached to the cross-slab. They allow the monument to function as a metaphor for the displacement and fragmentation of communities in local contexts in the Easter Ross seaboard. Furthermore, the experience of loss or alienation from the cross-slab has often

magnified its significance and value. For instance, its removal to the British Museum in 1921 magnified its national significance, and the sense of loss engendered by the absence of the upper portion in Easter Ross was an important stimulus for the reconstruction project and subsequently informed the conflict over the lower portion.

Our final point concerns the issues raised by the conflicting and sometimes incommensurable meanings and values surrounding the cross-slab. At times it has clearly been possible for these to exist alongside each other without coming into contention, yet clearly at other times they have resulted in tension and conflict. Ironically the very project reported on in this monograph provided a forum in which different values and meanings came into conflict with one another. In writing a biography of the monument we have attempted to gain a greater understanding of the diverse meanings and values surrounding the monument, and how and why these can come to conflict with one another. To do so we have had to shift away from the usual concerns with which narratives about a site are correct and which values should be privileged.⁴⁸⁸ In other contexts, where decisions regarding conservation, management and interpretation have to be made, it is of course necessary to weigh up conflicting values, and this is a matter that both of us have addressed elsewhere. 489 Here, we wish simply to remind readers of the rich meanings and values that have surrounded the monument throughout its social life in many different historical contexts, and which continue to surround the different fragments today, as testament to the way in which people and things enliven one another. The fragmented biography of the Hilton of Cadboll monument sheds light on potent themes of faith, identity, power, and place-making, which lie at the heart of people's relationships with one another and with the material world. Whilst the powerful nature of these themes contributes to the contestation surrounding the monument, it is also the reason why it has such a compelling aura, or sense of 'voicefulness'.

Notes

1 This chapter is the product of collaborative research and writing. SMF is the primary author for the early and later medieval phases of the monument's biography (6.2 and 6.3), whereas SJ is the primary author for the later phases from the Reformation onwards (6.4–6.9). As regards research there was greatest collaboration concerning the period from the 16th to the early 20th century (up to and including the events of 1921), whereas the early/later

- medieval sections are based on SMF's research and the 20th/21st-century sections are based on SJ's. Obviously the research behind this chapter also extends to all those involved in the archaeological and art historical analysis included in this volume (especially the work of Heather James and Isabel Henderson).
- 2 In a recent book on The Past in Prehistoric Societies Bradley (2002, 50) argues that 'ever since Appadurai's edited volume, The Social Life of Things, appeared in 1986, prehistorians have tried to study the 'cultural biographies' of artefacts and monuments.
- 3 Alberti 2005; Appadurai 1986; Bender 1999; Bradley 2002; Driscoll 1998c; Gosden & Marshall 1999; Hall et al 2000; Hamilakis 1999; Hingley 1996; Holtorf 1998; Hoskins 1998; Jones 2002; Kopytoff 1986; Moreland 1999; Spooner 1986.
- 4 1999, 170.
- 5 Two projections on either side of the lowest level of the stepped base have been modified at some time.
- 6 1999, 176. This tendency to accumulate a biography also applies to other examples of early medieval sculpture in Scotland as revealed by Hall *et al* 2000 in their analysis of the Crieff Burgh cross.
- 7 Hamilakis 1999.
- 8 Moreland 1999, 194.
- 9 The field research involved participant observation and in-depth qualitative interviews (52 in total) carried out whilst living in Hilton of Cadboll and the adjacent village of Balintore for a period amounting to six months in total (between 2001 and 2003). The research was grantaided by Historic Scotland and aimed to investigate 'the meanings, values and interests associated with the Hilton of Cadboll cross-slab, and the ways in which these are manifested in the debates and commentaries concerning its conservation, location and presentation'. Funding was also provided by the University of Manchester and the AHRC. The methodologies and resulting insights will be discussed in 6.8 and 6.9. A full report can be found in Jones (2004).
- 10 Henderson 2001; Henderson & Henderson 2004, 181.
- 11 Woolf 2006.
- 12 Foster 2004, Chapter 5, is an attempt to provide an overview and we derive what follows here from this.
- 13 Hudson 1994, 146.
- 14 Bridei was certainly king in northern Pictish areas. James Fraser (2003) suggests he had a base around the Tay too.
- 15 Grant (2000, 93) suggests that conversion of Ross cannot be attributable to Columba and his followers because of the lack of dedications to St Columba. However, Colmán can be used as a diminutive for Columba, and there are several instances of this name (eg Fraser, I A 1986, 28), including at Portmahomack (Carver 2004, 24, n 43). Other saints, such as Donnan of Eigg and Maelrubai of Applecross, were very important in the conversion of Wester Ross, but it is conceivable that Columba and his followers could have focused their attention in Easter Ross because it lay at the end of the Great Glen, a route that we know from Adomnán that they made good use of.

- 16 Hudson 1994 is a good survey of the relationship between kings and the church, particularly for the period from the eighth century (also the role of the local nobility). See Ó Carragáin (2003, 130) for a useful summary of how small, relatively well-defined territories might have had a principal church controlling considerable territories in their immediate vicinity and be affiliated mainly with churches in the same secular kingdom as themselves. See also Taylor (1996) and Driscoll (1998a) on how the distribution of early saint dedications may represent evidence for earlier Scottish polities in southern Scotland. Woolf (forthcoming) suggests that bishops would also have existed exclusively to serve the needs of dispersed monastic familia whose distribution cut across the regular territorial dioceses of secular clergy.
- 7 Hudson 1994; Taylor 1996; 1999. See brief overview of archaeological evidence in Foster 2004, 88.
- 18 Hudson 1994, 156.
- 19 MacDonald 1992. The distribution of cill- place-names in Easter Ross possibly also supports this (Taylor 1996, 102).
- 20 Henderson 1990; www.scran.co.uk.
- 21 Foster 1997; Fisher 2001, 4.
- 22 It is thought that there were some proprietorial churches in eighth–ninth-century Ireland (Ó Carragáin 2003) and 10th-century and later Cornwall (Turner 2003, 187). Ritchie (1995) argues that Meigle and St Vigeans were centres of lay patronage, and by implication proprietorial.
- 23 These types of pre-12th century support are inferred from the Book of Deer (Hudson 1994, 168).
- 24 Caution is needed here (Henderson & Henderson 2004, 176), for the cross-slab form could have developed within Pictland itself under the influence of art in other media, or have been evolving gradually through Irish influence.
- 25 Based on recent work by Henderson & Henderson (2004) and Henderson (this volume) it can be seen that Foster (2004, 91–3) over-states the case for a distinction between an ecclesiastical cross-face and secular back-face on such slabs. Importantly, Hilton of Cadboll can now be seen to have had a cross on both sides.
- 26 See also Henderson & Henderson 2004, 180.
- 27 Samson 1992; Forsyth 1997.
- 28 Henderson & Henderson 2004, 180.
- 29 Driscoll 1998b; see Plunkett 1998 for Mercia; Ó Floinn 1995 for Clonmacnois, Ireland. While we do not necessarily infer specific royal patronage, the developing cult of St Columba as founder of Iona probably stimulated the creation of the series of eighth-century crosses here, as well as the Book of Kells (Fisher 2001, 1).
- 30 Ó Floinn 1995; 2001.
- 31 Hamlin 1987; Fisher 2001, 9.
- 32 Henderson & Henderson (2004, 177) suggest this might be a possibility for the Drumdurno 'Maiden Stone'.
- 33 Higgitt 1982, 306.
- 34 Harden 1995.
- 35 Carver 2004; 2005.
- 36 Carver 2004, 1; 2005, 26. Four Pit- place-names also survive on the Tarbat peninsula (Fraser, I A 1986, 26–7,

- Fig 2.4). These refer to individual estate- or land-holdings established after 900 but are almost certainly based on earlier land divisions. They give us a flavour of the number of individual land-units that monastic estates might have contained.
- 37 Clancy 1995, 111.
- 38 MacDonald 1992; Taylor 1996, 101; Woolf forthcoming.
- 39 To understand better the potential relationship of Portmahomack and Rosemarkie we need a study that embraces the evidence for the development and interrelationship of secular and ecclesiastical power bases around the whole Moray Firth., including the relationship with Burghead, Kinneddar and Elgin.
- 40 Carver 2005, 22–5; James 2005. The *First Statistical Account* (OSA XIII, 19) reports the walls of a chapel and enclosure at Shandwick being visible in 1793, but modern fieldwork, including geophysical survey, has not yet detected this. We do not know if there were originally also other satellite sites from which the sculpture is now lost, or how much other sculpture is lost from the satellite sites themselves. Hugh Miller (Jnr) suggests (1889, 442) that a further fragment of sculpture was built into the base of the Shandwick Stone, although there is no mention of this being observed during the conservation and remounting of the slab in 1988 (James 2005, 95–6). The importance of Nigg is also highlighted by two 'annat' names in the immediate district (Clancy 1995, 111).
- 41 This stone remains on site in unexcavated deposits. If indeed structural, its presence is potentially highly significant since we have little evidence for the use of dressed stones by the Picts in anything other than an ecclesiastical context and scant evidence for Pictish dressed stone buildings.
- 42 Watson 1904, 43–4; *Reg Mag Sig*, Thomson (ed) 1892, no 409, 150–1.
- 43 See OS 1881 Ordnance Survey. 'Ross and Cromarty'. Sheet L (surveyed 1872), 1:10,560. In passing, there is a local tradition that Columba had an establishment near Port Lark beneath Cadboll Castle, ie by the northernmost of the two wells. The source of this tradition, quoted by Macdonald and Gordon (1971, 5) is unclear. A much later example of the special properties of water is the 'Wart Wellie'. This was a stone alongside the chapel with a hollow in the top. Locals believed that water from here cured warts (Macdonald & Gordon 1971, 61). This sounds like the (lost) font from the chapel site.
- 44 Carver 2004, 26; 2005, 26 Fishers used the Shandwick Stone as a navigational aid before the use of compasses (Macdonald & Gordon 1971, 17). Carver earlier suggested five possible candidate locations for the Hilton of Cadboll cross-slab: Fearn, Portmahomack, Cadboll, 'Hilltown' of Cadboll and present Hilton (1998, 8).
- 45 Ó Carragáin 2003, 137-8.
- 46 A liturgical landscape is definable as a structured landscape where foci for different activities have been consciously created or evolved.

- 47 Wells are another type of monument that tend to have a complex biography, although it should be noted that not all holy wells necessarily have a pagan predecessor.
- 48 Henderson & Henderson 2004, 180–1; Hawkes 2005, 270. While looking at monuments over a far wider geographical sweep, Jane Hawke's 1999 study of the iconography of Anglo-Saxon sculpture from Deira & Bernicia nicely reinforces the point of how people probably intended each monument to function in a way specific to itself.
- 49 The projections at Hilton seem more likely to be the projecting ends of the cross-arms rather than architectural tenons, as may have been the case at Meigle 2 (Ritchie 1995, 5)
- 50 At times of uncertainty such locally-defined character could be particularly important, cf Ó Carragáin 2003, 146
- 51 Carver 2005, 28 would also argue that this suggests secular commissions.
- 52 Carver 2005, 29; Henderson & Henderson 2004, 179.
- 53 We should note here Henderson's tentative suggestion (see Chapter 5.4.4) that they designed the blank panels on either side of the cross base at Hilton of Cadboll to bear an inscription. If so, this may tell us something about when in the sequence of carving an inscription might be added (at the end) and, since located by the break between the tenon and lower portion, that the slab broke before there was the opportunity to add any such inscriptions, ie very soon after manufacture.
- 54 Henderson & Henderson 2004, 74; Driscoll 1988, 228; Driscoll 1998a.
- 55 Carver doubts that such a centralised and massive investment could have taken place without royal authority behind it (Carver 2005, 26). There are only a few instances (in Ireland and Anglo-Saxon England) when we have an indication of which (high status) person arranged for a sculpture to be created (eg Hamlin 1987, 140). It would be true to say that we know very little about the mechanics of the patronage of the arts in early medieval times (Bailey 1996, 105ff; Alcock 2003, 307–9).
- 56 Ó Floinn 1989, 72, 90; Plunkett 1998. See Helm 1993 on the symbolism behind the production and acquisition of such long-distance goods, and hence their value to the elite.
- 57 This is contrary to the passive and bleak role Fisher (2001, 15) suggests for the Iona sculptors as 'mere executants' working under the direction of monks with their own traditions of manuscript and metalwork design.
- 58 Hamlin 1987, 140; Mac Lean 1995a; 1995b; Bailey 1996, 105–6. Although there is a tradition of craftsmen-clerics in medieval Europe (Ryan 1989, 125), there is little evidence for these working in stone. The suggestion that Abbot Colmán (d 924) was the 'architectural sculptor' for the Cross of the Scriptures at Clonmacnoise (Henry 1980, 44–5) is now questioned: the Colmán who may have made both the Clonmacnoise and Kinnitty crosses was, however, someone of high status who could travel and work for several patrons (Mac Lean 1995a, 141–

- 3). Geology can provide important insights into how far (finished) sculptures were transported from a quarry site, and the scale of investment involved in such transport and its implications for patronage (Lang 2001, 18–19).
- 59 Henderson & Henderson 2004, 212-13.
- 60 There is evidence from Anglo-Saxon England of sculptors working on a single site, or a single sculptor working at a adjacent sites, as well as evidence for individuals working over quite large distances (Bailey 1996, 108ff).
- 61 Eg Richards 2004; and for an early medieval example see Gondek forthcoming 2006.
- 62 See Driscoll 1998c.
- 63 Jones 2004, 12.
- 64 Eg Mackenzie 1991; Waterson 1990.
- 65 Grant 2000, 95-6.
- 66 Crawford 1995.
- 67 Fraser 1986, 31; contra Watson 1904, 40; Mackenzie 1931, 205
- 68 The Shandwick cross-slab faces east, but it is not totally clear if this was the original orientation. Petley (1857, pl xix) describes the back-face as the east face, therefore west-facing. He also says that he lifted the stone, but makes no mention of turning it around (ibid, 346). The stone blew down in around 1846 so, if the orientation has changed, it perhaps took place at this time.
- 69 We cannot be 100 per cent confident about Nigg because we do not know where it was first erected and how many times it was moved prior to the earliest documentary sources in the post-Reformation period
- 70 Carver 2004, 25.
- 71 Martin Carver pers comm.
- 72 OS 1880 Ordnance Survey. 'Ross and Cromarty', Sheet XXX (surveyed 1872), 1:10,560. The early 19th-century destruction of this monument is described by Stuart (1856, 11), but there seems to be some mistake here, since Cordiner (1776, 66) had already seen the fragments; pers comm Carver.
- 73 Pers comm Carver.
- 74 From the mid-ninth century onwards the Gaelic kings of the Cenél nGabráin, following the lead of their Pictish predecessors, took an active role in ecclesiastical reorganisation of their kingdom. This involved taking Columba's relics from Cenél nGabrain lands in the west to Dunkeld in their new Gaelic territories. The motivation would appear to have been a desire to realign religious structures and practices with those of the Gaelic (Columban), rather than Pictish (Roman) church, although this is not to suggest that there was no continuity with the earlier Pictish church (Hudson 1994, 168-9). We do not know if these mid-ninth century reforms, stemming from southern Pictland, had any direct impact on northern Pictland because we do not know whether the lands north of the Mounth were regarded as a separate kingdom at this time.
- 75 Woolf 2000, 145-64; forthcoming
- 76 The Norse were nominally Christian since 995 and there was a bishopric in Orkney by 1035, and its authority would have extended at the same time as the authority of the earldom extended (Cant 1986, 51).

- 77 Grant 2000, 118.
- 78 Foster 1998, 46; Fraser 2005, 64.
- 79 High Island in Co Galway is an instance in which the excavators argue that the headstones of a line of significant early medieval graves were incorporated into a slightly later gable wall of a church (Marshall & Rourke 2000).
- 80 Hay Fleming 1931, Fig 30.
- 81 See, for example, Bourke 1993.
- 82 Henderson & Henderson 2004, 221.
- 83 James 2005.
- 84 Again we must turn to better documented Ireland to illustrate this. Some saints had their own metalworkers and some of these metalworkers were saints in their own right: the classic example is St Patrick and Bishop Tassach, one of his three 'artificers' (de Paor 1993, 127, 129).
- 85 In the West Highlands, in the 15th and 16th centuries there was a revival of interest in early medieval Insular art (Glenn 2003, 111–12), but there is very little evidence for this on the east coast.
- 86 The Gaels were certainly devoted to the Virgin Mary and there is no reason why this did not also apply to the Picts. Potentially early examples are found in east Scotland (Taylor 1996, 108, n 4) and the Virgin and Child features on a Pictish sculpture from Brechin. The strong connections between the Tarbat peninsula and Iona (a known centre of Marian devotion see the writings of Adomnán and it sculpture) might make this more likely. However, in Ireland no churches or monasteries are dedicated to her prior to 1100, and the number of instances increases rapidly after 1150 (O'Dwyer 1988, 287–8).
- 87 For example, St John's Cross on Iona is 4.8m west of the chapel known as 'St Columba's Shrine', Kilnave Cross on Islay is 7m west of the chapel, and the Aberlemno Churchyard cross-slab in Angus stands west of the church (although some consider this to be moved). 1994 excavations at A'Chill on Canna, Highland, have demonstrated that its eighth-ninth-century free-standing cross lies about 10m WNW of a building that is thought to be a chapel (Hunter & Roberts 1994, 16–18).
- 88 McNeill & MacQueen (eds) 1996, 356. Grant 2000 Map 1 shows the likely extent of the parishes. The creation of the parish of Fearn, in which Hilton of Cadboll is now found, from the southern part of the medieval parish of Tarbat, dates to 1628 (Thomson (ed) 1892, 433; contra Carver 2005, 26 who states that all the Pictish monuments on the Tarbat peninsula were in Tarbat parish until 1626).
- 89 Cowan 1967, 157, 195; Adam (ed) 1991, 28. New Fearn operated in a triangular relationship with St Duthac's Shrine in Tain and Balngown, the seat of the local Ross magnate (Dilworth 2000, 43).
- 90 RCAHMS 1979, nos 208, 210, 227, 243–5; Stell 1986,
- 91 OPS II, 2, 434; ONB Book 11, Fearn Parish, 28.
- 92 OPS II, 2, 454; Stell 1986, 110–11.

- 93 RCAHMS 1979, no 210; NGR: NH 883 791; OPS II, 2, 434, 437.
- 94 The following discussion derives predominantly from information in OPS (II, 2, 441–3) and Adam (ed) 1991.
- 95 Eg Adam (ed) 1991, 37, 186-7.
- 96 Watson 1904, 41. A map of the late 1500s (National Library of Scotland, Gordon MS 20), attributed to Pont, names 'Cattbo Cast' and an inland 'Hiltoun', but no Catboll settlements, probably because they are very small.
- 97 Macdonald & Gordon (1971, 6) point out that parish records treat Hilltown and Hilton as if they were separate villages. The Cadboll Estate papers of 1813 refer to 'Fishertown and Lands of Hilltown'.
- 98 Carver 1998, 16-17.
- 99 Petley (1857, 347) refers to the Hilton of Cadboll crossslab as Bardvour (Watson 1904, 44: Bàrd Mhoire, Mary's meadow or enclosure, in sense of Our Lady's Park).
- 100 OPS II, 2, 442–3. Only a small part of Cadboll Castle survives within the grounds of the seventh-century laird's house that replaced it.
- 101 Stell 1986, 127.
- 102 Dilworth 2000, 43, 53. Cowan & Easson 1976, 102.
- 103 Miller 1835 [1994], 40-1, our emphasis.
- 104 Campbell-Kease 2002. Subsequent research has uncovered further information, which will be discussed later in this section.
- 105 For example, Fraser 2005. This was also assumed at the time of excavation, and in the interim reports that arose from this.
- 106 Sutherland, 1892, 189, stated that 'there can be no doubt from the analogy of its congeners that it was originally a cross-bearing monument, but having fallen into unappreciative hands and on evil days, the cross that adorned its obverse side has been sacrilegiously hewn away to give place to a ridiculous epitaph of 1676'.
- 107 The burial inscription must date to sometime in and around 1676, but a 16th-century OSL date has been obtained for the layer containing the fragments (007).
- 108 See James, Chapter 3, for detailed discussion of the stratigraphy.
- 109 The fracture survives on the upper surface of the lower portion, but not on the bottom edge of the upper portion which was modified for mounting at Invergordon Castle.
- 110 SMF discovered a copy of the letter reprinted in Mitchell & Clark (eds) 1908, 17–19. The original manuscript is held in the archives of the Royal Society, London (EL/M1/72).
- 111 Letter from Sir George MacKenzie to Mr James Gregory, 16th January 1675, Royal Society, EL/M1/72. It is notable that both the Nigg and Shandwick Stones are also reported to have blown down in strong winds, in 1725 (OSA III, 20) and 1840s (Stuart 1856, 10) respectively.
- 112 The dimensions of 3.65m high, by 1.52m wide by 0.6m thick compare with 2.4m by 1.41m by 0.21m for the surviving upper portion. MacKenzie's dimensions are

- therefore greater, particularly with respect to height and thickness. Given that the wind rather than the obelisk is the main focus of concern for MacKenzie, they are likely to have been based on a rough estimation longer than an accurate measurement. At this stage the untrimmed upper portion would also still be slightly higher than its present measurements. The height quoted almost matches the estimated original height of the cross-slab of c3.35m, but there is no suggestion from the archaeology that there was any exploration of the surviving lower portion at this date. We believe this to be the Hilton of Cadboll cross-slab, and not one at Portmahomack or Nigg, because these are active parish churches at this time. The Shandwick Stone allegedly stood by a chapel, but there is no evidence for it having fallen down before the 1840s (Stuart 1856, 10).
- 113 It is acknowledged by the present authors that this dating technique is in early phase of development and there is some debate about its accuracy. However, the dates produced by OSL for samples taken during this excavation are very much in keeping with the relative stratigraphic sequence as well as dating by ¹⁴C and ceramic typology lending the dates some credence. Further discussion of OSL dating is provided by James, Chapter 3, and Sanderson and Murray, Chapter 7.3.2.
- 114 See Collinson 1997; Duffy 1992.
- 115 Exodus 20:4.
- 116 Moreland 1999, 199–201. It should be noted that whilst the Reformation marked a distinct phase of intensive iconoclasm, the problem of the appropriate use of religious imagery was a source of debate within the church throughout the Middle Ages (ibid, 194–5). Indeed, some examples of discrete and precise removal of small areas of carving on some examples of early medieval sculpture (eg St Orland's Stone and Meigle 11) may relate to careful editing of the iconography well before the Reformation (Fraser 2005), or alternatively, as Henderson (1994, 91–2) suggests, they may be evidence of early medieval fitting of inserts in other media.
- 117 Information about material destruction during the Scottish Reformation is mostly derived from McRoberts (1959) detailed review. In addition Spicer (2003) provides an analysis of the physical adaptation of pre-Reformation buildings for post-Reformation worship in Scotland.
- 118 McRoberts 1959, 171.
- 119 See McRoberts 1958; Tarlow 1999.
- 120 Tarlow 1998. Cowan 1978 emphasises just how diverse local attitudes to the Reformation could be.
- 121 Gilchrist 2003; Spicer 2003; Tarlow 1998; 2003.
- 122 See Budd 2000.
- 123 See Moreland 1999.
- 124 An act was passed ordaining that these monuments 'be taken down, demolished and destroyed, and that with all convenient diligence' (cited in Hewison 1914, 13).
- 125 Cassidy 1992, 4. Cassidy goes on to suggest that the singling out of the Ruthwell cross in this manner in the Act of 1642 may be a result of its celebrity but also an indication of a reluctance on behalf of Ruthwell's parish

- minister, the Rev Gavin Young, to comply with the previous order of the Aberdeen Assembly in 1640.
- 126 Cassidy 1992; Hewison 1914.
- 127 Also known as Woodwray. Fraser 2005, although subsequently questioned by Henderson (pers comm).
- 128 Ibid.
- 129 Henderson & Henderson 2004, 218.
- 130 A point which Fraser (2005) acknowledges.
- 131 Some of St Vigeans stones were built into the fabric of the medieval church suggesting earlier phases of re-use as well
- 132 The extent of loss relating to the early medieval art of the Picts, including sculpture, is emphasised by Henderson & Henderson (2004) in their recent book.
- 133 See Tarlow 2003 for a similar argument.
- 134 Tarlow 2003; and see other contributions to Gaimster and Gilchrist (eds) 2003.
- 135 Alston 1999, 52; Willsher 2005.
- 136 Alston 1999, 52; Gilchrist 2003. The Rosses of Balnagown did this at Fearn Abbey, creating a north burial aisle in the early 1600s and a century later appropriating the east end of the church as a burial place.
- 137 Alston 1999, 52; Spicer 2000; Tarlow 1999, 90; Willsher 2005, 19.
- 138 Willsher 2005, 19-21.
- 139 Tarlow 1999, 84-6.
- 140 Allen & Anderson 1903 [1993], Vol 2, 462–72; Ritchie 1999; Stirling Maxwell 1899.
- 141 Allen & Anderson 1903 [1993], Vol 2, 491.
- 142 See RCAHMS 1992 and Fisher 2001, where occasional examples can also be found of re-use of post-Reformation grave-slabs too.
- 143 Allen & Anderson 1903 [1993], Vol 2, 36. McKay's name was chiselled off in the 1990s (Blackie & Macaulay 1998, 14).
- 144 Ibid, 48-50; see also Forsyth 1996, 299.
- 145 Ibid. The stone is illustrated in Allen & Anderson 1903 [1993], Vol 2, 49, and Close-Brooks 1989, 9.
- 146 Thomson 2006, 3.
- 147 Allen & Anderson 1903 [1993], Vol 2, 462–71; Ritchie 1999, 14–15.
- 148 For more detailed discussions of the role of burial memorials in the negotiation of identity and status at this time see Finch (1991 and 2003) and Tarlow (2003).
- 149 Cutmore 1996, 9–10; Ritchie 1999, 14. The absence of trade emblems may also be an indication of the status of the individuals who chose to use such monuments.
- 150 The Golspie and Reay cross-slabs from Sutherland and Caithness provide examples where relatively ornate crosses (decorated with key-pattern and knot-and interlace-work) are clearly respected by the later inscriptions suggesting that the iconography was at least acceptable and perhaps of particular significance to the individuals involved. A number of the Govan recumbent cross-slabs also respect the framework offered by the cross, the modern inscriptions being carved within the top arm (No 38) or across the horizontal axis of the crosshead (Nos 7 (second inscription to Will^m Bogle), 8, 34). It is notable, however, that many of these make use of the

- cross-slabs where the cross itself is plain and undecorated, which may have made them more acceptable in a post-Reformation context.
- 151 Examples include, Govan Nos 7 (first memorial to RD), 15, 25–8, 37, and of course Hilton of Cadboll itself which will be discussed in detail below.
- 152 Govan cross-slab (No 5) and recumbent cross-slab (No 9) are the sole examples where the inscriptions are carved the opposite way up to the earlier iconography producing an inversion of the monument. They provide an interesting contrast with the use of the plain recumbent cross-slabs.
- 153 Such modification is discussed by Tarlow (2003) in relation to other examples.
- 154 Eg see Cowan 1982.
- 155 Kirk 1986, 1-3.
- 156 See Kirk 1986 for a detailed discussion. Strikingly it was Patrick Hamilton, once a commendator of Fearn Abbey, who became one of the first to be executed for his Protestant teachings in 1528. However, Hamilton had resigned the abbacy in 1526 and had no real connection with the area, it being unlikely that he even visited (Alston 1999, 50; Dilworth 2000, 46).
- 157 Ibid.
- 158 McRoberts 1958, 140.
- 159 Kirk 1986, 19.
- 160 Ibid, 10–11. Henry Sinclair was Bishop of Ross in the early 1560s (replaced by John Leslie in 1566). Despite being a Catholic, he was, according to Kirk, flexible in his approach to Reform, declining to reply to the papal envoy and upholding the act forbidding the celebration of mass.
- 161 Ibid, 10.
- 162 Cowan & Easson 1976, 101-2; Dilworth 2000, 53.
- 163 McInnes 1940, 73–4; Adam 1991, 221–2. Perhaps Duff commissioned the monument in advance of his death, maybe at a time when he was very ill. In this respect it is worth noting that the Reay cross-slab inscription simply has '17' after the name, and there appears to be a space which may have been left for completion of an appropriate date on the death of Robert MacKay.
- 164 Adam 1991, 221–2. The reference to being buried at Fearn presumably refers to the abbey which became the parish church in 1628.
- 165 McInnes 1940, 73-4; Tayler 1946, 267.
- 166 Tayler 1946, 267.
- 167 Helen's relationship, if any, to Duff's previous wife Christian Urquhart is not known, although it is clear that they were not sisters, Helen's father being Thomas Urquhart of Kinbeachie (Tayler 1946, 267) and Christian's being Alexander Urquhart of St Martins (Adam 1991, 221–2).
- 168 Campbell-Kease 2002. In relation to Duff's first wife KS, Campbell-Kease points out that the hand holding a banner is a relatively uncommon charge and the only time it appears regularly is the Arms of Bannerman.
- 169 Pers comm. Alex Maxwell Findlater and David Eaton. Findlater also notes that the arms of Bannerman of Elsick, a north-eastern family, also contains a banner (Stodart 1881, I, 110; II, 396).

- 170 Pers comm.
- 171 McInnes 1940, 73–4; Macgill 1909, 38–9. In 1665 a warrant of apprehension was issued for 'Dam Elizabeth Leslay, The Laird of May, Alexr. Duf, chamberlaine to the Ladie Mey' for non-payment of certain dues (MacGill 1909, 38–9). Sir James Sinclair of Mey was the great grandson of George Sinclair, 4th Earl of Caithness. He married Elizabeth Leslay c1628 and died in 1662. He was also known as Sir James Sinclair of Canisbay (from 1631).
- 172 Kirk 1986, 8. However, he was brought before the General Assembly in 1574 for non-residence at Rogart. He was absolved but appears to have had the charge for the income leading to questions about the strength of his protestant faith. David Alston pers comm.
- 173 Adam 1991, 227–8. Richard Oram (pers comm) has not come across the Duff family when researching Tain and Lochslin material.
- 174 George Sinclair of Mey, father of Sir William Sinclair (d 1616), bought Cadboll, Plaids and the bailary of St Duthac from the Innes family in 1585, and in 1601 bought half of the Barony of Geanies from Sir Patrick Murray, thus creating the Barony of Cadboll. (Adam 1991, 186–7)
- 175 Tarlow 2003, 86-89.
- 176 David Alston pers comm. The St Regulus stones are for burials of burgess families who had moved in and taken over the laird's burial ground, as the Urquhart's affairs fell into disorder in the 1670s, and they seemingly deliberately flaunt their symbols of status (armorial bearings).
- 177 Given the Sinclair family connections with Sutherland and Caithness he may well have been aware of them. Robert Gordon who is commemorated on the Golspie cross-slab was almost certainly one of the Gordon's of Sutherland.
- 178 Thomson 2006, 4. Although Thomson acknowledges that the attempt to vary line thickness suggests that the mason was aware of the written execution of roman script with a broad-edged pen.
- 179 Ibid, 97.
- 180 As noted above there is a possibility that his family had a connection with Cadboll Castle dating back to 1565.
- 181 Early medieval carvings potentially lurk on the backside of other post-Reformation grave-slabs throughout Scotland; we only know of Hilton of Cadboll because the grave-slab was turned over, it being assumed that it had not been used.
- 182 Where it was encountered by the antiquarian Charles Cordiner in the late 18th century (Cordiner 1780, 66).
- 183 See note 171 above.
- 184 One young male inhumation burial was discovered during excavations at Hilton of Cadboll dating to the period of Duff (Skeleton 1 produced a radiocarbon date of the mid-16th to mid-20th centuries), but Duff lived to an older age.
- 185 Allen & Anderson 1903 [1993], Vol 2, 62; Campbell-Kease 2002; Petley 1857, 348; Tayler & Tayler 1914 ii, 586
- 186 Adam 1991, 221–2.

- 187 As suggested by, amongst others, Petley (1857, 348), although it seems unlikely given Duff's status that he could not arrange to have it relocated.
- 188 Given that it lay on his employer's land it is possible hat Duff didn't gain permission or approval for the re-use of the monument.
- 189 Cordiner 1780, 65-6.
- 190 Ibid, 66.
- 191 Eg Gordon 1726; Pennant 1771.
- 192 Stat Acct of Scotland, 1791-99, Vol 13, 19-20.
- 193 Following Petley's death on 25 August 1830, his widow donated his manuscripts, etchings and etching plates to the Society of Antiquaries of Scotland (see the letter from Ellen Petley which is reproduced at the end of Petley's article; also Stevenson 1981a, 71–2). Petley's paper was then read to the Society in 1831 in advance of its publication in *Archaeologia Scotica*, Vol IV, part 3. However, although the first two parts appeared in 1831 and 1833, misfortunes which the Society experienced delayed publication of the third part until 1857 (Graham 1969–70, 241). Unfortunately, we have been unable to locate Petley's original manuscripts, etchings, or etching plates in the archives of the library of the Society of Antiquaries of Scotland, the collection of the National Museums of Scotland, or the RCAHMS.
- 194 Petley 1857, 347. The fact that the upper portion had been returned to the position in which Cordiner encountered it (with the surviving early medieval sculpture facing downwards) perhaps suggests a desire to protect the original carving. It is not clear, however, who might have been responsible for this action: Cordiner, Macleod and/or local residents.
- 195 Petley states that 'the large circle is copied correctly from a cast I had made in wax' (ibid, 348 and see Plates XXI and XXII).
- 196 Watson 1904, 44; Watson pers comm.
- 197 New Stat Acct , Vol 14, 28. Petley (1857, 346) records the name of the Shandwick cross-slab in the shortened form 'Clachcarra'.
- 198 Ibid, 346. Petley also records other variants, such as the account which cites the sculptured stones as memorials to the three sons of a King of Denmark 'who were shipwrecked on a rock about a mile from the shore, and which is to this day called the Three King's Sons'.
- 199 Miller 1835 [1994], 39; cf Petley 1857, 347. Ironically, although describing the tradition as 'doubtful and imperfect', Miller reaches the same erroneous conclusion proposing a Scandinavian origin for the sculptured stones of Easter Ross on the basis of his own stylistic analysis.
- 200 Petley, 1857, 345-6; Miller 1994 [1835], 2-3.
- 201 The church appears to have successfully eradicated much of the traditional folk lore in the area of Easter Ross (Seosamh Watson pers comm). Furthermore, whilst the villages of Hilton of Cadboll, Balintore and Shandwick had medieval antecedents, their modern form is largely a product of the Clearances inland (see 6.6). Indeed, the *New Stat Acct* (1845, 27) for Nigg parish states that 'there are few, if any, individuals in the parish whose progenitors were in it, two hundred years ago'. Thus the components

- of the King's Sons folk tradition may have been derived from other areas and reinvented in respect to the local monuments of Easter Ross.
- 202 See Tarlow 1999 for a general discussion of changing forms of memorialisation.
- 203 Petley 1857, 345.
- 204 1845.
- 205 New Stat Acct, 1845, Vol 14, 28–30. The account of the latter draws heavily on the work of Hugh Miller and the same version of King's Sons folk lore is cited in summary form.
- 206 Allen & Anderson (1993 [1903], Vol 2, 61) note the rapid deterioration but attribute this to weathering at Invergordon Castle. Whilst this undoubtedly continued at the Castle due to the exposed location it is clear from A Gibb's drawing that some of the erosion had taken place at the Hilton of Cadboll chapel site (see above).
- 207 Thomson 2006, 4.
- 208 Bann 1999 xviii. Sweet 2001, 199 and 2004, 345-6.
- 209 See Piggott 1976; Sweet 2004; Withers 1995a.
- 210 Sweet 2004, 12; see also Withers 1995a.
- 211 Buchan 1778, 28–30. For discussion of the founding of the Society see Smellie 1782; see also Cant 1981.
- 212 See Graham 1974–5; Withers 1995a. There were five questions specifically addressing antiquities referring respectively to: crosses and obelisks; monastic ruins; Roman, Saxon, Danish or Pictish remains and associated local traditions; coins; and tumuli (Graham 1974–5, 184). The resulting coverage by individual ministers was, however, very uneven.
- 213 Newman 1987, 111–12, cited in Bending 2002, 521.
- 214 Peltz & Myrone 1999, 8.
- 215 Ibid.
- 216 Peltz & Myrone 1999, 3; see also Brewer 1997, Piggott
- 217 Bending 2002, 520.
- 218 See Bending 2002 and Sweet 2001.
- 219 There were some notably earlier accounts such as Gordon who published his *Itinerarium Septentrionale*, or A Journey over the Greatest Part of Scotland, in 1726. Gordon discusses many of the early Christian sculptured monuments south of the Moray Firth in the context of an account of the 'invafions of the Danes upon the Kingdom of Scotland'.
- 220 The improved communications and political stability following the suppression of the Jacobite Rebellion of 1745 paved the way for the development of tourism in the Highlands (Nenadic 1995, 149).
- 221 Pennant 1771; Grose 1789–91; Cardonnel 1788. Cordiner depended upon Pennant's patronage. The two men were engaged in regular correspondence, Cordiner following Pennant's direction and queries and Pennant promoting Cordiner's publications as well as utilising his notes and drawings for his own publications. Indeed, the first of Cordiner's publications, Antiquities and Scenery (1780), is structured as a series of deferential letters to Pennant apparently written during the course of his journey.
- 222 Ibid, 2–3. In his opening letter Cordiner tells Pennant that 'in these drawings I shall deliver over to you as their

- preserver, the most venerable and ancient monuments of the nation's former grandeur'; a claim which is also common amongst similar writers (Bending 2002, 522).
- 223 He notes for instance, 'the variety of pleasant scenery exhibited in the surrounding fields, formed to a vast distance, into one continued garden' and the 'sumptuous prospects which the castle yields from almost every point of view' (ibid, 56).
- 224 Ibid, 61. An integral component of this romantic discourse is the portrayal of ruins and antiquities as timeless and unchanging despite their obvious state of decay. Thus Cordiner informs his readers erroneously that the Hilton of Cadboll slab has lain unnoticed on its face 'from time immemorial' despite the Duff memorial dating to 1676 (ibid, 66).
- 225 Ibid, 76–7. Cordiner's illustrations reinforce these aesthetic ideals. His illustration of Gordon Castle for instance emphasise its picturesque prospects, and the inclusion of people strolling in the gardens serves to highlight the pleasures to be gained from viewing such scenery. In contrast, the illustrations of Elgin Cathedral and Beaulieu Abbey provide a strong impression of darkness and decay, their ruinous states reinforced by the piles of headstones, carved architectural fragments and rubble heaped up in the foreground. Whereas the sublime scenery of the Cascade near Carril is wild and dark, lit only by moonlight, which reveals shadowy figures in the background and the bard seated in the foreground.
- 226 See the discussion of Sueno's Stone (ibid, 54).
- 227 Ibid, 1788.
- 228 Ibid, 1780, 54.
- 229 Ibid, 1780, 66-8.
- 230 Ibid, 68.
- 231 Ibid.
- 232 On the significance of Miller's contribution as a folklorist see Alston 1996.
- 233 In the opening chapter he explains his regret that 'this oral knowledge of the past, which I deem so interesting, should be thus suffered to be lost' and that he therefore set himself the urgent task of 'storing them up' (Miller 1994 [1835], 2–3). Later though he makes the point that much depends on the manner in which the story is told, asserting his resolve not to be tedious or dull (ibid, 8).
- 234 Ibid, 40.
- 235 Ibid, 39-40.
- 236 Itis likely that Miller's work reached a wider audience given his intellectual and political prominence. Furthermore, their impact would have varied geographically. Cordiner's work, being published in London, was better known south of the Border (Sweet 2004, 272), whereas Miller's would have been particularly popular in Scotland given his connections with the North East and Edinburgh.
- 237 Petley 1857, 346. In contrast, Petley argues that 'books will give us little, and what they do is taken from no better authority, for we have none published which mention these subjects of older date than fifty or sixty years ago' (ibid, 345).
- 238 Ibid, 345. Betraying his class prejudices, he goes on stress: 'particularly when it is considered such traditions are

- for the most part found amongst the lower class, whose ancestors were a rude and uncivilised people'.
- 239 Ibid, 346.
- 240 See Sweet 2004, 18. The process whereby his work finally reached publication, following some degree of editorial synthesis and subject to the fluctuating fortunes of the Society of Antiquaries of Scotland (leading to a delay of about 25 years) was also commonplace.
- 241 For an overview of this empirical strand of antiquarianism see Sweet 2004, Chapter 1.
- 242 Henry & Trench-Jellicoe 2005, 236.
- 243 Vol 1 was published in 1856 and Vol 2 in 1867.
- 244 Chalmers 1848; Muir 1855.
- 245 Stuart 1856, xvii.
- 246 Ibid, xvi. Stuart contrasted Gibb's drawings with those of Mr Jastresbski who had been entrusted with the illustration in the first instance. In some instances, the latter's drawings had been found to be deficient and had been drawn again by Mr Gibbs (Ritchie 1997, 123–4).
- 247 Ibid, 10.
- 248 Henderson 1993, 14.
- 249 Allen & Anderson 1993 [1903], Vol 1, iii.
- 250 Sweet 2004, 8-9, 15.
- 251 Ibid, 65-66.
- 252 Cordiner 1788, no page number.
- 253 Miller 1994 [1835], 40.
- 254 Bending 2002, 529; see also Stewart 1993 [1984].
- 255 Allen 1891, 431.
- 256 Nenadic 1995, 153.
- 257 Brewer 1997, 619.
- 258 Ibid, 621.
- 259 Ross-Shire, Vol II, Fearn Parish, no page.
- 260 These were collected during the local community research carried out between 2001 and 2003 by SJ.
- 261 Although see Haycock 1999 for examples of such relocated monuments and the construction of new 'Celtic' temples and gothic ruins.
- 262 Allen & Anderson 1993 [1903], Vol 1, 15-21.
- 263 Ibid, 243; Cheape et al 2003, 67-8.
- 264 See Close-Brooks 1989.
- 265 Allen & Anderson 1993 [1903], Vol 1, 21. Allen was extremely disapproving commenting that 'it is exposed to the wild fury of the winter storms on top of a high mound close to the sea-shore' (ibid, Vol 2, 35).
- 266 Groome 1882–5, reproduced in the Gazetteer for Scotland 2002–4; see also *Third Stat Acet* 1987, 159.
- 267 It was clearly established by the time the Ordnance Survey Original Object Name Book was produced, as it is described therein. Furthermore, the Third Stat Acct (1987, 159) notes that the Gardens were created some years prior to 1872, when work started on rebuilding the Elizabethanstyle Castle.
- 268 We are grateful to David Alston for pointing out the fashion for 'American Gardens' in 19th-century Britain. Examples of American gardens were, for instance, summarised in Louden's influential *Encyclopaedia of Gardening* (1822), and generally involve the cultivation of naturalistic wooded settings and the aesthetic characteristics of rhododendrons and azaleas.

- 269 Ross-Shire, Vol II, 1872, Rosskeen Parish, no page.
- 270 1987, 159.
- 271 2001.
- 272 For further discussion see Foster 2001.
- 273 For instance, the correspondence surrounding the removal of the Hilton of Cadboll Stone from Invergordon Castle to the British Museum in 1921 provided the forum for extensive debate about the intentions of the Macleods. One correspondent in the Highland News (26 February 1921, p 5, our emphasis) remarked that 'the stone, which was lying in a neglected state, was taken to the American Gardens, Invergordon, many years ago by the late R.S.[sic]A. Macleod, father of Captain Macleod, solely for protection'. Similar views were expressed in the Highland News on 12 February 1921, p 7, and in the Ross-Shire Journal on 8 April 1921, p 3. Other correspondents, however, argued that its location at Hilton of Cadboll Chapel was sheltered, and that at Invergordon in contrast the cross-slab had been erected in a very exposed position that had led to considerable damage through weathering (eg The Scotsman, 11 February 1921; Glasgow Herald, 8 February 1921).
- 274 See Chaper 1, although as pointed out above an analysis of the deterioration in the carving between the production of Petley's drawings in 1811/12 and Gibb's drawings for Stuart in 1853, suggests that considerable weathering had taken place prior to its removal to Invergordon Castle.
- 275 Allen & Anderson 1993 [1903], Vol 2, 290.
- 276 Many people from Allen (ibid, 42–3) onwards have distinguished the Dunrobin collection, highlighting its importance and the curatorial/scholarly influence of the Rev J M Joass, LL.D, during the late 19th century. Nevertheless, there is little doubt that the desire of one of the most powerful landholding families in north-east Scotland to amass such a collection of antiquities and natural history specimens was nevertheless embedded in the negotiation and display of status.
- 277 Ibid, 21.
- 278 Letter from General Pitt Rivers to W D Geddes reproduced in Foster 2001.
- These oral historical accounts derived from residents of Hilton of Cadboll whose families have been associated with the village for four to five generations. These suggest that the men of the village protested against the removal of the stone by marching behind it as far as they could (whether or not this was only as far as the smack in Our Lady's Haven, or some distance along the road to Invergordon is unclear). Such accounts can be subject to embellishment and invention as they are retold over time and obviously have a particular resonance in light of recent local protests surrounding the excavation of the lower portion. However, it is not unfeasible that there was some sort of protest even if only of a limited nature; as will be discussed below there was a strong tradition of protest with regard to land and resources during the later 19th century in the Easter Ross fishing villages, and in the Scottish Highlands more generally (see Withers 1995b), and this protest often focused on the actions of landowners.

- 280 Cited in Brewer 1997, 629.
- 281 See Nadel-Klein 2003, 23-30; see also Coull 1969.
- 282 Ibid; see also Ash 1991.
- 283 For a more detailed discussion see Dalglish 2003; Devine 1999; Phillipson & Mitchison 1970; Smout 1969.
- 284 See Smout 1969; Dalglish 2003.
- 285 It is difficult to identify the precise date by which Hilton of Cadboll Chapel and the surrounding land became incorporated into the Cadboll estate. However, by 1643 the same lands were part of the 'barony of Ganyes or Cadboll' held by Sir James Sinclair of Cannesbye (Origines Parochiales Scotiae 1855, 443), and the Contents and Estimate of the Estate of Cadboll produced in 1813 detail 'Fishertown of Hilltown' as part of the estate along with the land on which 'St Mary Chapel' was located. At this date the rental from the village amounted to £24 and 2s.
- 286 Geophysical survey carried out by the University of York suggests that the medieval village lay to the northeast of Hilton of Cadboll Chapel whereas the modern village of Hilton of Cadboll lies to the South (see Carver 1997).
- 287 The connotation of feudal ownership implied in the name Hilton of Cadboll undoubtedly has historical foundations and the proprietorial relationship was maintained until the sale of the Cadboll Estate in 1918 (see the description of the lots for auction of the estate: Particulars and Plans of the Estates of Cadboll). However, this is vehemently disputed today by some Hilton residents who emphasise that the name simply means Hilton by Cadboll, and stress the independence of the village from the Estate. This active (re)presentation of the history of the village is significant in terms of the continuing negotiation of relationships of power and authority between the residents of the fishing villages and landowners or farmers, which is manifest in a variety of contexts and will be discussed in more detail in 6.9.
- 288 Manuscript in the papers of Ross of Pitcalnie, cited in Ash 1991, 160.
- 289 See Nadel-Klein 2003, 35.
- 290 The *Stat Acct* (1791–9, Vol 4, 292–3) documents that Hilton and Balintore have three fishing boats each, with six men per boat, suggesting perhaps eight to 12 families (given that there would undoubtedly be more than one man from the same family in the boat, brothers often working together along with their sons).
- 291 In some of the more infamous cases, such as Glencalvie and Strathnaver, this involved violent, forced evictions and outright expulsion of tenants by lairds and their factors (estate managers). In other cases the poverty resulting from loss of land for grazing cattle and growing crops, alongside increased population and rising rents, led to voluntary migration to Scottish cities and emigration (see Richards 2000).
- 292 Nadel-Klein 2003, 36.
- 293 There may have been significantly more, as it was common for closely related families to inhabit different rooms of the same house. Anson (1950, 15) states that in Footdee a contemporary observer noted the prevalence of multiple occupancy during the 1860s, there being 36

- married couples and 19 widows in 28 houses, with 54 distinct families. Oral historical accounts and the census data also attest to multiple occupancy during the 19th century in Hilton of Cadboll.
- 294 Macdonald & Gordon 1971, 18.
- 295 Ibid, 18.
- 296 For further detail see Jones 2004.
- One late 19th-century commentator emphasised that 'The inhabitants of these three villages are at the present moment the most poverty-stricken and the most destitute class of fishermen in all the Highlands' (Ross 1889–90, 166). Newspaper reports provide further testimony to the poverty of the Easter Ross fishing communities for instance the *Ross-Shire Journal* carried an article entitled 'The destitution of the Easter Ross fishing villages' on 6 March 1885. In this article the Inspector of the Poor of the parish assured the readership: 'that it was impossible to exaggerate the poverty he witnessed. They had nothing to live upon, and [...] it would fall upon the Poor Law Board to see that none died of starvation'.
- 298 For a local account see *New Stat Acet* 1834–45, Vol 18, 35.
- 299 Ross 1889-90, 167.
- 300 A small pier of insubstantial character had been built in Hilton in 1850s with financial support from the laird, Macleod of Cadboll and the Fisheries Board, but this suffered from silting (*Ross-Shire Journal* 20 February 1885, 4), and proposals for a harbour at Balintore in the early 19th century failed to reach fruition until 1896 (Alston 1999, 75; Ash 1991, 167–8).
- 301 See Ash 1991, 166; Macdonald & Gordon 1971, 53. This militancy took the form of meetings and petitions, for instance to the Napier Commission, but also direct action against the trawler fishermen who were perceived to be threatening the livelihood of the Easter Ross fishermen by trawling in the shallow waters of the Moray Firth. See, for instance, 'Invergordon disturbance between fishermen and the crew of a trawler' in *Ross-Shire Journal*, 30 January 1885, 3.
- 302 Report of Her Majesty's Commissioners of Inquiry into the Condition of the Crofters and Cottars in the Highlands and Islands of Scotland, 1884, 355.
- 303 For instance, see 'Mr Munro Ferguson of Novar, M.P. on Trawling' Ross-Shire Journal, 23 January 1885, 3; 'Gloomy outlook for Easter Ross fishermen', Ross-Shire Journal, 20 February 1885, 4; 'Novar and the distressed fishermen' Inverness Advertiser, 23 January 1885, 4; 'Morayshire fishermen and the trawling question' Inverness Advertiser 6 February 1885, 5.
- 304 Nadel-Klein 2003, 48.
- 305 On the marginality of fishing communities see Nadel-Klein 2003, 24.
- 306 The Scotsman, 14 February 1921.
- 307 Minutes of the Standing Committee 12 February 1921, British Museum Central Archives, CE1.
- 308 Tarbat N°. 1, Allen & Anderson 1993 [1903], Vol 2.
- 309 The Scotsman, 22 February 1921.
- 310 The Inverness Courier, 11 March 1921.

- 311 A copy of a letter to Sir Frederic G Kenyon, Director of the British Museum, from Mr Graham Callander, Director of the National Museum of Antiquities in Edinburgh, dated 10 November 1921, acknowledges safe arrival of the Stone and includes settlement on the costs of transport, NMS archive ('Cadboll File').
- 312 The Inverness Courier 18 March 1921.
- 313 See Viscount Esher in *The Glasgow Herald*, 17 February 1921
- 314 The Inverness Courier 18 March 1921, 5.
- 315 See *The Ross-Shire Journal* 11 February 1921 and *The Ross-Shire Journal* 20 May 1921.
- 316 Third Stat Acct, Ross and Cromarty, 1987, 157.
- 317 To our knowledge there is no surviving record of Macleod's original offer, but it probably took place in 1920. The fact that Macleod chose to donate the sculptured stones to the British Museum rather than include them in the sale of his property suggests that they were conceived as a significant aspect of the family's history as well as important pieces of national patrimony. Unfortunately there are no papers pertaining to the sale of the castle and the events surrounding the upper portion of the cross-slab in the Macleod family archives contained in the Highland region archive.
- 318 Newspaper reports suggest that Tarbat N°. 1 fragment was sent about a week later.
- 319 Report by Sir Hercules Read, 7 February 1921, for consideration by the Trustees at the meeting of the Standing Committee on 12 February 1921, BM Central Archives CE1. The inclusion of the monument within the artistic tradition of the pre-Roman Britons provides an interesting contrast with its long-standing classification in Scotland as an example of Christian art (see 6.5 above).
- 320 Letter from Mr Robert Munro, Secretary for Scotland, to the Trustees of the British Museum, 10 February 1921, BM Central Archives CE4.
- 321 Letter from Glasgow Archaeological Society to the Trustees of the British Museum, 12 February 1921, BM Central Archives CE4.
- 322 Copy of circular letter, NMS archive ('Cadboll Stone', no number). It has not been possible to reconstruct a full list, but responses in the archives of the National Museums of Scotland reveal that the following Societies were certainly recipients of the letter: The Buchan Field Club; Glasgow Archaeological Society; Stirling Natural History and Archaeological Society; Scottish Ecclesiological Society; Perthshire Society of Natural Science; The Institute of Scottish Architects; Buteshire Natural History Society; Falkirk Natural History and Archaeological Society; The Elgin and Morayshire Literary and Scientific Association; The Gaelic Society of Inverness
- 323 'The Hilton Stone: an ancient Moray Firth monument. Possible loss to Scotland', *The Scotsman*, 3 February 1921.
- 324 'Famous sculptured stone: threatened removal to London'. The Glasgow Herald, 3 February 1921.

- 325 Citing the Ancient Monuments Act was a deliberate attempt to bring the ethos behind the Ancient Monuments Act to bear on the outcome. This often led to confusion about the status of the monument which a number of people, including The Office of Works and Viscount Esher tried to clarify. In a statement to *The Glasgow Herald*, 12 February 1821, it was noted that 'the monument is not a "scheduled" one, and the Department therefore, can have no effective voice in the matter of its disposal. Any action which The Office of Works may take will be limited to "moral persuasion".
- 326 An article in *The Glasgow Herald*, 5 February 1921, suggests that Munro was also asked to receive a deputation, led by the Society of Antiquaries of Scotland. Correspondence with The Office of Works is a product of the attempt to invoke the Ancient Monuments Act despite the fact that the monument was unscheduled (see the previous footnote and discussion in the main body of the text).
- 327 Letter from Moncrieff to the President of the Society, Lord Carmichael, asking him to sign and post the two letters, NMS archive ('Cadboll Stone').
- 328 Copies of both letters are in the NMS archive. A copy was also forwarded by Sir Lionel Earle to Sir Frederick Kenyon, Director of the British Museum, BM Central Archives CE4. The Society of Antiquaries of Scotland wrote to a number of individuals to this effect, and may well have been the source of information for a number of erroneous newspaper articles. However, it was subsequently clarified that the British Museum only had the upper portion of the Hilton of Cadboll crossslab and the vine-scroll fragment from Tarbat (No 1, Allen & Anderson 1993 [1903], Vol 2, 73-4), which had stood beside the former alongside the carriageway at Invergordon Castle. See the Letter from Viscount Esher, one of the Trustees of the British Museum, to the editor of the Glasgow Herald, 17 February 1921. Confusion reigned about the other nine Tarbat fragments (Nos 2, 2a, 2b, 2c, 4, 5, 8, 9, & 10, ibid, 88-95) with a number of newspaper articles suggesting that these too had been transferred to the British Museum, eg The Ross-Shire Journal 18 February 1921.
- 329 For example, letter from the Institute of Scottish Architects to the Trustees of the British Museum, 25 February 1921, BM Central Archives CE4, and letter from the Paisley Philosophical Institution to HM Office of Works, 10 March 1921, BM Central Archives CE4.
- 330 See Foster (2001) for a discussion of the views of Joseph Anderson, Keeper of the National Museum of Antiquities, and General Augustus Pitt-Rivers, Inspector for Ancient Monuments.
- 331 Letter from The Glasgow Archaeological Society to The Trustees of the British Museum, 10 February 1921, NMS archive (file: 'Cadboll Stone').
- 332 Letter from the Perthshire Society of Natural History to Robert Munro, Secretary for Scotland, 22 February 1921, BM Central Archives CE4.
- 333 Letter from R Scott Moncrieff to the Earl of Rosebery, 8 February 1921, NMS archive ('Cadboll Stone').

- 334 Letter from Lord Rosebery's secretary to R Scott Moncrieff, 10 February 1921, NMS archive ('Cadboll Stone')
- 335 Letter from W Douglas Simpson to T Graham Callander, 8 February 1921, in reply to Callander's of 4 February, NMS archive ('Cadboll Stone').
- 336 Letter from the Gaelic Society of Inverness to R Scott Moncrieff, Secretary of the Society of Antiquaries of Scotland, NMS ('Cadboll Stone'). Replies from T B Morison and Ian Macpherson to the Gaelic Society were publicised in *The Glasgow Herald*, 17 February 1921. The Stirling Natural History and Archaeological Society also reported that they had written to three unnamed MPs, NMS ('Cadboll Stone').
- 337 Hansard Commons, 1921, Vol 138, 2038. Also reported in: The Ross-Shire Journal, 11 March 1921; The Scotsman 4 February 1921.
- 338 Hansard Commons, 1921, Vol 139, 1226–7. Also reported in: The Scotsman, 16 March 1921; Highland News, 19 February 1921.
- 339 We have drawn upon the archives of the National Museums of Scotland, the Royal Commission of Scotland, and undertaken extensive searches of the local press in the Highland Regional archives. The original source and date of three of the newspaper articles derived from archival sources had not been recorded.
- 340 For example in *The Scotsman*: 'The Hilton Stone: an ancient Moray Firth monument. Possible loss to Scotland', 3 February 1921 (details initial reports about removal of the stone). 'Ancient Scottish Stones removed', 10 February 1921 (reports on the removal of the Tarbat stone fragments and infers, erroneously, their removal to the British Museum); untitled report, 10 March 1921 (reports that the Secretary for Scotland has met with Captain Macleod, and notes that communications are in progress between the Scottish Office and the British Museum); 'Cadboll stone', 16 March 1921 (reports the Secretary for Scotland's announcement to The House of Commons that the Hilton of Stone will be returned to Scotland).
- 341 For example see: 'Removal of Cadboll Stone: Scottish antiquaries protest', *The Scotsman*, 9 February 1921; 'Cadboll stone: protest by Glasgow archaeologists', *The Scotsman*, 11 February 1921; 'Links with the past: the Cadboll stone. Protest by Perthshire Society', *The Perthshire Courier*, 15 February 1921; 'Hawick Archaeological Society and the Cadboll stone', *The Scotsman*, 24 February 1921. 'Removal of Hilton obelisk: protest by Society of Antiquaries', *Highland News*, 12 February 1921; 'Hilton of Cadboll stone: Ecclesiological Society's protest', *The Inverness Courier*, 15 February 1921.
- 342 For examples see: 'The Hilton Stone: an ancient Moray Firth monument. Possible loss to Scotland', *The Scotsman*, 3 February 1921; 'Famous sculptured stone: threatened removal to London'. *The Glasgow Herald*, 3 February 1921; 'Scottish sculptured stones: other removals to British Museum', *Glasgow Herald*, 10 February 1921; 'The Obelisk of Hilton: its removal from Invergordon to the British Museum. What Hugh Miller said about it', *The*

- Highland News, 5 February 1921; 'The stone described', The Inverness Courier, 4 February 1921.
- 343 Editorial, The Scotsman, 9 February 1921.
- 344 Editorial, The Scotsman, 22 February 1921.
- 345 For example see 'Famous sculptured stone: threatened removal to London. From a correspondent', *The Glasgow Herald*, 3 February 1921; 'Hilton of Cadboll stone: demand for restoration', *The Glasgow Herald*, 4 February 1921. However, these articles do take the form of reports on the opinions of antiquarian authorities rather than direct editorial comment, which appears to be the case with *The Scotsman*.
- 346 For example see 'Hilton of Cadboll stone: demand for restoration', 8 February 1921, which approvingly cites the view of 'one antiquary' that it is incredible that the British Museum should 'connive in smuggling out of the country so remarkable a stone'. There were also outspoken leader articles responding to Viscount Esher's letter to *The Glasgow Herald* (17 February 1921), 'Injured dignity' and 'The ethics of the case', *The Inverness Courier*, 18 February 1921 (these will be discussed in more detail later).
- 347 'The Cadboll stone: it's destination' *The Inverness Courier*, 18 March 1921.
- 348 The Ross-Shire Journal, 22 April 1921.
- 349 'Historic Scottish Stone, protests at removal to British Museum', *The Times*, 1 March 1921. No author is attributed but in his letter of reply, the Duke of Atholl suggests that Sir Hercules Read has a strong hand in its content, arguing that the article 'gave the point of view that one would naturally expect a custodian of an interested department of the British Museum to take', 'Cadboll Stone: Scotland's right to possession', Letter to the Editor from the Duke of Atholl, *The Times*, 8 March 1921.
- 350 For example: Letter signed simply 'F.S.A. (Scot)' to the Editor of *The Scotsman*, 5 February 1921, stated that 'It is incredible that they [the British Museum authorities] should act in a way contrary to the spirit of the Ancient Monuments Act, and connive at the smuggling out of the country of so remarkable a stone'. Other such letters came from: Charles Whitelaw, FSA(Scot) to the Editor of *The Glasgow Herald*, 5 February 1921; J S Donald FSA (Scot) to the Editor of *The Scotsman*, 8 February 192; Herbert Maxwell to the Editor of *The Glasgow Herald*, 10 February 1921; David Barnett to the Editor of *The Scotsman*, 11 February 1921.
- 351 For example, 'The Cadboll stone: Viscount Esher and the facts', *The Scotsman*, 17 February 1921; 'The Cadboll stone: Viscount Esher defends the British Museum' *The Inverness Courier*, 18 February 1921. Whilst desiring its return to Scotland, both Sir John Stirling Maxwell and the Duke of Atholl wrote conciliatory letters to *The Scotsman* (18 and 21 February) arguing that the neither the Officials and Trustees of the British Museum, nor Captain Macleod, should be blamed for actions which they felt was in the best interests of the Hilton stone itself.
- 352 For example, Letter from 'Old Mortality' to the Editor of The Highland News titled 'The Hilton obelisk: why was it

- removed?, 26 February 1921; Letter from Ludovic M'L Mann, *The Glasgow Herald*, 4 February 1921; Letter from G M C of Carnoustie, to the Editor of *The Scotsman*, 11 February 1921.
- 353 Letter from David Barnett to the Editor of *The Scotsman*, 11 February 1921. One letter to the Editor of *The Highland News* compares the trouble and expense involved with the restoration of the Hilton stone to the impoverished social conditions prevailing in Hilton and the other seaboard villages, 2 April 1921.
- 354 For example, an article from a 'Hiltonian' correspondent in *The Highland News*, 19 February 1921, takes issue with another correspondent over the facts about its history at Invergordon. Another example is the debate which took place between two correspondents, Ludovic M'L Mann and an anonymous author 'Your Correspondent', in *The Glasgow Herald* over the details of the recent history of the monument (3, 4, 8, 10 February 1921)
- 355 'The Cadboll Stone: Viscount Esher and the facts', The Glasgow Herald, 17 February 1921, also reprinted in The Inverness Courier, 18 February 1921, which took exception to Esher's admonishments responding the same day in a hostile and mocking tone with two editorial commentaries titled 'Injured dignity' and 'The ethics of the case'
- 356 To the Duke of Atholl, the Council expressed their appreciation of his efforts to secure the return of the stone noting that 'The Council have every reason to believe that it was largely due to your opportune intervention and to your influence with Captain Macleod of Cadboll that this happy result was brought about', letter from G P H Watson on behalf of the Council, 7 September 1921, NMS archive (file: 'Cadboll Stone'). To Robert Munro, they again expressed their sincere thanks and stated that 'The whole of Scotland is indebted to you for your active interest in this matter and more particularly the members of this Society as custodians of the National Museum of Antiquities, in which the stone is to find a resting place', letter from GPH Watson on behalf of the Council, 7 September 1921, NMS archive (file: 'Cadboll Stone'). The activities of both individuals were also heavily reported on and praised in the press.
- 357 Atholl's letter has not been preserved in the NMS and BM archives, but Macleod's reply to him on 24 February provides this information.
- 358 Letter from Captain Macleod to the Duke of Atholl, 24 February 1921, BM Central Archives CE4.
- 359 Earle pressed the latter point for some time having heard 'perhaps inaccurately, that the owner is not disposed to do so', see letters to Lord Carmichael 15 February 1921, 'The Secretary' of the Society of Antiquaries of Scotland 17 February 1921, and G P H Watson, 21 February 1921, all in NMS archive (file: 'Cadboll Stone'). Privately he did observe to Kenyon that 'in view of the howl that the whole question has caused, I think he would be glad to deposit it anywhere in Scotland', letter 2 March 1921, BM Central Archives CE4.

- 360 Letter from R Scott Moncrieff to Lord Carmichael, 24 February 1921, NMS archive (file: 'Cadboll Stone').
- 361 Letter from Robert Munro, Secretary for Scotland, to the Trustees, 7 March 1921, BM Central Archives CE4.
- 362 Minutes of the Standing Committee, 12 March 1921, BM Central Archives CE1.
- 363 Letter from Macleod to Kenyon, 15 March 1921, BM Central Archives CE4, emphasis in original.
- 364 Letter from Moncrieff to Macleod, 1 April 1921, NMS archive (file: 'Cadboll Stone').
- 365 Letter from Macleod to Moncrieff, 7 April 1921, NMS archive (file: 'Cadboll Stone).
- 366 Petley 1857, 352; Stevenson 1981a, 71–2. These drawings are discussed in detail in Chapter 6.5.
- 367 Anderson 1881. Anderson's conception of archaeology as a national pursuit of the highest order is explicit in these lectures (especially in Chapter 1).
- 368 Glasgow Archaeological Society cited in *The Scotsman*, 11 February 1921.
- 369 For instance, an advertisement for a rug designed by the artist George Bain and inspired by early Christian art described it as 'the only form of truly traditional art we have' (Quayle & Tranter 'Advertisement for a Hebridean rug', cited in Seright 1997, 20).
- 370 Letter from Ludovic M'L Mann, *The Glasgow Herald*, 4 February 1921.
- 371 'The obelisk from Hilton: its removal from Invergordon to the British Museum. What Hugh Miller has said about it', *The Highland News* 5 February 1921.
- 372 Buchan 1778, 28.
- 373 Smellie 1782, 2–3; my emphasis.
- 374 Ash 1981, 91–4; cf Crooke 2000 on the Irish situation. New accommodation was found in the 'Building for the Societies' in 1926, and the museum collection was seen by growing numbers of people (Ash 1981; also Stevenson 1981a). At this point in time access was still restricted to a privileged nexus as the Society issued tickets to the Fellows to be distributed to non-members and which had to be signed to indicate approval of and responsibility for the visitors.
- 375 Anderson 1983 [1991].
- 376 See amongst others Bennett 1995; Crooke 2000; Duncan 1999; Hooper-Greenhill 1992.
- 377 Bennett 1995, 19.
- 378 Ibid, 28.
- 379 Wilson 1851–2, 2; see Ash 1981; Stevenson 1981a for further details.
- 380 Ash 1981, 105.
- 381 For example, in the circular letter sent to antiquarian societies requesting that they register a formal protest about the removal of the Hilton of Cadboll stone to the British Museum, 3 February 1921, NMS archive (file: 'Cadboll Stone').
- 382 British Museum Central Archives CE4.
- 383 Letter from Graham Callander, Director of the National Museum of Antiquities to Sir Frederick Kenyon, Director of the British Museum, 17 May 1921, British Museum Central Archives CE4.

- 384 Telegram sent 23 May 1921, 'Galloway mask Sotheby's tomorrow we will not compete until your limit is reached please tell me your limit or we may both lose it', British Museum Central Archives CE4.
- 385 Wilson 1852, cited in Ash 1981, 110-11.
- 386 Wilson 1863, xvii.
- 387 Anderson 1881, 13.
- 388 Ibid, 14-15.
- 389 On the portrayal of modern nations as organic homogeneous entities see Handler 1988.
- 390 The Scotsman, 9 February 1921.
- 391 The Glasgow Herald, 12 February 1921.
- 392 The Scotsman, 11 February 1921, my emphasis.
- 393 See Handler 1988.
- 394 For example, The Highland News, 12 March 1921.
- 395 For instance, the Chairman of the Ecclesiological Society is reported in *The Inverness Courier* saying that 'it seemed to him to be a rather shabby thing of the British Museum to take the stones without at least communicating with the Ancient Monuments Board in Edinburgh', 15 February 1921. For further examples see: *Glasgow Herald*, 10 and 11 February 1921; *Inverness Courier*, 8 and 18 February 1921; *The Scotsman*, 5 and 9 February 1921.
- 396 See Note 365 for examples.
- 397 When it appeared that the conflict would be resolved leading to the return of the monument, a *The Scotsman* editorial offered Macleod redemption stating that 'the timely intervention of the Duke of Atholl has enabled the Laird of Cadboll to make it clear, even from his sick bed, that he is as good a Scotsman as any of his compatriots', 22 February 1921.
- 398 See Chippindale 1983.
- 399 These included Sueno Stone, St Vigeans cross-slab, Kirkadrine carved stones, Newton in the Garioch, the Catstane, and Kirkmadrine.
- 400 Including Ruthwell cross, the Dyce stones, Glamis cross, Aberlemno symbol stones, Eassie, and Whithorn.
- 401 The Scotsman, 18 February 1921.
- 402 'The Cadboll Stone: Viscount Esher and the Facts', *The Glasgow Herald*, 17 February 1921. Reprinted in *The Inverness Courier*, 18 February 1921.
- 403 1 March 1921. In a personal response to this article, the Duke of Atholl suggests that Sir Hercules Read has a strong hand in its content, arguing that the article 'gave the point of view that one would naturally expect a custodian of an interested department of the British Museum to take'. 'Cadboll Stone: Scotland's right to possession', Letter to the Editor from the Duke of Atholl, *The Times*, 8 March 1921.
- 404 Letter from Atholl to the Editor of *The Scotsman*, 21 February 1921.
- 405 For example, untitled editorial in The Scotsman, 9 February 1921; 'A famous stone', The Inverness Courier, 4 February 1921; 'The ethics of the case', The Inverness Courier, 18 February 1921.
- 406 See Jones 2005b; and 6.9 below.
- 407 Letter signed 'Pro Bono Publico', Highland News, 2 April 1921, 8.

- 408 Ibid.
- 409 Letter, signed 'Hiltonian', to the Editor of the Highland News, 19 February 1921, 7. Furthermore, the local press (Highland News, Inverness Courier, Ross-Shire Journal) included regular articles, editorials and correspondence on the subject for at least three months, with correspondence indicating a considerable depth of knowledge, and frequently drawing on Hugh Miller's (1835 [1994]) Scenes and Legends of Northern Scotland.
- 410 Macdonald & Gordon 1971.
- 411 For a wider perspective see Cohen 1987; Nadel-Klein 2003; Watson 2003.
- 412 For example, Macdonald & Gordon 1971; Ross 2001; Watson 2003.
- 413 Macdonald & Gordon 1971, 156-7.
- 414 These were mostly women, there being a tendency for virilocal residence when the traditional pattern of endogamy was broken.
- 415 See Barr 1996; Grigor 1980.
- 416 Grigor 1980, 74.
- 417 Grigor (1980, 76) notes that in May 1973 it was estimated that 'of the expected new job opportunities (total 12,700),
 9,100, or 75 per cent, would be taken up by incomers to the area', leading to a population increase of 21 per cent.
- 418 Barr 1996, 107; Grigor 1980, 77; Revill & Rowlands 1995, 3.
- 419 Barr 1996; Revill & Rowlands 1995; Seaboard Community Development 1991.
- 420 The 1991 census figures indicated that 16 per cent of the economically active population were unemployed (district mean 8 per cent), 39 per cent of the population of working age were non-earners (district mean 30 per cent), 35 per cent of the population had no access to a car (district mean 20 per cent), and 40 per cent of households with dependent children had no adult earners (second highest figure in Ross-Shire) (Revill & Rowlands 1995, 4; see also Barr 1996).
- 421 Community House provided a centre for various activities, including meetings, day and evening classes, and playschemes, as well as a source of support. This initiative was initially supported by Ross and Cromarty District Council and the Highland Council. Subsequently funding was provided by Ross and Cromarty Enterprise.
- 422 Seaboard Community Development are concerned with many spheres including 'social, cultural, educational and environmental development' and major projects include coastal landscaping, car park and picnic facilities, provision of environmental display boards, as well as playing a prominent role in the construction of the new Seaboard Hall in conjunction with the Hall Committee.
- 423 The Learning Centre offers vocational training, free internet access and so forth.
- 424 See Jones 2004 for further details.
- 425 Oral historical accounts gathered in 2001 suggest that its absence was a source of comment, and something which was clearly passed down from generation to generation.

- 426 Macdonald & Gordon 1971, 15; various oral historical accounts of such activities were also collected in 2001.
- 427 The dowser's report is contained in an appendix to Carver 1998.
- 428 J Wood, Highland Council Senior Archaeologist, pers comm; also Highland Council Archaeology Service web site 'Latest News', 12/11/01. The request probably came from Mrs Jane Durham, who was Chair of Tain and Easter Ross Civic Trust, but under pressure from some of the more active Hilton residents. Oral accounts suggest that one or two Hilton residents had made verbal requests for the upper portion of the monument to be returned. It is likely though that the requests were addressed to front of house staff at the National Museum of Antiquities, and as far as we can ascertain the Museum has no record of them.
- 429 Martin Carver pers comm. Indeed, it was Jim Paterson who was the landowner when the Hilton of Cadboll chapel site was passed into state care.
- 430 Grove 2001.
- 431 Ibid.
- 432 The latter approach was advocated by Martin Carver.
- 433 By Mrs Dolly Macdonald in conjunction with Community House.
- 434 The meeting which took place of 28 August 2001 was attended by \$\epsilon 120\$ people, including local residents, local and regional politicians, representatives of the landowners, Glenmorangie plc, and all the funding bodies: HS, NMS, Highland Council, and Ross and Cromarty Enterprise.
- 435 The legal details are outlined in the introduction to this volume, whereas the social and symbolic aspects are discussed in detail in Jones 2004 and 2005b.
- 436 Revill & Rowlands 1995, 18 and 21.
- 437 Seaboard Initiative 2001.
- 438 Grove 2001.
- 439 Robert, a heritage professional.
- 440 Clare, a resident of Hilton of Cadboll.
- 441 Fernandez & Herzfeld 1998, 90, and for an example of such research Herzfeld's A Place in History: social and monumental time in a Cretan town, 1999.
- 442 Even the absence of a visible monument in local contexts, prior to the production of the reconstruction and the excavation of the lower portion, provided a basis for the production of meanings, some of which have been discussed in Chapter 6.8.
- 443 Interviewing and visitor tracking are standard methodologies used in museum studies. The interviews were semi-structured and focused on the section of the 'Early People' exhibition where the upper section of the Hilton of Cadboll cross-slab is located (opposite the lift shaft on Level 0). The questions were openended and visitors were encouraged to respond in their own words. The length of the interviews ranged from c15–45 minutes. Initially visitors' were asked about their general reactions to the exhibition and then specifically about the early medieval sculptured stones, and eventually Hilton of Cadboll. Visitor movements were also tracked through the same space, and their

- actions recorded, eg stopping, reading text panels, and talking. See Diamond 1999 for further discussion of the methodologies.
- 444 For full details see Jones 2004.
- 445 See contributions to Bernard (ed) 1998 for an overview of these methodologies.
- 446 The interviews were conducted according to a common structure and set of opening questions for each theme. Beyond this they were conversational in style and openended, thus allowing interviewees to explore, develop and clarify their thoughts and feelings. Such interviewing techniques provide greater depth of understanding and insights into meaning than highly structured surveys, especially those with closed response categories defined by the researcher.
- 447 Three months in 2001, two weeks in 2002 and two months in 2003.
- 448 This would also apply to other methodologies, such as including questionnaire surveys and highly structured interviews.
- 449 To some degree the length of participant observation is also designed to overcome the more pronounced observer effect that can be produced in the context of one-off questionnaires and interviews.
- 450 It is not possible to provide a full discussion of these processes here but see Jones 2004, chapter 7 for further details.
- 451 Clarke 2000a; also Ascherson 2000.
- 452 Cooke & Maclean 2001, 115; see also Clarke 1995 and 2000b for a personal view on the archaeological displays and the 'Early People' section.
- 453 See Fladmark et al 2000 for a discussion of the Museum's development. For discussions of the national narratives and interests surrounding it see Ascherson 2000, 2003; Clarke 1996, 2000a and 2000b; Cooke & Maclean 2001.
- 454 Dewar 2000, cited in Cooke & Maclean 2001.
- 455 Ibid, 114-20.
- 456 The exhibition contains relatively small amounts of information about specific objects in contrast with the huge academic body of knowledge that exists for most of them. Originally the aim had been to produce a multi-media database called Mosaics, where people could access this body of knowledge and explore other dimensions of objects which were not included in the exhibition. However, this idea was shelved in favour of SCRAN (D Clarke, interviewed, 28 August 2002).
- 457 For a detailed discussion of the problems and issues of working with a national framework with respect to the archaeology collections see Clarke 1996 and 2000b
- 458 There was also an attempt to achieve a reasonably even coverage of different parts of Scotland: 'we were conscious of the need to not have blanks' and 'we didn't want to have great chunks of the country that no object appeared from, we wanted people to come and feel as they walked round if they looked at the maps, oh that's my area' (D Clarke, interviewed, 28 August 2002). This has a political dimension in relation to the boundaries of the modern nation as D Clarke acknowledged. It also creates

- the sense that the Museum collection is representative of the nation.
- 459 As the Keeper of Archaeology put it, the map 'keeps repeating implicitly that this is a display about Scotland [...] so the map never shrinks below the nation-state' (D Clarke, interviewed, 28 August 2002).
- 460 In the process of designing the exhibitions for the new Museum, there was a great deal of consultation with stakeholders as well as an Exhibition Review Committee (D Clarke, interviewed, 28 August 2002).
- 461 Text panel titled 'Gods of the Frontier, God of the Book' in the 'Early People' section, Museum of Scotland, emphasis added.
- 462 Paolozzi was commissioned to produce these sculptures, which are arranged in four groups, each group representing one the four themes of the archaeology galleries ('A Generous Land', 'Wider Horizons', 'Them and Us', and 'In Touch With the Gods'). Cases for the display of prehistoric artifacts are set within the modern sculptures.
- 463 The Woodwrae cross-slab, the other large Pictish class II cross-slab in the exhibition, is used to illustrate the adoption of Christianity, although its cross-face is also damaged.
- 464 This interpretation is disputed by Henderson in Chapter 5 of this volume.
- 465 Henderson & Henderson 2004, 226–7. Their critique privileges origins over and above other important aspects in the history of early medieval sculpture such as their re-use an aspect that the Museum could also have drawn out.
- 466 The etched design was produced prior to the discovery of the lower section in 2001.
- 467 D Clarke, interviewed, 28 August 2002, Museum of Scotland, Edinburgh. Nevertheless, tracking showed that many visitors evade this intended route (see below).
- 468 These 'Most Treasured Objects' are identified by a code with a green background.
- 469 In contrast, other examples of early medieval, and indeed Roman, sculpture are displayed in more discrete sections of the gallery. The early Christian sculpture is mostly grouped together for comparative purposes at the end of 'In Search of the Gods', which runs along the back of the introductory 'People' section.
- 470 Henderson & Henderson (2004, 226) are particularly critical of the way in which the cross-slab is isolated from relevant *comparanda*.
- 471 Cooke & Maclean's (2001) research also demonstrates that in the perceptions of visitors the main function of the Museum is to tell the story of Scotland, although there was divergence of opinion about the nature of that story.
- 472 The tracking suggests that the issue of scale is an important factor in directing the gaze of the visitor. There was a close correlation for instance between visitors being drawn

- to the jewellery in the small display cases embedded in the Paolozzi sculptures and an almost complete lack of attention to the larger monumental pieces, such as the Hilton of Cadboll cross-slab. Indeed, for some the latter could have been a mere architectural feature; they hardly seemed to see it.
- 473 This kind of conception of the monument was particularly prominent amongst those with long-term, often multigenerational, associations with the village; people who defined themselves and were defined by others as 'locals'.
- 474 See MacDonald 1997 for a discussion of the concept belonging in a Western Isles context.
- 475 Emphasis added.
- 476 Macdonald 1997, 131.
- 477 For other ethnographic case studies illustrating similar processes see Macdonald 1997; Mewitt 1986; Nadel 1984; Nadel-Klein 1991.
- 478 Gray 2002; Gupta & Fergusen 1997; Kempny 2002; Nadel-Klein 1991.
- 479 See Nadel-Klein (2003, Chapter 5) for an analysis of the ways in which fisherfolk's experience of crises in the fishing industry is conditioned by specific historical processes, particularly the social memory of injustice and stigma, and a continuing experience of marginality. As Nadel-Klein explains, the past as remembered and reconstructed becomes 'an interpretive guide for action and inaction (ibid, 161).
- 480 For instance, one man noted in passing, 'Aye, we'll sort our stone and then we'll sort that stone' referring to the controversial statue of the 1st Duke of Sutherland, on top of Ben Bhraggie hill overlooking the small town of Golspie in east Sutherland. The Duke of Sutherland is one of the most notorious and despised of the Clearance landlords, and his statue, which was erected in 1834, has been the focus of a campaign to knock it down, taking the form of formal requests through the Planning Office of the Highland Council from 1994 onwards (see Withers 1996).
- 481 The villages of Nigg and Portmahomack can be distinguished from the seaboard villages. Whilst they have similar social and economic histories in some respects, they are substantially more affluent and have a rather different socio-economic makeup.
- 482 Barkan & Bush 2002, 15.
- 483 See Anderson 1983 on the concept of the nation as an 'imagined community'.
- 484 See Jones 2005b for a detailed discussion.
- 485 Ruskin 1849, 233-34.
- 486 Duncan 1998.
- 487 Nadel-Klein's 2003, 24.
- 488 Fernandez & Herzfeld 1998, 90, and for an example of such research see Herzfeld's *A Place in History: social and monumental time in a Cretan town*, 1999.
- 489 See Foster 2000; Jones 2004, 2005b.

Chapter 7

Artefact and environmental studies

7.1 Analysis of the fragments

Amanda Brend, Meggen Gondek, Allan Hall, Isabel Henderson, Heather James, Stuart Jeffrey, Douglas Morton and Ian G Scott

Methodology and logistics of the analysis

This section will describe how the carved fragments were analysed by the various agencies involved with this aspect of the project. The agents include several staff of RCAHMS, Historic Scotland and GUARD and consultants Isabel Henderson and Ian G Scott. Each had their own priorities which had to be accommodated within the project. One issue affecting the schedule of work was the hope that analysis of the fragments could inform the design of the replica cross-slab being sculpted by Barry Grove in Hilton. There was a fast approaching deadline for the fulfilment of the HLF funding and also a need to complete the sculpture while the stone was still in a suitable condition. Fortunately, Barry Grove had been involved with the excavation process on a daily basis and thus was familiar with the individual fragments. Initial developments in the reconstruction were relayed to him, but unfortunately the final design had to go ahead with only partial analysis to inform it.

The fragments retrieved during the Kirkdale excavations in 1998 were from a 1m square, which is equivalent to the four 0.5m squares 1015E 1025N, 1015E 1030N, 1020E 1025N and 1020E 1030N. These were collected as context (012), which is equivalent to the same context used by Kirkdale in 2001 and to GUARD's context (007). The fragments from 1998 were sent to AOC (for conservation) and then to Croft-an-Righ for storage where they were examined by Ian G Scott in 2000.

Ian G Scott's reconstruction methodology started with an initial rapid recording process. Each fragment was unwrapped and then laid on a small sandbag or high-density foam. A sketch was made, which consisted of the outline of the fragment and an indication of its modeling, with a scale. Photographs were taken

vertically with the fragment lying near-horizontal, using a 35mm single-lens reflex (35–80 zoomlens) Pentax camera. Four photographs were taken, changing the direction of the lighting each time, using a 100-watt halogen video floodlamp. For the purposes of immediate study, the drawings and photographs were photocopied to a common scale of 1:2. A speedy visualisation of the analytical problems was enabled by cutting out individual pieces from the drawing set at half-size and mounting them with adhesive strip on hardboard sheets. These photographs and drawings formed a 'visual index' which was supplemented with a catalogue-style listing comprising a record of each fragment and its context, and with some attempt at classification, for which a glossary was put together.

Kirkdale initially reported that there were 40 carved fragments from this first phase of the work. However, there are now over 400 fragments from the 1998 excavations on the database (although few have a carved surface).

In January 2001, Kirkdale devised an excavation strategy for recording what was expected to be a fairly small number of fragments from the chapel site. The excavation was to operate on a 0.5m grid, with each fragment being located within the appropriate grid square and numbered in a sequence that incorporated that location information. Although a 0.5m grid gives a maximum error of 0.7m, it was felt that recording the fragments at a finer resolution would not yield additional information and would impact on the time constraints of the excavation. Each 0.5m grid square was excavated individually and with the intention that the excavation would stop at the first archaeological layer below the deposit of fragments. It was felt that locating each of the fragments, using an EDM for example, would be time consuming and again would be unlikely to reveal significant information regarding what was then interpreted as a random scatter of fragments resulting from the re-dressing of the cross face of the monument.

The carved fragments retrieved during the Kirkdale excavations in 1998 and 2001 were thus recorded by grid square and given a location descriptor (eg

09901025), as well as an individual Kirkdale number, 1–n. This location descriptor relates to the site grid: the easting is the first three digits; the fourth digit is 0 or 5, which relates to the specific 0.5m; the next three digits are the northing; and the final number relates to the specific 0.5m.

Once GUARD became involved with the project, a relational database, designed in Access 97, was created. This contained the catalogue descriptions of each fragment, produced in consultation with Isabel Henderson and Ian G Scott. This database was constructed in order to record, present and analyse information on each of the excavated fragments.

During the GUARD excavation in 2001, the fragments were delivered to an off-site finds hut in Hilton at the end of each working day. They were immediately removed from their finds bags and placed in the open to dry thoroughly. As much dirt and organic material as possible was then gently removed with a soft brush. The fragments were kept with their grid square information at all times and clearly labelled to avoid mixing. Most of the fragments were in a good condition and only a small number were in a friable state. The fragments were then re-bagged using the same numbering system that was used in the field (see Chapter 3.3). Some basic data were entered into the database at this stage. Fragments from each grid square were counted, joins identified in the field were noted, and major decorative elements were identified.

The fragments retrieved by the Kirkdale excavations were removed from storage at Croft-an-Righ and delivered to the Portrait Gallery in Queen Street, Edinburgh, along with the fragments retrieved by GUARD during their excavation. Some of the setting stones, which had been left with the lower portion of the cross-slab in Hilton, were brought to Queen Street at a later date for inclusion in the catalogue. The fragments from the soil samples taken during the Kirkdale excavations in 1998 were delivered to the Museum in Chambers Street in Edinburgh in December 2005 to be added to the database.

Once the fragments were in Edinburgh, the reconstruction and cataloguing work commenced simultaneously. Initially Ian G Scott selected 783 of what appeared to be the most significant fragments from the assemblage based on size and the amount of decoration, especially key pattern and interlace. Of these, 752 have been individually accessioned and numbered by the Museum (X.IB 355.001 to X.IB 355.752). The remaining fragments have been

accessioned but not individually numbered, the numbers being noted on the bags in which they are stored.

During this process, it was obvious that there were thick fragments which could not have come from the destroyed cross-face (face A) of the upper portion and therefore must either belong to another slab or to the missing mid-portion. These fragments, with large-scale spiral pattern or inhabited scroll, were identified as belonging to face C and they were arranged in a sandbox provided by the Museum. Gradually, more fragments were added to these clusters to form the partly reconstructed mid-portion of face C (see illus 4.5).

The remaining thick fragments were placed in a second sand box to attempt the reconstruction of the front, face A, of the mid-portion, since only one substantial piece had been identified as belonging to another cross (see relief cross illus 7.47). This reconstruction was based on the evidence of the lower portion because there were no clues from the refaced upper portion apart from the scars on its edges (faces B & D), which may have been relics of protruding cross-arms. A large fragment to the right (X.IB 355.5) fitted on to the lower portion and, with another group of fragments to the left (X.IB 355.1), probably established the content of the side panels leaving the cross itself unidentified except by its side bands. Above this, another group (X.IB 355.9) was placed (see illus 4.3).

The remaining fragments, which should represent what is left of the slice from the upper portion of the front of the slab, were arranged on trays of sand with some attempt at classification to allow judgements to be made. Initially, 'key pattern', 'interlace', 'bosses with spiral' and 'animal' were separated out. A very few fragments showed two of these classes of ornament, thus providing vital connections. Many that could not be so classified must constitute bands defining panels. But, being in short lengths, these were difficult to distinguish from, for example, the serpentine bodies.

Meanwhile, catalogue descriptions were written for the fragments and entered into the database. Initially, descriptions for 131 of the selected 752 fragments were produced by Isabel Henderson, and descriptions for the remaining 621 fragments were produced by Meggen Gondek during the period from March 2003 to August 2003. Douglas Morton took over from August 2003 to March 2005. Assistance with weighing the fragments was provided by Hilary Paterson. The fragments were

weighed with an Ohaus CS200 Compact Scale with a maximum weighing capacity of 200g.

This database was later used to associate fragments with GUARD record photographs, and Ian G Scott's photographs and sketches. The database also tracked the progress of fragments through the post-processing work by recording information such as whether or not they should be drawn by Ian G Scott or photographed by Museum staff with the relevant reference numbers. As part of the processing of these fragments, information relating to their sculpted form was also recorded in the database. Most significantly, a thesaurus of 26 keywords was devised by Isabel Henderson and Ian G Scott and each fragment was described by the use of a subset of the thesaurus terms.

Cataloguing of the sculptural fragments in the database followed a procedure devised by Isabel Henderson:

- 1 Fragments were retrieved from the excavation grid-square bags and then weighed, measured, and individually re-bagged.
- 2 Records were created within the database for every fragment. Each record contained a wide range of information from basic weight and measurements to discursive fields on fracture type. Every fragment was assigned a GUARD number and those from the Hilton sculpture were also assigned NMS X.IB 355.1–n numbers. A total of 196 non-Hilton sculpted fragments were found, these were allocated a notional number in the catalogue for future reference.
- 3 Each fragment was examined individually and the data was entered into the database. If the fragment was of particular interest or was found to join another fragment, then it was set aside to have its NMS number painted on it to facilitate safe manual handling.
- 4 The Kirkdale fragments were treated in the same way as the GUARD fragments, except for the fact that the Kirkdale fragments had an additional Small Finds number and original bag number, which were added to the database.
- 5 All other fragments were securely bubble-wrapped and bagged before being boxed and stored, labelled according to an NMS number. Each box contains an inventory of contents to allow for easy location in the future.
- 6 The non-Hilton fragments were not entered into the database and were boxed separately.

While this work continued on the most significant fragments, the remaining fragments were classified and sorted in order to prioritise their accessioning and analysis. This work was undertaken by Amanda Brend under the guidance of geologist Allan Hall (Department of Archaeology, University of Glasgow). Sorting was undertaken by visual examination supported by binocular microscopy. The sorted samples were counted, re-bagged and labelled.

Summary of sorting criteria:

Class 1 Fragments with evidence that they belong to the sculpted surface.

1A Probable Hilton surface that has a sculpture pattern. Criteria: part of a shaped 'sandy' surface; reddened surface; remainder of fragment bounded by fracture surfaces; Hilton sandstone lithology or relatively fresh rock. Fragments lacking reddening were most problematic. This was the priority group, so even if there were some uncertainty, fragments would be put in this group.

1B Probable Hilton surface with an original flat surface. Criteria: as 1a but carved surface does not show any indication of belonging to a carved feature.

Class 2 Fragments probably from the Hilton stone.

2A Probable Hilton (unsculpted) fragments with features (sandstone fabric etc) that could help with their positioning in the reconstruction.

Criteria: lack of evidence of being part of the sculpted surface; pellets of brown limonitic iron; lamination due to variation in grain size of sediment; concentration of mica into a layer/slither or chisel marks.

2B Probably Hilton fragments (unsculpted), fragments lacking features.

Criteria: fresh angular chips of Hilton lithology.

Class 3 Fragments possibly from the Hilton stone.

3A Possible Hilton fragments with features (sandstone fabric etc.).

Criteria: Lithology similar to but not typical of Hilton or indication of shaped surface.

3B Possible Hilton fragments lacking features. Criteria: as 3a but no indication of carving or of 'geological' feature.

Class 4 Fragments unlikely to be from Hilton stone.

4A Fragments with potential evidence of belonging to a sculpted stone.

Criteria: lithology and general appearance unlike Hilton stone; some of the surfaces are fracture surfaces or indicate that part of the fragment represents a carved/shaped surface.

4B Fragments lacking features.

Criteria: spherical shape; rounded shape; intense weathering; not Hilton lithology; no indication of being carved in past.

The sorting was done without much appreciation of the nature of the context of origin and this was potentially a disadvantage. It was noted that, if the Hilton-type lithology (the fine grey micaceous sandstone) had been used for another carving on the site, and if this had also been fragmented, then it would not be possible to tell them apart. The assumption was made that all the fragments of Hilton-type lithology were from the same Hilton carved stone. A table of total numbers of fragments per classification was created but, as there were a small number of re-classifications during the cataloguing process, only the final table is presented in this volume.

Of the remaining fragments those with a class of 1A to 4A were entered into the database. This was undertaken by Meggen Gondek and by Douglas Morton from September 2003 until November 2004. The 4A and 4B fragments were initially not recorded in detail as they were not thought to belong to the Hilton of Cadboll cross-slab. However, they were visually

examined again by Douglas Morton to ensure that no carved fragments had been missed. Any found to be carved were re-classified. A number of successful joins were made through examination of the fragments at each stage of cataloguing. Work with fragments from context 008, for example, provided a number of useful re-fits to the mid-portion of face C and, indeed, it is this area that is likely to form the most successful part of reconstruction. The majority of the other joins made have been between only two or three fragments, although there are a number of groups of two or more conjoined fragments. Well into the project, six fragments of flat relief-band were joined to form a 'T-shaped' border that may have separated decorative panels.

The initial remit was to catalogue all fragments that belonged to the Hilton sculpture. However, this was later extended to include any possible carved fragments not from the Hilton sculpture (4A). The class 4A fragments were also catalogued, but were provided only with a working number. In February 2005, it was decided to further assess the fragments from class 4B to eliminate the possibility of Hilton sculptural fragments remaining unchecked (see Chapter 7.5.4).

The keywords and descriptions for the first 3406 database entries were checked by Isabel Henderson. Her comments were entered into the database by Douglas Morton, who then continued editing the

Table 7.1						
Total number of fragments per class						

Class	1998	Jan 2001	Aug 2002	Number of fragments
1A	462	1653	1222	3337
1B	3	27	3	33
2A	72	183	148	403
2B	144	2460	666	3270
3A		271	60	331
3B		45	78	123
Total of Hilton fragments				7497
4A (not Hilton, on database)		187	6	193
4B (not Hilton, not on database)		4	3541	3545
No class		14	3	17
Final Total	681	4844	2186	11,252

remaining fragments, maintaining consistency with Isabel Henderson's standards. Before the catalogue was completed, a pilot study was undertaken to test whether a database-driven methodology was a useful tool in the reconstruction of the cross-slab and this is reported in Chapter 7.2.5.

The full database of all 7493 fragments can be consulted via the Arts and Humanities Data Service (http://ahds.ac.uk/).

7.2 The cross-slab and fragments

7.2.1 Petrology

SUZANNE MILLER

Introduction

Petrological provenancing is a well established technique in archaeology, with analysis of thin sections increasingly seen as an important extension to both interpretation of stone artefacts and to aid the assessment of supply, circulation and mobility of lithic raw material. In addition, analysis of petrological features of stone artefacts can not only help to identify whether fragments are likely to be from the same artefact, but can also allow these to be set in context of procurement and patronage.

The aim of this work is to identify the petrological characteristics of the sandstone of the Hilton of Cadboll cross-slab (X.IB 185) and to identify possible source/sources of raw material for this sculpture. In addition to these primary objectives, analysis was aimed at answering several context-specific questions especially significant to the site interpretation. These were as follows:

- 1 What is the nature of the red staining on the surface of the Hilton of Cadboll cross-slab? Is it natural iron deposit or an applied material such as paint?
- What is the nature of the reddish (rusty) 'blebs' that feature in the greenish sandstone. Is this common? Can this feature be used to identify this particular stone?
- 3 It is proposed to reconstruct the original Hilton of Cadboll carved slab from the main pieces and all the fragments. How can 'geology' inform the reconstruction process?
- 4 What is the geology of the non-Hilton sculptured fragments:
 - (a) X.IB 355.3 could this be part of the Hilton stone?
 - (b) The cross-incised architectural fragment (context 002, Kirkdale)

5 Is it possible to identify the sandstone fragments in soil layer 007? If so, is it possible to say whether these tiny fragments are the same geology as the cross-slab or the fragments? (This may help to determine whether or not layer 007 was formed when the defacement of the cross-slab was taking place.)

Methodology and petrology

All stone fragments have been examined using non-destructive petrological techniques in order to provide a macroscopic identification of the geological characteristics. This type of petrological analysis has provided a basic identification of rock type and has been used to distinguish between general rock types. All examination includes the following measurements;

colour (with reference to Munsell soil colour charts);

grain size (with reference to standard grain size measurements on the μm scale);

macroscopic mineralogy (ie mineralogical content that can be ascertained by examination with $10 \times$ magnification hand lens);

textural and structural characteristics such as parallel bedding/lamination, cross-bedding, jointing, other planar fabric, grain size variation;

clast/nodule distribution and composition; weathering characteristics.

(Colour has been used only as a general guide to overall appearance since, in many cases, the sculptures have undergone varying degrees of weathering and/or cleaning, both activities that could significantly alter the colour of the surface of the specimen.)

Sampling of the upper portion of the Hilton of Cadboll cross-slab was undertaken using a 20mm micro-corer, producing a 17mm core sample. From the core, standard petrological thin sections were prepared, one cut parallel to the diameter of the core and one parallel to the core length. Thin sections, 30µm thick, were prepared at the National Museums Scotland (NMS) using the standard method. The micro-cores were sliced to provide 2mm-thick samples, using a diamond saw. These slices were bonded to a glass slide and precision lapped to 30µm, with cover slipping completing manufacture of the section. The thin sections were described using a Leica DMLP polarising microscope. Digital photomicrographs were taken using a Leica DC100 camera. Both plane polarised and polarised light sources were used for standard mineralogical and textural identification.

All the fragments examined are sandstones. They are classified according to their mineralogy, using the sandstone classification scheme of Folk where all rocks containing less than 15 per cent fine grained matrix are classified in terms of the three principal components;

quartz, feldspar (plus granite and gneiss clasts) and other rock fragments (Folk 1974). All outcrop specimens (potential source rocks) have been examined using petrological techniques in order to classify rock type. In addition to the macroscopic measurements taken for the artefact fragments, all examinations of outcrop specimens also include microscopic mineralogy.

Hilton of Cadboll cross-slab upper portion X.IB 189: geological characteristics

Macroscopic petrology

The stone of the Hilton of Cadboll cross-slab is fine-grained micaceous quartz sandstone. Both feldspar and opaque grains are also evident. The carved surfaces most probably correspond to original bedding planes, along which the stone would most naturally fracture. The sandstone is massive in the sense that there is no evident internal structure, for example lamination or cross bedding.

Two features are particularly characteristic. The first is the high mica content which gives a sheen to the main faces (both front and back). The alignment of the mica grains parallel to the main faces is consistent with these faces equating to original bedding planes since it is most likely that the micas would be bedding-parallel. The second distinctive feature is the presence of iron nodules. These are natural phenomena of diagenetic (post depositional) origin and probably resulted from subtle changes in porewater chemistry during lithification and cementation of the sandstone. It is not possible to determine their exact mineralogical composition. (This would require additional mineralogical/chemical analysis.) However, they are almost certainly composed of iron oxide/oxyhyroxide mineral phases.

Thin section analysis

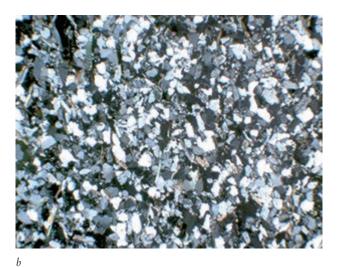
Slide X.IB 189(a)

The rock is arkosic sandstone with grains generally less than 250µm diameter (illus 7.1A & B). The principal mineralogical components are quartz, feldspar, biotite, muscovite, chlorite, calcite and opaque grains. The quartz and feldspar grains are anhedral and show sutured grain boundaries. They display undulose extinction (particularly obvious in the quartz grains) indicating a metamorphic protolith (ie pre-sedimentary source) for the sandstone. The quartz grains are generally monocrystalline but minor polycrystalline grains are present. The feldspars include plagioclase, microcline and orthoclase. All show some degree of alteration. The mica grains show a very distinct alignment, most probably bedding-parallel. Some biotite grains show alteration to chlorite. The matrix is principally composed of very fine grained clay with some calcite. Minor opaque grains (probably iron oxides/sulphides) are present. This sandstone is well sorted but the moderately



a Illustration 7.1

Thin section of the Hilton of Cadboll cross-slab upper portion: (a) ppl, 40× magnification, (b) cpl, 40× magnification



high proportion of feldspar grains would indicate that it is mineralogically immature. This is consistent with the clay matrix.

Slide X.IB 189(b)

No additional features were noted in the perpendicular section.

Fragment X.IB 355.3 Geological characteristics

This stone is fine-grained micaceous sandstone, containing quartz, feldspar, mica and opaque grains as well as small oxidised iron nodules 10–14mm in diameter. It is greengrey in colour with minor patchy surface discoloration. An area of the broken surface is pitted. This may be a late weathering feature. There is no obvious internal sedimentological structure although micas are aligned parallel to the bedding surface throughout.

Cross-incised fragment HC98 (002): geological characteristics

This fragment is fine-medium grained arkosic micaceous sandstone. It is yellow-brown in colour. No internal structure is apparent. This sandstone is petrologically unlike any of the other fragments examined.

Potential source material: outcrop geology

The Tarbat peninsula, apart from the hill of North Sutor, is composed of Devonian sandstones belonging to the Old Red Sandstone supergroup (ORS). The coastal strip westward towards Tain is composed of Upper Old Red Sandstones (UORS) from the Balnagowan group. The base of the UORS is conjectural but is thought to run on a line from Nigg Bay to Hill of Fearn and then north-east to Pitkerrie, Meikle Tarrel and on the coast at Wilkhaven. Sandstones exposed on the south-eastern side of the peninsula from a little south of Shandwick to Balintore, Hilton of Cadboll and Wilkhaven are composed of Middle Old Red Sandstones (MORS) of the Strath Rory group (Fortey et al 1998; Johnstone & Mykura 1989). The majority of these sedimentary rocks were deposited in fluvial (river) systems with thin but extensive lacustrine units representing deposition in the Orcadian lake around 380 to 390 million years ago. The rock types include extensive sandstones and limestones.

Quarries are generally limited to coastal areas or where the drift deposits are shallow as in the Lower Pitkerrie area. Today there are no working quarries, but around a dozen quarries are known to have been in existence since the 18th century. The *Statistical Account* for 1791 records 'There is a soft freestone at Pitkery, of an inferior quality, in the east of the parish, but little used; a pretty good freestone at Balintore, a good deal used for building; but at Catboll, in the rocky part of the coast there is a remarkable good freestone, little inferior to any in Scotland' (*Stat Acct*, 379–92). It is therefore clear that the geology around the Hilton site provides various potential sources for large sandstone slabs.

Source rock petrology

Various local outcrop specimens were sampled and their geological characteristics examined and recorded. Most outcrop specimens do not match the geological characteristics of the Hilton of Cadboll cross-slab. Specifically, many of the outcrop sandstones have a high iron oxide content which is present not only as discrete grains but also as iron oxide coatings on individual grains. This produces a pervasive red colouration to the rock. Many are texturally more mature than the X.IB 189 sandstone, showing more rounded grains and differences in degree of sorting. Some outcrops were discounted on the absence of iron nodules or on the basis of internal structure such as cross-bedding which is not evident in the Hilton of Cadboll cross-slab.

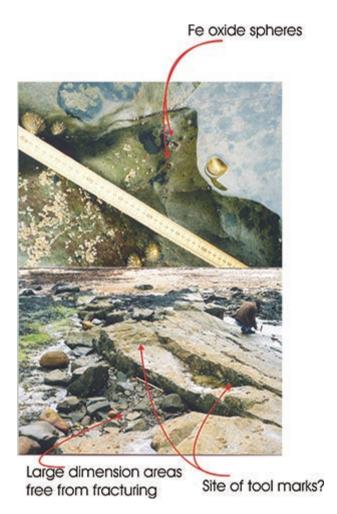


Illustration 7.2

Outcrop locality of suggested lithic source for the Hilton of Cadboll cross-slab: (a) general locality shot, (b) close-up showing iron nodules

Provenance of the Hilton of Cadboll cross-slab

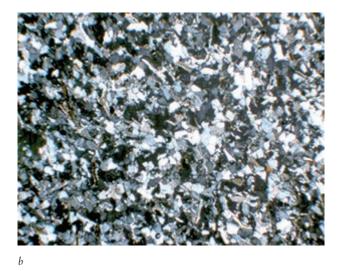
Having discounted various potential sources, one outcrop appears to have the same geological characteristics as the cross-slab. This sandstone is located to the north side of a sandy bay marked on the 1:25000 OS map as Jessie Port (NGR NH 879772). Medium to low tide is required for access. The first prominent feature on the north-east side of the bay is a light grey limestone (fish bed). This is followed by some siltstones and very fine sandstone units until a prominent sandstone bed containing large rip off clasts of silt and fish bed material is reached. There is a further metre (thickness) of silts and muds before two 0.7–1m thick sandstone beds, the lower of which contains iron oxide nodules (illus 7.2).

This unit is a micaceous arkosic and stone (illus 7.3a & b), with grains generally less than 250 µm diameter and



a Illustration 7.3

Thin section of the suggested source rock: (a) ppl, 40× magnification, (b) cpl, 40× magnification



defined by the presence of iron nodules. The principal mineralogical components are quartz, feldspar, biotite, muscovite, chlorite, calcite and opaque grains. The quartz and feldspar grains are anhedral and show sutured grain boundaries. They display undulose extinction (particularly obvious in the quartz grains) indicating a metamorphic protolith (ie pre-sedimentary source) for the sandstone. The quartz grains are generally monocrystalline but minor polycrystalline grains are present. The feldspars include plagioclase, microcline and orthoclase. All show some degree of alteration. The mica grains show a very distinct alignment, most probably bedding-parallel. Some biotite grains show alteration to chlorite. The matrix is principally composed of very fine grained clay with calcite. Minor opaque grains (probably iron oxides/sulphides) are

present. This sandstone is well sorted but the moderately high proportion of feldspar grains would indicate that it is mineralogically immature. This is consistent with the clay matrix.

The petrology is remarkably similar to that of the cross-slab although some parts of the outcrop appear to contain slightly greater proportions of calcite. This minor discrepancy may be resolved by weathering of the cross-slab after quarrying, which resulted in dissolution of some calcite, or it may simply reflect bed by bed variations in relative proportions of the principal mineral components. The outcrop shows good potential for the extraction of large, coherent slabs, of a similar thickness to the cross-slab. In addition to the similarity of geological characteristics displayed by both this sandstone and that of the Hilton of Cadboll cross-slab, there are grooves on



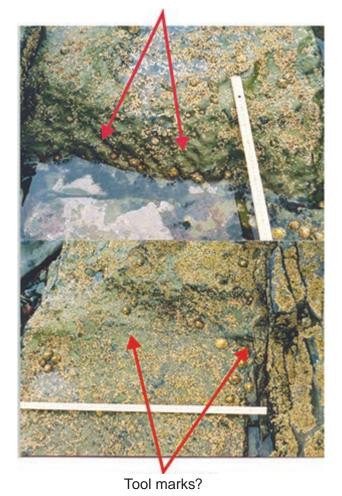


Illustration 7.4
Outcrop sandstone showing non-natural (?tool) marks

the outcrop (illus 7.4) that are difficult to explain as the result of a natural process. These grooves may be manmade toolmarks.

It is suggested here that this sandstone unit is a likely source for the raw material used for the Hilton of Cadboll cross-slab.

Conclusions

The descriptions and analysis of the Hilton of Cadboll cross-slab and outcrop thin section samples have provided an insight into the geological characteristics of the stones used for the carved monuments. The work has identified that a range of arkosic sandstones have been utilised for the monuments. It has also been possible to locate a potential source of raw material that, from a geological perspective, matches the characteristics of the crossslab. Several general points can be made concerning the nature of the sandstones used at the Hilton site. Perhaps most notable is the overall similarity of the majority of the sandstones. This may indicate that various beds of the same outcrop or unit have been used as sources of raw material. This is consistent with generally similar petrology combined with subtle differences seen in individual fragments/monuments.

It is proposed that further work to constrain the potential source for the Hilton of Cadboll cross-slab should include magnetic susceptibility measurements. The cross-slab itself has already been measured as have numerous potential, but now discounted, source outcrops. This detailed analysis has also provided answers to some of more specific questions posed at the beginning of this report:

1 What is the nature of the red staining on the surface? Is it natural iron deposit or an applied material such as paint?

Natural red colouration is common in sandstones and is a particular characteristic of certain formations within the Old Red Sandstone. Indeed, it is one of the distinguishing features of certain units, for example the Upper Old Red Sandstone. It is generally the result of the oxidation of grains of ferrous iron minerals and/or coatings on grain surfaces and is pervasive throughout the rock rather than a surface feature. Many sandstones cropping out (and used for building) in Easter Ross are particularly iron-rich. The colour can vary from reddish yellow to dark brownish red. The exact nature of the iron minerals (ferrous and ferric oxyhydroxides) and presence of manganese can all influence the colour. In general, once formed, the red colour is generally fairly stable as ferric iron is insoluble in an oxidising environment. However, if the chemical environment changes, for example if the stone is buried and exposed to reducing conditions, iron may be leached from the rock.

A uniform reddish-brown colouration is a feature of the carved surface of the Hilton of Cadboll cross-slab, slightly more pronounced on the front of the slab than other faces. This staining may be caused by iron oxide, possibly the mineral haematite (Fe₂O₃). However, it is impossible to identify the actual composition of the pigmentation without further investigation such as XRD or FTIR analysis. The colour may have been applied although it is possible that this is a natural phenomenon as iron oxides are common constituents of the sandstones examined. The colour may have appeared gradually during weathering of minerals in the sandstone. Minerals which could produce the reddish colour on weathering include feldspars, detrital ferromagnesian silicates and iron-bearing clays. The uniformity of the colour could be due to the iron-source mineral being very fine-grained and distributed uniformly through the sandstone (eg fine iron-bearing clay minerals), or it could be due to iron being leached out of the sandstone during weathering and being re-deposited from a probably acidic, saline solution on oxidation and evaporation of the solution on the sandstone surface. Such a process could have been more marked in the earlier stages of weathering of the exposed carved sandstone.

The X.IB 189 thin sections do not show iron oxide coatings on grains. This is consistent with the suggestion that the stone used for the Hilton of Cadboll cross-slab is more likely to have been derived from Middle Old Red Sandstone outcrop and these rocks are generally more greenish-grey to brown in colour, lacking the iron oxide grain coatings that are common in other units. It is also consistent with a non-pervasive colour.

Further examination of the potential pigment surface is recommended in order to clarify its origin, especially since it does look superficially more like an applied pigment than a weathered product on the face and sides of the sample on display in the museum. Because the actual mineral material present is very slight and its nature would be essentially identical whether it was natural or applied, study of the surfaces requires detailed micro-analytical techniques such as scanning electron microscopy imaging to ascertain the physical nature of the coating.

2 What is the nature of the reddish (rusty) 'blebs' that feature in the greenish sandstone. Is this common? Can this feature be used to identify this particular stone?

The 'blebs', or nodules, are reddish brown and appear on the slab on display in the NMS as well as on some of the fragments examined. The reddish brown mineral is almost certainly an iron oxyhydroxide. The presence of ferric iron can produce a yellowish, brownish or reddish colour. The red colour is usually attributed to haematite Fe₂O₃ whereas the other colours are attributed to hydrated

oxyhydroxides such as limonite (ochre) FeOOH.nH₂O. The exact mineralogical composition could be identified by further chemical/mineralogical analysis (eg XRF, XRD, SEM).

Iron-bearing minerals can result from oxidation of reduced ferrous iron minerals such as pyrite FeS₂ or siderite FeCO₃ on weathering of the rock. Although the original ferrous minerals may only be present in small amounts they can be concentrated in small areas especially as ferrous iron is soluble and can be easily leached by circulating pore fluids. Where there is a subtle change of chemistry in the rock, re-precipitation of ironrich minerals may take place, with concentration of such minerals around suitable nuclei (eg grains of other iron minerals, organic matter or calcite/dolomite nodules). Repeated dissolution-precipitation cycles can enhance and 'grow' the nodules.

The iron may migrate through the body of the sandstone, along fractures, bedding planes or other planar structures and can produce reddish brown rings (Leisengang rings). In the fragments examined as part of this study, the sandstone is generally fairly massive and there are few early fracture or bedding surfaces. Iron staining seems to be restricted close to the original nodules in the case of the samples examined. On the slab on display in the NMS there are some quite large brown-ring features. They are present on both the old carved surface and the more recent gravestone (back) surface. The colour is similar to, but distinct from that of the reddish colour of the carved surface and is most probably a natural feature.

3 It is proposed to reconstruct the original carved slab from the main pieces and all the fragments. How can 'geology' inform the reconstruction process?

Sandstones very often exhibit a fabric that relates to its original depositional environment, for example sandstone deposited in a lacustrine or flood plain environment will most often be parallel bedded and may be massive or have fine internal laminations whilst sandstone deposited in a current may have well-developed cross-bedding. The bedding planes of sandstones provide an ideal, natural flat or flattish fracture surface which would be ideal for quarrying and carving. When a slab is broken into fragments, there is a good chance that the shapes of fragments and the orientation of fracture surfaces are influenced by this original depositional fabric. The carved surfaces of the cross-slab on display in the NMS are probably original bedding planes. There are indications on the carved front that weathering of the stone has resulted in peeling off of layered patches as would be expected if there were fine internal laminations parallel to the bedding plane and therefore parallel to the carved face. Both macroscopic and thin section examination of X.IB 189

show a very clear alignment of mica parallel to the presumed bedding plane (parallel to the carved faces). It would also be expected that any fragments would also display this orientation and could therefore be used as a point of reference to orientate the fragments relative to the main slab and to one another.

Fragments from different monuments of different sandstone could have a different internal fabric. For example X.IB 355.3, a large slab of flaggy fine-grained grey micarich sandstone, has orientation of micas parallel to the main face.

- 4 What is the geology of the non-Hilton sculptured fragments?
- (a) X.IB 355.3 could this be part of the Hilton stone? Whilst fragment X.IB 355.3 is petrologically similar to other X.IB 355 stone fragments found at the excavation site, it does not appear to be petrologically identical to the sandstone of the Hilton of Cadboll cross-slab.
- (b) The cross-incised architectural fragment (context 002, Kirkdale)

This fragment is petrologically different to other fragments examined. It is likely that the source of this sandstone differs from other fragments examined.

5 Is it possible to identify the sandstone fragments in soil layer 007? If so, is it possible to say whether these tiny fragments are the same geology as the cross-slab or the fragments?

The sandstone fragments identified from soil layer 7 show at least two sandstone varieties. Those in soil slide 1E (context 007) are arkosic, containing quartz, feldspar, mica and opaque grains. They contain less feldspar and much less mica than the Hilton of Cadboll sandstone. In particular, there is lack of aligned biotite. In addition, the quartz grains are slightly more mature, being more rounded than those in IB189.

The lithic fragment in soil slide 1F consists of polycrystalline quartz with feldspar, biotite, muscovite and opaque crystals. These fragments are not in any way similar to the sandstone of the Hilton of Cadboll cross-slab.

The sandstone fragment in soil slide 2B (context 042) is petrologically similar to X.IB 189 but appears to have a higher proportion of opaque grains and has a finer grain size. However, the sandstone fragments in soil slide 1D (context 019), which are also arkose, are petrologically identical to that of the Hilton of Cadboll cross-slab. They contain immature grains of quartz and feldspar and exhibit a clear alignment of biotite and muscovite. The grain size is also consistent with these fragments being part of the cross-slab.

7.2.2 Toolmarks: technical assessment of the lower portion, the upper portion and the fragments

PETER HILL

Introduction

This assessment was carried out in February 2003 at the request of GUARD, following on from assessments of other Pictish sculpture previously made for Historic Scotland (Hill 2001). The purpose was to examine the toolmarks in order to gain precise technical information about the methods used in working the stone, to establish the standards of workmanship and to see if any light could be shed on the way in which the stone was prepared. The assessment was made on an objective basis, without regard to any received opinion.

The cross-slab has been broken in the past, and there were three sites at which parts were examined. The lower portion slab was in a store in Hilton, Easter Ross, with some overhead natural light, supplemented by a flood lamp; the main part of the cross-slab is in the National Museums of Scotland in Edinburgh, under the normal museum lighting; and a large number of fragments were held in a gallery at Queen Street, Edinburgh, with some

overhead natural light supplemented by a flood lamp. In all cases a hand torch was used as well. Photographs were taken with a hand-held 35mm camera with off-camera flash; the scales used were 250/500mm and 50/150mm.

Definitions

Measurements are given in the order length of face \times depth \times natural bed height.

'Straight' means that the surface is straight within 2mm in 300mm. 'Round' indicates a convex surface and 'hollow' a concave surface, with the average or typical deviation given in millimetres. 'Square' means an angle of 90° within 1mm in 300mm. 'Over-square' means an angle of greater than 90°, 'under-square' indicates an angle of less than 90°, with the deviation given in millimetres. 'Approximately square' is used when the nature of the faces prevents accurate measurement, but the balance of probability is that the faces are or are very nearly at right angles to each other. 'Range' is the maximum depth of the tool marks measured from the immediately adjacent surface. All measurements are approximate or average rather than absolute.



 ${\it Illustration~7.5}$ General view of the front of the lower portion, showing the uncarved panels to left and right



Illustration 7.6
The left-hand panel, showing deep pecks on the right-hand side

Constant reference is made to the use of a punch. This is a simple bar of iron or steel, typically 150–200mm long and 10–25mm diameter, with one end drawn out to a point which may be fine or heavy according to the nature of the work; it is normally driven by a hammer. A punch will occasionally have, by design or as a result of wear, a short cutting edge of 1–2mm (Hill & David 1995).

Standards

The working of the cross-slab is judged on the basis of what is readily achievable by a trained stone mason. This may seem a harsh judgement for a stone in which the interest relies to a considerable extent on the freehand low-relief carving, but there are many elements, from the initial preparation of the stone to the geometric designs, which lend themselves to such an approach. It also gives an objective standard by which other artefacts may be judged and compared. No comment is made on the artistic quality of the stone.

Assessment

1 The lower portion

The 1470mm-wide lower portion survives to a height of approximately 770mm, plus whatever is hidden by the temporary stand. Although somewhat weathered, it is in a generally very good state of preservation, with tool marks showing clearly over most of the stone. The lower part of the stone is broken away to a generally concave

shape. There are several visible loose beds in the stone, which is face-bedded.

Face A

The left-hand side is generally more weathered than the right. The left-hand panel has a smooth, slightly undulating surface with hardly a toolmark showing, except on the right-hand side (illus 7.5). Here, over a length of 40–60mm, it is clearly worked in small pecks, range up to 3mm, resulting in the surface dipping by up to 5mm as it approaches the right-hand fillet or 'band' (illus 7.6); the rest of the surface is flush with the surrounding fillets. The lower part of the area, including part of the right-hand fillet, has been lost in the fracture.

The left-hand fillet is formed by the projection or lug on the left-hand side of the stone (see below, face D), and is thus only about 120mm high. The width of about 30mm is due in part to the form of the projection. The right-hand fillet runs down to the fracture. The horizontal fillet above this area has the start of a line pecked in from the left over a distance of about 75mm; it is very close to the top of the fillet (illus 7.6). The fillets are separated from the flat area by V-shaped pecked lines which are reasonably regular.

The right-hand panel is uneven, worked in pecks of up to 5mm; it has an unfinished look especially in the upper part (illus 7.7). The separation between the flat area and the fillets is less regularly marked than around the left-hand panel; the line to the right is deeper than the others, the upper one is very shallow, and the left-



Illustration 7.7

The right-hand panel, showing uneven working and variable lines around it

hand one is very variable in width and depth. The fillet to the right is rather heavily worked, range 4–5mm, and does not look well-finished, especially when compared to the equivalent against the left-hand panel. It is about 50mm wide, largely due to the form of the projection on the right-hand side of the stone (see below, face B). The bottom of the left-hand fillet has been lost in the break. At the bottom of the area there is a shallow, pecked line which appears to be delineating a lower fillet; towards the left, it appears to follow the line of the fracture in a parallel curve.

The horizontal fillets above the two panels have a more or less flat surface, whereas other fillets above that level are

more rounded. This could be the result of weathering or they were perhaps worked to a rounder profile. Although it is impossible to be certain, the latter is slightly more likely. When measured across the stone, the lower edges of these two fillets appear to align very closely. The middle horizontal fillet on the left-hand side slopes down to left, but the equivalent on the right-hand side is horizontal and approximately square to the vertical fillets above and below it.

The fillets are uneven in width. The upper vertical one on the right-hand side is about 15mm wide. The broken remains of the upper fillet on the lefthand side were 30mm wide, whereas the equivalent on the right-hand side is 25mm; it is the latter Illustration which seems to be that aimed for. The horizontal fillet above the lefthand panel is dead straight, while that above the right-hand panel is at least 2mm round with large pecks in it. The latter has the appearance of less skilled, or at least less careful, work than that on the left-hand side. In general, the junction between the fillets and the background to

the carving is somewhat uneven, with the sides of the fillets generally going down at an angle with a rounded junction to the background.

Most of the face is decorated with a key pattern filling a panel bordered by fillets. This is set out in a very regular manner; each part is different, but the differences are repeated exactly from side to side (rather than a mirror image). The face of this panel is 2mm round across its full width, and is set about 3mm below surrounding fillets. The surface was clearly prepared very carefully. The lines of alternate keys do not line up exactly, as they theoretically should, but they are very close.

In the same panel, elements of the key pattern are treated as double spirals raised to form bosses, five at the bottom, two in the middle, and three at the top. In the bottom and top rows the spirals run clockwise, and in the middle row anti-clockwise. The existence of these bosses implies the lowering of the surface over the whole of the face merely to accommodate them (and perhaps other projecting elements, now lost). The alternating direction of the spirals shows careful planning.

The backgrounds to the carved panels at either side are worked in fine pecks, range no more than 2mm, with the exception of the area immediately to the left of the right-hand panel. This is slightly more heavily worked,



Illustration 7.8
Background to carving, right-hand side, showing heavier than usual working

with pecks of up to 3mm deep (illus 7.8). In general this face has been set out very carefully, but one exception is the width of the undecorated panels. Between the vertical fillets above these areas, that above the left-hand panel is 240mm wide, while that above the right-hand panel is 215mm wide. The execution of the work does not always match its setting out. In particular, the grooves surrounding the right-hand panel are significantly less well worked than those around the left-hand panel. The latter has a much cleaner surface than the right-hand panel, although it is marred by the heavily pecked area on the right. It may be that the area was to be sunk down,



or to be carved, but if any such plan was intended it was abandoned before completion.

Face C

The back preserves the lower horizontal section of a wide border of vine-scroll, and the first stages of the scrolls that ascend its vertical sides. Below the scroll is a roughly worked area, ending in an arched break as on the front (illus 7.9). The right- and left-hand edges above the projections return to the sides in a vertical chamfer. The

carved detail stops above the level of the top of the projections, whereas on the front it continues well below the bottom of the projections. The horizontal vine-scroll has no fillet at the lower edge; the background rises to the general surface in a simple straight line. Below this line the surface has been worked with a heavy punch in long stokes, up to 5mm deep, at an angle of 60-70°, running top left to bottom right. On the right-hand side, these marks continue almost to the bottom of the stone. The tool had a cutting edge about 2mm wide, perhaps as the result of wear on the point.

A pecked horizontal line crosses this area, running from the top of the projection at the right-hand side and ending 370mm from the left-hand chamfer, rising slightly towards the left-hand end. At the right-hand side it is 110mm below the base line of the vine-scroll, but only 90mm at the left-hand end. Above the line, the face is all worked with heavy punch marks, but beyond the left-hand end the surface is increasingly worked in pecks; some of these occur above the

left-hand end of the line. Below the line, the left-hand two thirds of the face is worked with pecks, which are up to 4–5mm deep in places. It appears that the face was first worked in heavy strokes of the punch, and then cleaned up with small pecks below and to the left of the line. On the extreme right-hand side, there is another area of work in pecks, but this is not as neat except very close to the right-hand edge.

In the centre of the stone, some heavy punch marks occur below the line, but some of these appear to have been cut in a separate operation from those above the line. It may be than after the line was cut in, the surface below the line in this area was further reduced with long punch marks before the pecked work was begun.

On the right-hand side, the heavy strokes are crossed by two vertical lines which are aligned on the edges of the vertical fillet on the inner side of the right-hand vinescroll. These lines are very roughly pecked and, although they appear to be marking out another fillet, the surface



Illustration 7.10
False line on the horizontal fillet

between the lines is very rough and rather too low and uneven. The lines stop some 50–60mm above the lower, broken, edge of the stone, while beginning just below them is another pecked line roughly parallel to and about 40mm from the edge of the stone. It is paralleled by the line at the base of the right-hand panel on the front of the stone, and may represent work following the fracture of the lower edge of the stone or it may be random, later work. It is understood that the stone may have been moved in antiquity, giving the opportunity for such work, but this is no more than speculation. However, the line on the back of the stone was not observed at the time of the survey; it shows on the photograph, but could be a trick of the light.

The order of work may have been: heavy punch; the horizontal line; the pecked working of the surface. It is not clear whether the parallel vertical lines were cut before or after the horizontal line.

From side to side across the stone, measured midway between the lower edge and the carving, the surface rises by about 10mm. Across the heaviest punched work, it rises by 15mm.

The large curve at the bottom, now covered by the display stand, appears to be a fracture resulting from pressure or a sudden shock on the centre base of stone.

The background between the carved elements is slightly rounded and with no real attempt to achieve a flat surface; it dips down towards the carved elements.

The horizontal fillet above the vine-scroll is approximately straight with undulations of up to 2mm around the centre. The right-hand end shows an error where a line has been cut with a punch from the centre of the right-hand end for 165mm, curving down to the lower edge of the fillet (illus 7.10). This line, up to 5mm deep in places, is not especially neat. The carved tendril below the fillet has been cut in very neatly with a fine punch, giving it a flat upper edge, to separate it from the fillet. This punched line is very sharp in comparison to the rest of the stone; as it is a very narrow slot, about 2mm wide, it may have been filled with moss or lichen at an early date which would have protected it from weathering. The left-hand end of the fillet is lost, as is the left-hand vertical fillet above. About 70mm remains of the right-hand vertical fillet.

The external angle between the horizontal fillet and vertical fillet on the right is more than 270°. They would have met in a right angle if the lower edge of the horizontal fillet had not been cut back to make room for the tendril below. The distance from the base line below the vinescroll to the lower edge of the fillet both at the left-hand end and just before the tendril intrudes is 215mm, but only 210mm at the right-hand end.

The left-hand end of the false line follows the outer curve of the tendril, which may indicate that the tendril was begun before the fillet was worked. However, there is no reason for it to have continued to rise towards the right and it may well be the result of inattention on the part of the carver.

The base line to the vine-scroll and the arris running up the chamfer on the right-hand side are approximately square to each other; that on the left, although now much damaged, was probably never square and the lines make an internal angle of about 100°.

Measured across the base of the vine-scroll, the stone is no more than 2mm round from side to side, suggesting that the stone had been trued up with great accuracy before carving began.

Above the vine-scroll, the surface is so damaged that little can be said. What remains was all worked in small



Illustration 7.11
Face D (left-hand edge as viewed from the front of the stone)

pecks. All the back of the stone was worked with a fine punch, apart from the area below the vine-scroll, where a heavier punch was used.

Face D

There is a more or less flat face against the front of the stone and a chamfer against the back. The 65mm-wide chamfer is about 3mm round, giving a distinctly rounded appearance as compared to the chamfer on Face B.

The right-hand 80–90mm of the face is straight and is worked neatly in 2–3mm pecks, but thereafter more coarsely, with pecks up to 5mm deep and the surface falls away to the left (back face) by 10–15mm (illus 7.11).

There is a projection or 'lug', which projects about 45mm, 400mm down from the broken top of the lower portion. It is deliberately curved in plan, with a convex curve on the side towards the front; the left-hand half of the projection has been subject to heavy damage leaving only the upper surface. The top of the projection at the junction with the side of the stone is level for the first 120mm from the front, after which it falls away. The top also slopes down towards the outer side, by up to 25mm at the left-hand side. The surface is more neatly worked against the front face of the lower portion, mirroring the face above. The face of the projection is worked in neat pecks on the right-hand, curved, side; the left-hand side is lost.

The face below the projection is worked neatly with 2–3mm pecks on the right, less well on the left, for the first 130mm down for the projection. Then it drops back 10mm or so in a short splay to a pecked surface of which only the upper 40mm is visible. Across this area is a 15mm-wide fillet which is smoothed as though by friction. It may be that when the stone was upright it was rocking against the collar-stone.

Face B

This end has a more or less flat face against the front of the stone with a chamfer against the back. The main part of the face is worked in small pecks, ranging up to 3mm, and is more or less straight from side to side, with undulations of 3mm hollow and 3mm round. In the centre of the face are two conjoined oval hollows, 5–6mm deep, with one or two punch marks running into them; they appear to be the result of the stone plucking out during working. The chamfer, about 70mm wide, is no more than 2mm round, and has a neater appearance than the rest of this face.

There is a projection, the top of which is about 450mm from the broken top of the stone; it projects about 30mm. On the top surface, the first 70mm from the front has been worked in to approximately a right angle in 2mm pecks, while to the right of this the junction is unfinished and left

as a rough curve. The vertical face of the projection is also more neatly worked than the rest for 70–75mm from the face (illus 4.4). The rest of the face of the projection then rises in a step by about 10mm to an uneven surface, with notable holes up to 10mm deep. The projection is more or less flat across the end, as opposed to the rounded projection on face D.

Below the projection, the surface is worked in fine pecks and short 10mm furrows, no more than 2–3mm deep, with the front and bottom edges neatly delineated. It is neater at the right-hand edge, where there are clear signs of a loose vertical bed. From the right-hand side, the surface rises towards the left where it drops by 5mm at about 25mm from the front face.

The top of the lower portion

The broken top shows it to be a buff-coloured stone. There is at least one loose bed 100mm from the back face, and the nature of the break suggests that the stone is highly laminated. These laminations have broken at different points to produce a very jagged break. There are no marks to show how the slab was broken.

2 The upper portion

Only the back, face C, and the edges, faces D and B, of the Pictish work survive. These surfaces are all weathered which limits the information available. The assessment was made from ground level and was thus limited to a height of about 2m. Measurements high on the slab are very approximate.

Face C

The vertical fillets on the inner sides of the vine-scrolls are generally 25mm wide, but with some variation. The left-hand fillet immediately adjacent to the lower lefthand horse is 30mm wide, while directly opposite this point the right-hand fillet is only 20mm wide. These fillets are reasonably parallel through the lower panel, but at the base of the pictorial panel they begin leaning inwards; at the base of this panel they are 770mm apart and 740mm near the top of the panel when the damage makes them unmeasurable. Measuring over the fillets gives 820mm at the base of the pictorial panel and 800mm near the top. The horizontal fillet at the base of the pictorial panel dips down to the right a little; it is 410mm above the modern stand at the left-hand side and 400mm on the right-hand side. Measured from side to side of the stone, this fillet is no more than 2mm round overall, with occasional hollows of up to 2mm. One or two peck marks are visible, but the general lack of tool marks on the face of the fillets suggests that they were to some extent smoothed by abrasion rather than weathering. The abrasion will have been done with a slip of the same stone.

The incomplete panel of spirals at the bottom is straight from side to side, with occasional hollows of 1mm; this was clearly a well-prepared surface.

In the pictorial panel, the head of the lower right-hand horse, and the shield of its rider, have the appearance of having been abraded to a smooth surface. The same is true of the shield of the lower right-hand rider, and to some extent of his horse's head. The bodies of all the horses may also have been abraded. The background to the pictorial panel was worked entirely with a punch, in pecks and 10mm furrows. It does not seem to have been very carefully worked, and compares unfavourably in this respect with, for example, the relatively unambitious Meigle no 6 (Allen & Anderson 1903, 301-2; Hill 2001). The stem of the mirror symbol at the top left of the pictorial panel terminates in a small knob; at the seven o'clock position against this the background has not been fully worked. From nine o'clock to 11 o'clock on the mirror itself the descent to the background and fillet is in the form of an uneven splay. The background to the head and shoulders of the female rider is sunk some 4-5mm from the general background and on the lefthand side depicts the head of a fourth rider.

The upper panel was not easy to see in detail, but at the left-hand side of the left-hand roundel there was no attempt to separate it fully from the fillet. On the right-hand side of the left-hand roundel, just below three o'clock, the background dips quite noticeably and appears quite uneven. The key pattern with spiral elements in the centre of the crescent is not mirrored from side to side as is the key pattern on the front of lower portion.

Face D

The chamfer already noted on the edges of the lower portion continues on the upper portion. On face D, it is of unusual form in that it is sunk 2–4mm at the right-hand side. This feature is vestigial right at the bottom of the upper slab, but it becomes very clear about 500mm above the stand. It is almost certainly the result of weathering, but it is just possible that is was due to careless working. The chamfer is rounded, especially at the bottom of the stone, perhaps as a result of weathering. It returns to the back face in a fillet which is rounded, probably due to weathering. The rest of this edge is flat, and more or less square to the reworked front face; precise measurements were not taken. All of this edge is worked in pecks, range 3–4mm deep but occasionally deeper, neatly enough but not especially tidy or uniform.

At 490mm above the stand, there is a horizontal mark which is the result of pressure or friction. This was very probably caused by the triangular stand which formerly supported the stone in the museum in the National Museum of Antiquities of Scotland (Laing 1993, pl 13).

Beginning 1455mm above the stand is a projecting area 330mm high, over the full width of the edge (illus 4.3). It is highlighted by a slight sunken fillet immediately below, 70mm high, where surface drops 5mm then rises 10mm to the broad fillet. This projection is presumably the remains of a projection, similar to the ones on the lower portion, which was worked off at some unknown point in the history of the stone. In the middle of this area is a mortar repair roughly 70–80mm in diameter.

Face B

The chamfer on this edge is not sunk as on face D, but is approximately flat. The fillet on the return to face C is damaged and shows most clearly at the bottom of the stone, where it is about 20mm wide. The working of the stone is very similar to face D, mostly in 3–4mm pecks with some deeper ones; it is much weathered. Measuring the flat part of this edge, that is between the chamfer and the front face, from the reworked front face A, the first 50–90mm (variable) is worked slightly better than the rest which has rather deeper pecks of up to 6mm. This margin has a slight splay, which is also to be seen on face D. This more careful working against the front face also appears on the base portion (particularly on the projections) and is thus original rather than part of the 17th-century reworking of the stone.

At about 1480mm above the stand there is a slightly projecting area some 350mm high, as on face D; the projection, which runs the fill width of the slab, is about 10mm (illus 4.3). Again, it is probably the remains of a projecting projection. There is a mortar repair in this part, about 70mm wide and 50mm high.

Above this, the flat part has a slight twist in it (that is, it does not lie in a flat plane), which from some angles makes it appear that the stone tapers inwards from the top; this is an illusion.

When viewed from the front, the projections on both sides are clearly visible owing to the slight splay on the front margins of the edges.

Face A reworked

This face was not examined in any detail. There is no sign of any toolmarks other than from a punch; the face of the stone is slightly concave up to a maximum depth of 2mm.

3 The fragments

A large number of fragments were recovered during the excavations. Many derived from the reworking of the face, while others are believed to come from a missing section between the lower and upper portions. Comments are made only on those fragments which yielded useful information.

Most fragments are weathered. They show a lack of attention to the background, as noted in respect of face

C of the upper portion of the stone. All the working was done with a fine punch.

There are rectangular notches in one edge of a number of fragments, for example X.IB 355.181, X.IB 355.91 and X.IB 355.380 (see illus 7.12 for a typical example). These notches were probably caused by the tool which removed them from the face. There are two possible tools which may have been used, either an ordinary chisel or a small pick with a horizontal, adze-like blade at one end; such a pick would have had a head about 300mm long, with a shaft of about the same length. Whichever tool was used, the width of the blade was about 10mm. Cutting back a worked surface would not usually produce such well-defined notches in the fragments. The most likely explanation of these is that the surface came away readily owing to the highly laminated nature of the stone. This would allow an area of stone to break away in a piece



Illustration 7.12
Rectangular notch caused by tool used for reworking the face

leaving the impression of the tool on one edge; a more unified stone would call for a harder blow which would break up the edge around the tool. It is quite possible that at least some of the face was loose before it was reworked.

Some fragments appear to have been rubbed very smooth. X.IB 355.271, X.IB 355.366 and X.IB 355.365, now all joined, show what appears to be a part of a tendril with some background. The background, tendril, and the junction between the two, have been carefully abraded leaving only faint traces of fine pecks. It is impossible to be certain, but the difference as compared to the other fragments and the main part of the slab suggest that these pieces may not belong to the Hilton of Cadboll stone.

On fragment X.IB 355.7, the background between what remains of the legs of the figure may also have been abraded. The significance of this is uncertain.

In a number of fragments, part of the pattern includes holes 6–10mm deep, such as on X.IB 355.155, X.IB 355.395, X.IB 355.396, X.IB 355.143, X.IB 355.34, X.IB 355.3, X.IB 355.29, X.IB 355.221 and X.IB 355.420. These may have been produced by repeated small blows on a punch, gradually deepening the holes, but there are indications that they were drilled. This need not have been even so simple a tool as a bow drill, but may simply have been caused by rotating by hand a punch which was forged with facets on the sides of the point. In fact, whatever the section of the shaft of a punch, it is normally brought to a point by forging on end to a tapered square section which naturally gives facets with sharp angles.

Among the carved fragments was a roughly worked stone (X.IB 355.3) measuring 420 by 200 by 35mm overall (illus 7.13). One end of one flat side of the natural slab has been sunk to depth of about 15mm over a length of 145mm. The return end, 25–30mm thick, is also worked; all the work was carried out with a punch. The return into the sinking is about 2mm hollow, neatly worked with a fine punch. The surface of the sinking is worked in pecks and furrows 10mm long, range 3mm. The work does not look as neat as the description implies, and the sinking is nowhere near flat and has a twist of over 5mm, varying between 3mm round and 3mm hollow. The return end was worked in fine pecks, range 2mm, and is partly broken away in the centre, but it was clearly up to 3mm hollow.

Summary and conclusions

The tools used

As with all Pictish sculpture examined by the writer, the evidence of toolmarks points to the exclusive use of the punch for both preparation of the stone and the final carving. The evidence previously observed was for the use of a relatively delicate tool for finishing. This was probably no more than 10mm in diameter, drawn out to



Illustration 7.13
The roughly worked slab

a fine point perhaps resembling that of a well-sharpened pencil. The surviving marks show that the tool was used almost exclusively at right angles to the surface, producing a small crater, or peck. The size of the peck mark is related to the weight of the hammer blow on the punch, and it can be a very delicate operation removing little stone. Occasionally, the mark is in the form of a short furrow which implies the removal of a larger flake of stone.

The survival of the little-weathered lower portion of the Hilton stone shows the use of a heavy punch, clearly used in the initial roughing-out of the stone. This is likely to have been around 20mm diameter, and was used at an angle to the surface to remove larger quantities of stone to a greater depth than with the fine punch. Used in this way, the tool will show either large peck marks or long furrows. It is the latter which show on the lower portion, and this suggests that perhaps something like 10–15mm was being taken off at once. Owing to the highly laminated nature of the stone, it may be that one bed of stone was being taken off.

The punch appears to have been the only tool used on those symbol stones and symbol-bearing cross-slabs stones examined by the writer. No non-symbol-bearing cross-slabs have been examined, nor any simple crossmarked stones. The punch is a very versatile tool, capable of modelling the finest detail in the carvings. It is a little surprising, however, that neither the claw tool nor the plain chisel was in use by the Pictish carvers. The former is excellent for reducing the level of a stone, or for roughing-out carvings, relatively rapidly and with less risk of the stone 'plucking', that is, stone lifting out from below the intended level. What is probably a pluck is visible on face B, mentioned above. The plain chisel would have been useful for finishing the fillets and the background to the carvings, giving a finer finish than the small peck marks which will have been visible over all the worked areas of the stone.

The lack of evidence for these two tools on cross-slabs sculptured in relief such as Hilton of Cadboll is the more surprising as the exclusive use of the punch continues the working methods used for producing symbol stones which use incision only. The production of the latter was a relatively simple matter of taking a natural, flattish slab and using the punch to follow around the outline of the intended design. Relief cross-slabs employ radically different principles. First, the preparation of the slab called for it to be worked on at least five sides to flat surfaces and right angles. In the writer's view, this represents a wholly different culture which must be derived from an external masonry tradition in which it would be normal for a range of tools to be known and used. Moreover, the new technique for the production of the stones seems to have been introduced quite abruptly, taking over with no transitional examples known to the writer. At the same time, the carvings changed from simple incision to varying heights of relief. This was another significant change, calling for a far greater degree of skill in execution. Using a punch to follow a sketched line to give an incised outline takes very little technical skill; removing stone to leave a three dimensional form is a very different matter.

Standards of workmanship

There are surprising variations in the way in which this stone has been worked. It is clear that the preparation of the slab was carried out with care and skill, for the front and back are worked to straight, flat surfaces, no mean feat on a stone nearly 1500mm wide. Although faces D and B are rather weathered, they seem to have been

worked approximately square to the faces. All this implies the work of a skilled mason, with skills quite different from those producing symbol stones. The existence of the projecting spirals in the base panel of face A shows that the rest of the surface was worked off by an amount equal to the projection. This shows both careful advance planning of the work and the acceptance of many extra hours of preparation.

On face C, the back, of the upper portion, the fillets on the inner sides of the vine-scrolls are parallel either side of the lower panel, something which must be deliberate rather than accidental. But, either side of the pictorial panel, the fillets incline inwards by 20–30mm; this could be deliberate but is just as likely to be the result of carelessness. The fillet below the pictorial panel on the upper portion dips to the right by about 10mm. Some of the fillets on face A of the base meet at right angles, again an intentional feature, but others do not.

The key pattern on the base of face A is a remarkable piece of work, with differing patterns repeated from side to side to give matching patterns. Overall the surface of this area is virtually straight, and it is difficult to see how this could have been improved. Either side of this panel, the undecorated panels present problems. The left-hand panel seems to have been worked with some care, but the punch marks on the right-hand side suggest a change of plan, perhaps to form a regular sunk surface, which was abandoned. The right-hand panel has a significantly worse appearance and was perhaps never finished. The pecked lines dividing the panel from the surrounding fillets are very unevenly worked, with some much deeper and better defined than others. Again, this aspect is much worse than in the left-hand panel.

The projections at either side of these two areas are worked very differently. That on the left-hand, D, has a curved face as seen from the front, and is finished with neat pecks. The projection on face B is squarer, and much less well finished; indeed it looks unfinished. The differences on the two sides leads to a suspicion that perhaps more than one hand was at work, something not impossible given the size of the stone. The fact that the left-hand panel is wider than the right-hand panel by 25mm suggests a fault in the initial setting out of the design.

An interesting feature of the appearance of the stone, showing both on the lower portion and the upper portion, is that the front edges of the two sides of the stone are finished to a better standard than the back edges. This is particularly noticeable on the top of the right-hand projection, where only the first 70mm of the junction with the side is worked to anything like a right angle; the rest is left at the roughing-out stage.

The sides of the stone below the projections are noticeably less well-finished than above. This may be because they were always to be underground, but it could equally be that these projections were originally the same size as the upper projections and were worked off at some point in the history of the stone. The fact that the carving on the face comes down well below the lower edge of the projections suggests that the stone was originally longer. The carvings on the back finish above the projections, which may indicate a change of plan while the work was still in progress. In view of the highly laminated nature of the stone, it is possible that the stone broke during working or erection.

It is far easier to carve such a stone when it is in an upright position, in the same way as all inscriptions are set upright for letter cutting; the dust and chippings fall away rather than lying on the face, obscuring the work. A possible scenario might be that the stone was set up and work begun. An uneven foundation which put excessive pressure in the middle of the stone might have caused the failure which resulted in the arch-shaped fracture. The stone in its original form probably weighed close to three tonnes; if most of the weight was supported on an undressed stone in the centre a point load could have been exerted. Given the laminar nature of the stone it would not be surprising if it split.

At that point, the stone could have been taken down, the lower projections shortened to allow the stone to sit lower in the collar-stones, and the back worked to finish at a higher point, perhaps at the new ground level. Some support is given to this by the lines on the lower part of the back, which may represent part of the original design. It must be emphasised that this is no more than a speculative reconstruction which appears to fit the facts; there may well be other interpretations.

A number of errors are apparent on the stone. The most noticeable is the false line on the right-hand end of the lower fillet on the back of the lower portion. This could have been due to the carver following the line of the tendril below and simply not noticing until too late that he had crossed the fillet and was going far too high. Such inattention may be surprising, but it is quite possible, as the writer can testify, to hold an animated conversation while working stone; errors can and do occur in this way. The tendril on the right below this fillet comes very close to the fillet and is a little higher than the corresponding one on the left. The lower edge of the fillet has been cut away by a few millimetres in order to accommodate it. There is another false line on the fillet above the left-hand undecorated panel on the face of the lower portion for which there is no obvious reason, but again it could be due to lack of attention or a change of plan.

The key pattern in the crescent at the top of face A on the upper panel does not mirror from side to side as the key pattern on the lower portion does. It could be that fitting such a pattern into other than a rectangular outline makes regularity less easy, or it could be that this part of the design was drawn out by a less skilled designer (Allen & Anderson 1903, pt 2, 362).

The background to the pictorial panel is less good than might be expected, and in places was not quite finished cleanly, and the sinking behind the head of the upper rider gives the impression of an awkward afterthought.

The slightly sunk fillet below the upper projection on face D probably represents the initial sinking from the natural edge of the stone to mark the position of the projection.

Summary

A considerable number of errors of commission and omission have been pointed out, but this should certainly not be seen as condemnatory. The Hilton of Cadboll cross-slab is a remarkable piece of work by any standards, but any shortcomings must be recognised. They are significant, and cannot be dismissed as being of no importance to the carvers. It was clearly of importance that the stone should be prepared accurately, that lines of fillets should be straight, and that fillets should meet at right angles: these aspects were part of the design. Errors were made on the lowest fillets on front and back, and the lowest fillet on the upper portion has a visible sag to the right. These tend to show that the carver was not infallible, but they may also show some lack of competence on the part of the person concerned.

Against this may be set the very skilful drawing out and working of the key pattern panel on face A of the lower portion, which raises the possibility that at least two people worked on the stone. This panel shows much greater care and skill than the working of the background of the pictorial panel. The same might also apply to the key panel in the crescent, but this judgement is less certain. Mack (1997, 34) suggests that the stone may be an imperfectly understood copy of Aberlemno no 3. It is possible, although this is well into the realms of speculation, that the stone was begun, abandoned after the fracture at the base, and then taken over by less skilled carvers.

The critical and objective examination indicates that the undecorated right-hand panel and the projection on face B were probably never completed. This strengthens the suggestion that something happened to the stone before it was finished, and that the fracture at the base may have occurred very early in the life of the stone. The slightly low area below the upper projection on face D gives a useful indication of the way in which the working of the stone was approached.

7.2.3 Fragment distribution analysis

STUART JEFFREY

The objectives of this analysis exercise were twofold: firstly, to extract any archaeologically significant

information from the pattern of fragment distribution within the site; and secondly, to facilitate the process of refitting fragments by predicting the relative positions of joining fragments based on the joins so far identified. The methodology best suited to this kind of analysis is derived from Geographical Information System (GIS) techniques. Despite the small scale of the area/distribution on which the analysis was carried out, the principals of GIS apply. ESRI ArcView GIS (3.2a plus Spatial Analyst) was used to plot the distribution of the fragments in relation to the original site grid. The additional information within the database relating to each fragment's properties (join dimensions, form, condition etc), in combination with their geospatial component, was then interrogated across the site to highlight any useful patterns within the data.

In looking at the distribution patterns, it should be noted that in order to create a model of the actual distribution pattern it was necessary to adjust the locational information associated with each fragment. Because the location of each fragment was only recorded to within a particular 0.5m square (referred to by its easting and northing) without adjustment, a distribution diagram would locate all the fragments on the spot where the particular easting and northing lines met. It would therefore not be possible to tell how many fragments were within that square. By adjusting the locational information, the fragments recovered from a particular grid square were randomly distributed spatially throughout that square, thus providing a visual impression of the distribution pattern.

This process required the randomisation of coordinates (generated from the fragment find number). Each fragment had a random number (representing a measurement between 0m and 0.5m) added to its X and Y coordinates. This means that, although the fragment falls in the correct grid square when plotted, its position within the grid square is in fact random. Since the object of the analysis was to look for patterns of distribution rather than to examine in detail the distribution of individual fragments, this approach was considered to be appropriate. The same randomisation process was carried out for fragments from the 1998 Kirkdale excavation, except for the fact that the fragments were randomised in a 1.0m square rather than a 0.5m square, because this was the only information that was available.

The software, Spatial Analyst, was used to perform density distribution plots of various subsets of the data (see illus 7.14–7.25; additional plots are in the archive). This is particularly useful when there are a large number of points in a fairly small area, as there is with the Hilton distribution. Plotting the points alone results in a very dense plot which still makes it difficult to tell where the largest number of fragments (or types of fragments) actually fall. Creating a raster image using colour contours which reveal the density of points (rather than the distribution) allows this information to be drawn out (see illus 7.15).

ARTEFACT AND ENVIRONMENTAL STUDIES

After some experimentation, a raster grid of around 700 \times 700 (depending on the size of the distribution to be plotted) and a search radius of 0.2m was found to give the most information, although a colour ramp of several hundred increments is needed to provide good detail.

A total of 36 fragment distribution plots were produced, including fragmentation distribution of all fragments (illus 7.14) and a density plot of all fragments (illus 7.15). Each context that contained fragments produced a distribution plot (002, 007, 008, 011, 016, 037, 042 and 047, illus 7.16 and archive). There is a distribution plot of fragments by weight (illus 7.17), for all major keywords (illus 7.18–7.24 and archive) and for classes of fragments (illus 7.25 and archive).

The results of this technique are detailed in the sections below. The following points should, however, be noted. The randomisation process has resulted in apparent hard lines around the edges of high density grid squares, thus giving the impression that the fragments extended further than the context in which they were found. As the boundaries of excavated features do not end on lines within the 0.5m grid, the plots should be examined with reference to the site plan. A clear example of the impact of this is that around the setting of the lower portion, where the hard lines formed by the point plot of fragments are

an artefact of the randomisation/plotting process. On the west side of the lower portion, the majority of the fragments actually fell in the pit (011) even though they are plotted outside the pit (but in the same grid square as it).

There are a number of fragments that, although they clearly belong to the monument, occur sparsely as outliers to the main distribution. These do not seem to represent significant patterning (apart from one small group; see below). The normal processes of bioturbation that will have been in progress for several hundred years, as well as the disturbance that would be expected in a graveyard in use, may well account for some of these outliers.

The current distribution and density plots do not take any account of the size of the fragments, and this has very serious implications when trying to compare different subsets in any other way apart from density, thus the distribution alone could give the impression that there were 100 fragments of type X at location Y and only five at location Z, where in fact the 100 fragments at Y may represent the same amount of the monument's surface as the 5 fragments at Z.

With regard to whether the resolution of the recording procedure was dense enough to allow for meaningful patterning to be extracted, or whether more could have

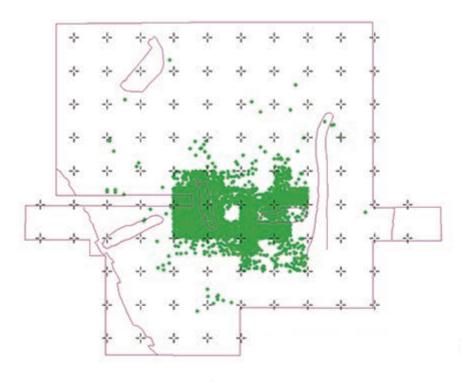


Illustration 7.14
Fragment distribution all contexts

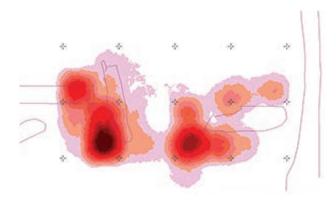


Illustration 7.15
Density plot of all fragments

been extracted on a 0.25m grid (or finer), I am confident that the significant features of patterning are apparent at the 0.5m resolution.

Observations on the distribution of fragments:

- 1 The fragments are distributed, almost entirely, in a sub-rectangular scatter roughly 4m east/west by 2m north/south. There are a number of outliers to the spread, but it can still be considered as fairly discrete (see illus 7.14). The density analysis of this relatively small area reveals further that there are two areas of particularly high density. One is centred adjacent to the lower portion on its south-west side and the other is a small area (c 0.5m x 0.5m) centred on E 101.25 N 102.25.
- 2 The general area of distribution seems to respect certain excavated features. The eastward distribution of the fragments appears bounded by the clay bank (context 005) and the westward distribution by the 'robber' pit. The southern extent of this distribution seems to have a coherent edge, but does not seem to respect any identified feature of the excavation. A real gap in the distribution occurs at grid square: E 100.5 N 102.5.
- 3 Groups of fragments (containing over five fragments) that were later shown to join do fall in patterns where they all lie in the either the same or adjacent grid squares. All these groups fall close to the lower portion and joined groups either fall on one side of it or the other. Fragments that join (over five fragments) do not fall on opposite sides of the lower portion. The simple patterning in groups of joined fragments should not be taken to be definitive as there has been no exhaustive examination of all fragments to detect all possible

- joins. There may be more complex patterns not yet revealed by the fragment analysis.
- 4 In a similar way to the joins, the clusters (with over 20 fragments) all fall close to the lower portion. Unlike the joins, the clusters have elements that fall on different sides of the cross base, and thus it is possible that clustering groups of fragments is not as reliable as joining.
- The fragments with keyword 'spiral' have a distribution with a prominent concentration mid-way up the east side of the lower portion (see illus 7.23).
- 6 The fragments with keyword 'vine-scroll' have a very similar distribution to those with keyword 'spiral' (see illus 7.24).
- 7 Analysis of fragment distribution by weight revealed at least one significant disparity. Fragments weighing over 75g fall predominantly on the west side of the lower portion. This corresponds with the field observation that a number of larger fragments appeared in the upper layers of the pit.
- 8 The most significant feature of all distributions is the apparent gap in the grid square E 100.5 N 102.5. This square does contain fragments, but they are significantly fewer in number (especially classes 1A/1B) than the surrounding squares.

Interpretation

By analysing the spatial distribution of the fragments recovered during excavation, it has been possible to construct a hypothesis for the sequence of events affecting the Hilton of Cadboll cross-slab from its last known upright setting (where the lower portion was recovered *in situ*) to its removal from the chapel site. This analysis has utilised both the density of the fragments (where they were concentrated on the site) and the density and distribution of particular types of carved fragment. The sequence of events that may best match the distribution of the fragments as recovered during excavation is as follows.

A pit was dug at the base of the cross face of the monument to around 0.5m in depth. The intention of this may have been to dig out the cross. If this was the intention, it was never carried through. The presence inside this pit of a large number of fragments indicates instead that a large section of the cross face was removed as it stood upright. This caused the resulting fragments to fall into the pit creating by far the largest concentration of fragments on the site.

It is likely that the person carrying out this removal actually stood in the pit removing the carved surface up to about shoulder height. It may be significant that a number of large fragments shown by Ian G Scott to fit directly too, or to be closely associated with, the 'mid-portion' were not found in this pit. These larger fragments may well have remained intact and attached

to the monument until a later episode in which it was toppled.

The monument then fell, causing a roughly horizontal break just above ground level, toppling towards the chapel. It is now thought likely that the stone blew down in high winds and it is therefore even possible that the stone, which had been stable for centuries, was destabilised and/or weakened by the pit and by the rough removal of some of its carved elements.

Once the monument was horizontal, with the partially defaced side skywards, the dressing/defacing continued. It is not possible to tell how much time elapsed between the two episodes of dressing when upright and dressing when horizontal. The second episode may have followed from the first immediately or after any number of years. Potentially, an earlier act of rough defacement was completed or enhanced by a finer redressing at a later date. The resulting fragment scatter from the episode of dressing when the cross was horizontal is heavily concentrated to the south of where the monument is likely to have fallen. Taken together with the less concentrated scatter of fragments to the north, it may be possible to discern a 'shadow' effect where the monument lay on the ground as the fragments were deposited around it. If we accept that there are two episodes of face removal then future work could potentially discern a clear difference between them and the tools used in each episode by analysis of the remaining toolmarks.

A gap exists in the scatter of fragments for around 1m to the chapel side of the lower portion. This would result from there being no need to dress off the carved surface of this section, it having previously been dressed off when the monument was upright. Although unlikely, there is also a possibility that the fragments from this area were used to back fill the pit and that no dressing took place at all when the monument was upright.

It is entirely possible, given the above proposed sequence of events, that the defacing/redressing of the monument and its subsequent fall were not conceived as part of the single act that ultimately resulted in its use as a funerary monument in the 17th century, but in fact represent a combination of deliberate action and natural process. A number of questions remain, the most thorny of which is: why was the pit dug in the first place? If it was to dig out or topple the monument, which proved too deep or difficult for the excavators to continue, why dress/deface the cross-side at all when it was upright? The case for the pit being filled by fragments as they fell directly from the face is strengthened by the existence of a number of joining fragments in the pit. Other sets of fragments that have seen been shown to join have been found in disparate locations around the monument, except for the concentration of such in the pit. It is even possible that some joined fragments were actually broken underfoot once they had fallen into the pit by the stone

worker rather than by the action of their chisel. Finally, the concentration of heavier fragments (>75g) on the west of the lower portion suggests that it was large, prominent elements of sculpture that were removed when the stone was upright and that the continued working of the monument when it was horizontal was a more delicate affair.

With the exception of the pilot study carried out by Douglas Morton (see Chapter 7.2.4), there has been no attempt to integrate the spatial distribution and database descriptions of the fragments with the process of refitting. Fruitful lines of approach abound for future implementation, for example a query supplying every fragment over 75g from within contexts 007/011 and the spatial confines of the pit would be more likely to yield further joins than a simple qualitative visual approach to the entire body of fragments.

7.2.4 Fragmentation of the cross-slab

DOUGLAS MORTON

An examination of the various categories of fragments was undertaken in order to inform our understanding of the destruction of the Hilton of Cadboll sculpture. Examination was made of the fracture type and fragment condition data held in the Access database. Little recourse was made to the actual sculptural pattern or design as this work was undertaken in Glasgow. Instead, discussion focused on the other characteristics of the fragments such as condition, fracture style, and secondary toolmarks. 'Toolmarks' here refers to toolmarks caused by the re-dressing of the sculpture, not to those left by its initial creation.

Fragmentation of the mid-portion

A total of 253 fragments have been catalogued with the keyword 'mid-portion' in any of the three 'keyword' fields. Of these, 116 belong to face C; 22 are recorded as possibly being from face C; 87 are noted as probable mid-portion fragments; 21 are possibly from face A; and seven are from faces B or D.

Face C

Approximately 70 per cent of the mid-portion of face C has been reconstructed with three large clusters of bonded fragments, unbonded groups of other fragments and a number of floating fragments.

Fracture

There are two main types of fracture that characterise the fragments from the mid-portion of face C. The majority are large, thick pieces with edges that slope inward to a thin 'pared' back. These fragments all tend to slope in the same direction, with the angle pointing towards the

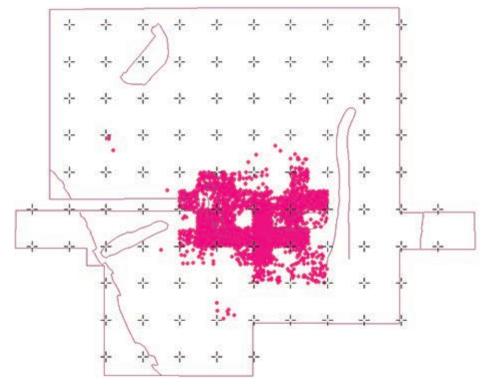
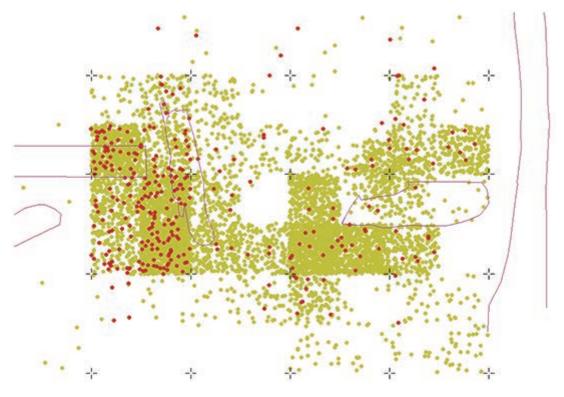


Illustration 7.16
Fragment distribution context (007)



 ${\it Illustration~7.17}$ Distribution of fragments by weight, red >75g and green <75g

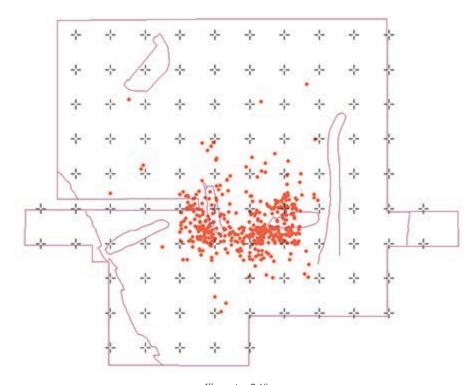


Illustration 7.18
Fragment distribution animal

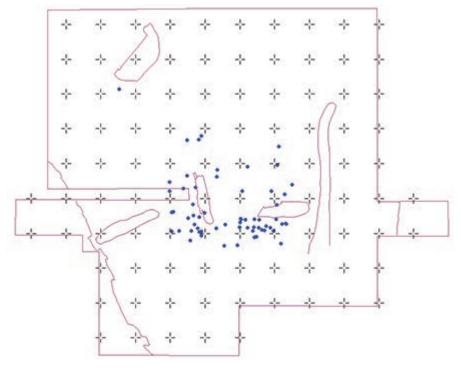


Illustration 7.19
Fragment distribution human

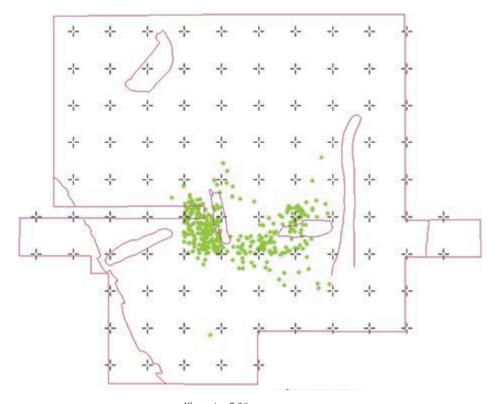


Illustration 7.20 Fragment distribution interlace

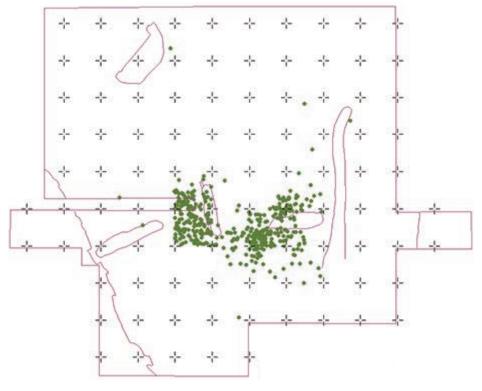


Illustration 7.21 Fragment distribution key

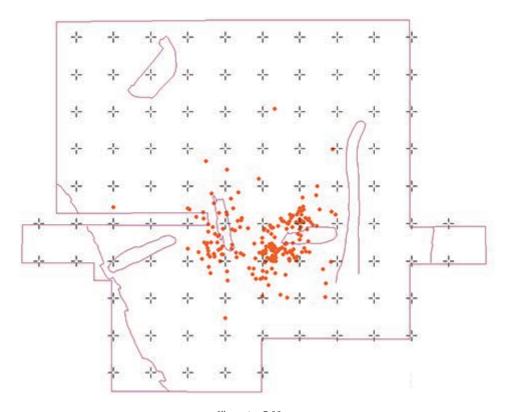


Illustration 7.22
Fragment distribution plant

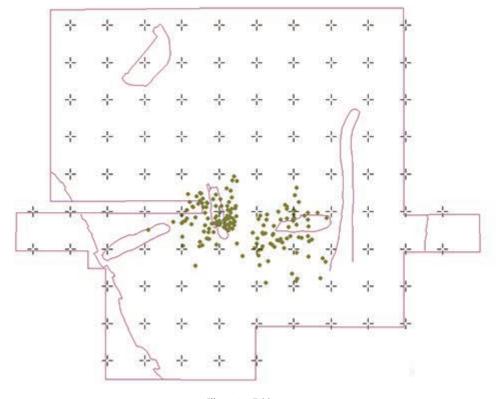


Illustration 7.23
Fragment distribution spiral

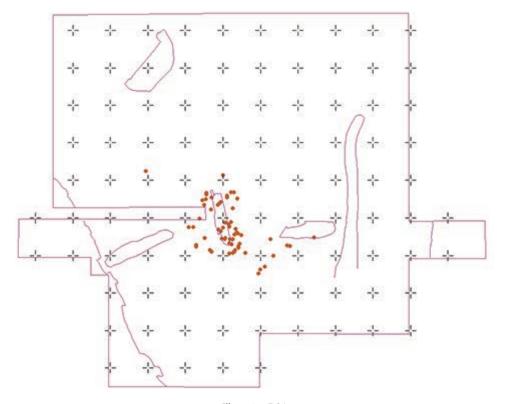


Illustration 7.24 Fragment distribution vine-scroll

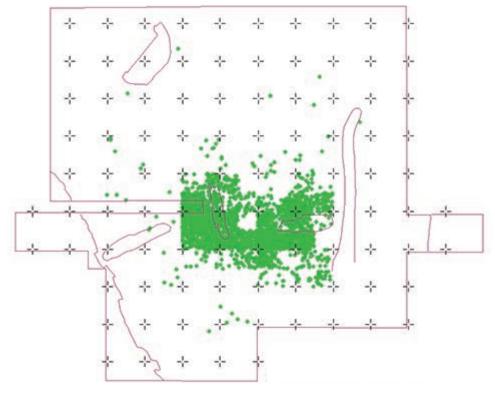


Illustration 7.25
Fragment distribution class IA

base of the slab, perhaps indicating the method of break. The un-carved edges are often characterised by either a concave or bulbous appearance. The second type is entirely different and less well represented among the fragments. These are delicate fragments characterised by thin sections and slight convex backs. Whilst the larger thick fragments were found throughout the mid-portion of face C, the thin pieces were only found in an area that runs left-to-centre along the lower edge of the mid-portion.

Condition

The best-preserved fragments from this area are those of the thin-sectioned fracture style. These are in good condition, displaying a high level of surviving surface detail and a rusty-brown colour that is normally associated with fragments from face A. Where surface has survived on the larger fragments, it tends to be in a fair condition, with only minor damage and weathering to the surface detail. A small group of fragments from the lower right-hand side of the area have no remaining surface detail. A number of large mid-portion fragments survive with no remaining carved surface. These fragments are presumed to be internal pieces.

Discussion

That there are two very different types of fragment from the mid-portion of face C is of interest. The larger fragments all bear very similar characteristics and it is clear that their formation process is a relatively simple one. The similar patterns of wear, fracture style, and orientation all suggest that they form a coherent group caused by one destructive event, probably the breaking of the upper portion. The smaller, more delicate fragments have a more complicated history. The stark difference in their size and shape immediately hints at a different biography, but their find locations suggest this need not be the case. They were found during excavations lying flush against the lower portion, having separated from main surface at some point and fallen downward. It is this position (flush with the lower portion) that presumably created a safe environment for their survival, and hence has resulted in their good condition. It is possible that there were more of these thin fragments that were less fortunate, being crushed under the weight of other fragments and debris. The small group of fragments without surface on the lower right-hand side of the area may have originally held this type of carved surface, which is perhaps now lost. Another possibility is that this damaged 'bald' area is the result of a large hammer blow. The lamination of these thin-sectioned fragments away from the main body of the mid-portion is interesting. This may indicate an inherent weakness in the geology or possibly a weakness as the result of percussive damage.

Face A

With only 21 fragments attributed with any confidence to the mid-portion of face A, the reconstruction and understanding of this area is very much still work in progress. Consequently, understanding the fragmentation process of this area at this point is difficult. The fragments are in two main clusters with one other large fragment and a number of other possible floating fragments.

Fracture

The three main fragments/clusters are of a similar large size, but there the similarity ends. On the right hand side, X.IB 355.5 (the animal that completes the motif on the top right of the lower portion) has a concave fracture above the carved surface; the back surface is gently domed; inner edges are thinned and sharp. Fragment X.IB 355.9, the largest fragment from the centre of face A, is a thick piece that angles into the body of the slab and has a convex back with a lip. It is also part of a possible cluster of fragments that may stretch over half of the width of the mid-portion face A. These fragments differ in size but all share orientation and direction in which the back angles into the slab. Fragment X.IB 355.1 (the animal on the left side of the lower portion) forms the centrepiece of the third cluster of fragments. The fragments in this cluster are all of a fairly uniform thickness, with straight edges and slightly concave backs.

Condition

The two fragments that re-fit to the lower portion (X.IB 355.5 & .1) are both in a good state of preservation with excellent surface detail still visible. The carved surfaces are a distinctive rusty-brown colour. Fragments from the X.IB 355.9 cluster are in a lesser state of preservation with considerable damage to the relief and worn carved surfaces. The distinctive rusty-brown colour is absent on these fragments. Rusty-coloured veining can be seen running across the otherwise greyish-brown surface of X.IB 355.7.

Discussion

There is little about their fragmentary nature that draws the mid-portion A fragments together as a coherent group. Although their large size and similar state of preservation characterise some of the fragments, the fracture style often differs. One or two of the fragments re-fit to the lower portion, and it would only be through a testing of these joins that a full appreciation of their complexity could be achieved. The survival of a wide cluster of fragments stretching across half of the width of the mid-portion is interesting, perhaps indicating a horizontal trauma or weakness in the stone prior to a destructive event. That this cluster is in a lesser state of preservation than the other main groups is also of note,

perhaps indicating differing biographies. It is possible that X.IB 355.1 is so well preserved on account of its deposition well away from the lower portion, where there was presumably a great deal of activity detrimental to the survival of the fragments. Similarly, the rusty veining on the X.IB 355.7 hints at staining caused by roots that may also have affected the state of preservation (see Chapter 7.2.1). This fragment was retrieved from just beneath the turf and so the staining could well be from the grass roots. Fragment X.IB 355.9 was presumably part of the cross itself and it is interesting to note the poorer state of preservation and the absence of red staining on this and its associated fragments.

Fragments from face A

The remaining 7216 carved fragments contained in the catalogue are all thought to come originally from face A. At the simplest level, the fragments are grouped within the catalogue according to categories described in Chapter 7.1. The fragments were catalogued in the same order as they appear in Table 7.1 from carved fragments with sculptural pattern (class 1A) to carved non-Hilton fragments (class 4A). The class 4B fragments were examined but were not catalogued in the database.

Class 1A

The 3287 fragments contained within class 1A form the largest coherent group of fragments. These fragments all bear evidence of belonging to the sculptural pattern on face A. For the purposes of the catalogue entries, the carved surface is termed the front, thus giving the fragment orientation across one axis while orientation across the others is often unknown.

Fracture

Given the size of the group, it is difficult to make generalisations about the class 1A fracture style. Nevertheless, over the course of the catalogue process two types of fracture were noted as being well represented: the typical conchoidal; and the flat-backed fracture. The typical conchoidal fracture is characterised by an 'oyster-shell' like appearance with thin edges on most sides, and a near-vertical break along one side, suggestive of an anthropomorphic origin. The flat-backed fracture is a fragment with an unusually flat back, probably the result of natural lamination of the stone.

Condition

The quality of the preservation of the 1A fragments differs greatly across the class, although some generalisations can be made. The carved surface is often in a good state of preservation, although the size of the surviving carved surface varies greatly. Carved areas are often a rusty-brown colour; damaged areas and the back of the fragment are greyish-brown.

Class 1B

This category was originally created as a grouping for fragments of flat-carved surface, of which there are 33. It became clear however, during the cataloguing of the 1A fragments, that it was often impossible to identify the orientation of the smaller fragments. In many cases, the smaller fragments, which appear to be flat surfaces, may in fact have been part of relief forms and thus may not be very useful as a separate class. Only fragments known to be part of an area of flat carved surface were catalogued as 1B.

Fracture

There exists a wide variety of fracture styles in this small group, although neither the typical conchoidal nor the flat-backed fracture are well represented.

Condition

The class 1B fragments are for the majority in good states of preservation. They display similar colouring to the 1A fragments discussed above.

Class 2A

Class 2A fragments have no surviving areas of carved surface yet are identified as being part of the Hilton sculpture by other diagnostic features such as toolmarks, fracture style, bleb stains or scars, surface colour, and geology. They are therefore internal fragments. There are 403 fragments of class 2A.

Fracture

The majority of these fragments are of the typical conchoidal fracture; a significantly smaller number are small chips.

Condition

All of the 2A fragments are recorded as surviving in poor states of preservation. Most of the fragments are a light brownish-grey colour.

Class 2B

Fracture

There is a wide variety of fracture styles for this large group of fragments, although the most common is the small chip. Class 2B fragments are found in the main as small thin flattish chips of stone, many with flat surfaces. Given that there are no carved surfaces on these fragments, orientation is often impossible. There are 3270 2B fragments.

Condition

Nearly all of these fragments are recorded as being in poor condition and of light greyish-brown colour.

Class 3A

Fracture

Irregular-shaped fragments. No coherent fracture styles. There are 331 3A fragments.

Condition

Poor condition. Greyish-brown.

Class 3B

Fracture

Irregular shaped fragments. No coherent fracture styles. There are 123 3B fragments.

Condition

Poor condition. Greyish-brown.

Secondary toolmarks

There are 278 positively identified, and 321 possibly identified, toolmarks recorded in the catalogue (Table 7.2) There were also two positively identified and four possibly identified toolmarks in the class 4 fragments.

The standard toolmark is a rectangular notch c 10mm wide (when measurable), which was identified as deriving from the tool used to redress the original carved surface. The presence of a small number of other rectangular notches c 5–7mm wide may indicate the use of a smaller tool for the removal of some fragments. Given that the orientation of the majority of fragments is not clear, it is

Table 7.2
Number of toolmarks per class

	Toolmarks	Toolmarks possible
Class 1A	164	118
Class 1B	0	0
Class 2A	96	106
Class 2B	18	96
Class 3A	0	0
Class 3B	0	1

not possible to locate the toolmark in terms of direction around the edge of each fragment.

Discussion

That most toolmarks are found within the class 1A category of fragments is not surprising. These, after all, are the fragments with carved sculptural features, which would have presumably been the first to be removed from the surface of the cross-slab face. The remainder of the toolmarks are found among fragments of classes 2A and 2B, fragments which do not bear any carved surface. These must represent a second phase of fragment removal, presumably to begin levelling the surface. That there are not more toolmarked fragments must simply be because the toolmarks do not survive. The probability is that the process of relief removal would be as likely to split and destroy a fragment, as to remove it with a clean toolmark. Furthermore, the presence of a toolmark notch on a fragment would compromise its already fragile condition, and it is likely that many toolmarked fragments probably broke after the event.

Discussion: the fragmentation of the monument

While all of the fragments (1A to 3B) are probably tied together by the simple fact that they were created by the destruction of a piece of sculpture, a thorough examination of each grouping and sub-category of fragment has revealed many separate biographies. Perhaps the most striking aspect is the difference between the opposing sides of the mid-portion, and the difference again between those of the mid-portion and the remainder of the fragments. It is hoped that further reconstruction work on the mid-portion of face A will flesh out our understanding of its biography to a point where the mid-portion can be understood as a whole, and not as two opposing sides. The sorting of the other fragments into different classes according to visual characteristics was an essential part of the postexcavation work on a large body of material. Fortunately, it has also proved useful in understanding the destruction of face A as a whole. Through an examination of the different classes of fragment, the layers of destruction can be seen (illus 7.26). Perhaps most striking is the relationship between 1A/B and 2A/B fragments: 1A/B being the carved surface itself which had to be removed first; and 2A/B being the underlying relief, which was removed at a second stage as part of the re-preparation of the surface. That there is an almost equal amount of fragments in each category should not be seen as a coincidence, rather the result of the separation of two originally related layers of relief. Clearly the IA/B and 2A/B fragments represent two main phases of the removal of carved relief, while class 3A/B represents additional fragment removal before the carving of the 17th-century memorial.

Carved surface face A
1A/B
2A/B
3A/B
Dressed face of material

Illustration 7.26
Schematic section through the Hilton cross-slab face A with suggested layering of fragments

7.2.5 The application of database-driven methodologies to the reconstruction of the monument

DOUGLAS MORTON

Introduction

Upon nearing the completion date for work carried out on the Hilton of Cadboll project for the financial year ending April 2005, it was felt that there were certain analytical avenues that had not yet been addressed. One such avenue was the application of database-driven methodologies to the reconstruction of the monument. Reconstruction up until this point had concentrated solely on the 752 available for manual handling at Queen Street, without reference to the other possibly carved fragments. Furthermore, this methodology had not taken advantage of the unique locational information available for each fragment. Although it was recognised that there may have been a limited amount of bioturbation on the site, which could affect the potential validity of locational information, it was felt that the usefulness of this information should be explored as it was a part of the original remit of the excavations. This pilot study was developed as a response to these shortcomings, and as a means through which to assess the possibilities of future reconstruction methodologies. This work initially took place over 9.5 days during February and March 2005 and was then continued for 30 days between May and August.

Methods

It was initially hoped to test the applicability of the locational and database information in two ways: on fragments of a particular type and on fragments from a particular location. However, time constraints meant that only a portion of the former was possible. Fragments

that have been ascribed the descriptive keyword BAND were selected for this study for the following reasons:

- 1 Apart from the numerous joins that had been made within the mid-portion of face C, a useful number of other joins had already been made between fragments of relief band.
- 2 Because of the chunky nature of these fragments, they are the most likely to fracture in such a way that allows for reconstruction to take place.
- 3 If successful, it was hoped that the reconstruction of these fragments would give an indication of the number of bordered panels on face A, and indeed of the size and shape of the contour of the cross itself.

Fragments were selected and located for analysis using the database KEYWORD SEARCH. A query was designed and performed on the database that would retrieve any fragment that contained the keyword BAND in any of the three potential keyword fields. Although it was recognised that this would return band fragments of different types/widths, it was hoped that the application of the pilot study to the widest sample held the potential

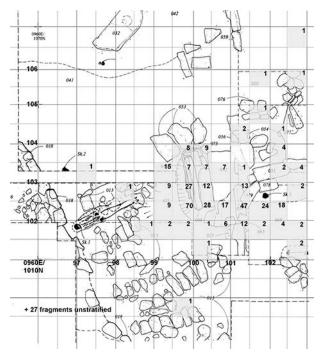


Illustration 7.27

The distribution and numbers of fragments of band in each grid square (the numbers in the top right corner of each shaded square)

ARTEFACT AND ENVIRONMENTAL STUDIES



Illustration 7.28
Joining band fragments

to yield the most results. A query of the database at that point (before completion of the fragment catalogue) produced a sample of 411 fragments. The totals of band per 0.5m grid square are illustrated on illus 7.27.

Fragments were then retrieved either from storage or from the sand trays at Queen Street. Only 255 out of 411 fragments had been marked with the museum accession number (X.IB 355.n) which presented problems for manual handling. Care was therefore taken during this work to maintain the association between the fragments and their bags, especially as ongoing reconstruction work was being carried out at the same time by Ian G Scott,

art-historical analysis by Isabel Henderson and photographic recording by the NMS.

Fragments were then physically sorted into their appropriate grid squares. Due to restrictions on the available surface area within which to work it was not possible to lay the entire 411-fragment sample out in a full reconstruction of the original excavation location. Instead, each grid square had to be worked through one-by-one using a small working area available in the National Portrait Gallery in Queen Street.

Each fragment contained within a grid square was checked both for joins against other fragments from within the same grid-square, and against those from



Illustration 7.29
Joining band fragments

neighbouring grid-squares in all directions, including diagonal. Once all fragments from the selected grid square had been checked with all others in all directions, then that square was crossed off and its fragments were re-bagged according to grid-square and readied for return to their original locations. Fragments contained within isolated grid-squares with no neighbouring squares were briefly examined and then returned to their storage location. Unmarked fragments had to be removed from and placed on top of their small bags to avoid any confusion. Whilst examining the fragments and checking for joins, extreme care had to be exercised to ensure that fragments did not lose their original location. This became very difficult for grid squares that contained large numbers of fragments and slowed down the process greatly. However, all 384 fragments were checked for joins.

Results

The fragments which have been catalogued with the keyword BAND have different widths. There is wide band which is thought to form the outline of the cross, a thinner band about 25mm and 30mm wide and more rounded band which may form parts of plant or animal ornament. These fragments were in varying states of preservation and size, with those best preserved already available for study in the sand trays at Queen Street. Many fragments were unfortunately too incomplete to allow for any categorisation. As a result of this work, several short sections of relief band were assembled, some possibly forming part of the contour of the cross (see illus 7.28 & 7.29).

A total of 22 joins were made, but only three square comparisons produced more than one join. The most numerous joins were found within the 70 fragments from grid square 0995E 1020N which produced eight joins. Several 'similarities' were noted between fragments of band and these were noted on the database, but unless an actual join was made then they were not included here. The full results of the checking for joins in the above grid squares can be seen in the database and archive.

Discussion

It is clear that this wide and varied sample of band fragments is a result of the initial wide database search. Although it was initially felt that such a wide-ranging search would benefit the study, it may be that analysis of those fragments containing BAND as a keyword in Field 1 (278 fragments) would have been easier.

It was originally hoped that the pilot study would inform our understanding of the shape of the contour of the cross, which may well have been damaged beyond recognition. Within the portion of the sample studied, there were several joins and similarities between fragments

of wide, flat relief band of a type normally associated with a margin or edge, which has contributed towards, but not clearly defined, the nature of the cross-face.

The relationship between fragments from neighbouring grid squares is far from clear. The majority of joins and similarities that were found appear to be between fragments from the same grid square rather than from neighbouring squares. This would imply that fragments have not been subjected to any significant post-deposition movement.

The results of the analysis suggest that there is no immediately recognisable pattern to be read from the location of fragments of a particular type. The individual grid squares contain many different types of fragments. This is something that is also borne out by the work of Stuart Jeffrey in Chapter 7.2.3.

While this work has not perhaps forwarded the reconstruction process very significantly, it has highlighted the problems with this type of endeavour. These problems include the lack of marking of the fragments, several people working on the fragments at the same time, the time-consuming nature of this matching process, and the freeform nature of the Pictish carving itself. Further work should perhaps concentrate on the keywords KEY (referring to key pattern) or INTERLACE, which contain some basic geometric shapes which presumably fill panels defined by the band.

Appendix

Summary of the joins found between fragments (full text in archive)

Similarities were also noted but are not included here.

The first phase of work produced the following:

10101015	10151015
12 fragments	2 fragments

One JOIN within grid square 10101015 between X.IB 355.2652 and X.IB 355.2661 to create a 30mm wide flat relief band of a type that could possibly form part of an edge/margin. The length of the relief band when joined is *c* 60mm.

One similarity within grid square 10101015 between X.IB 355.2652/X.IB 355.2661 and X.IB355.2657. X.IB355.2657 has lost nearly all its carved surface, though the scarring appears to be of similar band dimensions. The length of the scarred area is 28mm.

X.IB 355.2660, also from grid square 10101015, is also a wide flat relief band, though it appears slightly narrower at *c* 26mm.

ARTEFACT AND ENVIRONMENTAL STUDIES

10101020	10151020
47 fragments	24 fragments

One JOIN found within grid square 10101020 between X.IB 355.1569 and X.IB 355.1565 to form a section of very badly damaged relief band.

X.IB 355.371 (10101020) and X.IB 355.947 (10151020) are similar fragments of tubular curving band, probably part of plant stem.

X.IB 355.371 (101.01020) and X.IB 355.1042 (10151020) possibly JOIN to form a tubular curving band.

One JOIN found between X.IB 355.747 (10101020) and X.IB 355.604 (10151020) to form part of a c30mm wide flat relief band c102mm long. The band probably formed part of an edge-margin.

10101025	10151020
13 fragments	24 fragments

One JOIN found within grid square 101.0/102.5 between X.IB 355.735 and X.IB 355.783 to form a section of tubular band.

There are similarities between X.IB 355.733/X.IB 355.403, X.IB 355.785/X.IB 355.735, X.IB 355.734, X.IB 355.947, X.IB 355.57 and X.IB 355.1042.

10051015	10101020
6 fragments	47 fragments

One similarity within grid square 10051015 between X.IB 355.2201 and X.IB 355.2196. X.IB 355.2196 joins X.IB 355.5.

10051020	10101020
17 fragments	47 fragments

One JOIN between X.IB 355.571 (10051020) and X.IB 355.371 (10101020).

10051020	10101015
17 fragments	12 fragments

One JOIN found between X.IB 355.2604 (10051020) and X.IB 355.2660 (10101015) to form a section of wide flat relief band c50mm long.

Second phase of work produced the following:

10001020	10001015
28 fragments	2 fragments

One join between X.IB 355.141 (10001015) and X.IB 355.1291 (10001015) to form part of a flat relief band.

9901020	10001020
71 fragments	28 fragments

X.IB 355.309 (10001020) joins X.IB 355.3137 (9951020) to form part of a group of fragments that join to create a section of relief band from the contour of the cross.

10001035	10001030
9 fragments	7 fragments

X.IB 355.3226 (10001030) joins X.IB 355.962 (10001035) to form a section of straight relief band.

9901030
15 fragments

X.IB 355.139 joined to X.IB 355.514 within the grid square to form a section of band *c* 108mm in length. The top surface of the band is 20mm wide.

9951025
27 fragments

X.IB 355.3030 joins X.IB 355.3034; X.IB 355.3032 joins 3034.

10001020
28 fragments

X.IB 355.921 joins X.IB 355.922 within the grid square to form a section of tubular relief band, probably part of animal ornament.

X.IB 355.1298 joins X.IB 355.935 within the grid square to continue a relief band, probably part of animal ornament.

9951020

71 fragments

X.IB 355.724 joins X.IB 355.329 within the grid square to form part of a group of fragments that join to create a section of relief band from the contour of the cross.

X.IB 355.723 joins X.IB 355.725 within the grid square to form part of a group of eight fragments that join to create a T-shaped section of relief band which probably separated at least two panels.

X.IB 355.1122 joins X.IB 355.729 within the grid square to form part of a group of three fragments which join creating a straight section of relief band.

X.IB 355.1125 joins X.IB 355.729 within the grid square to form part of a group of three fragments which join creating a straight section of relief band.

X.IB 355.741 joins X.IB 355.3082 within the grid square to form part of a group of three fragments which join to create a section of relief band from an edge or margin.

X.IB 355.1216 joins X.IB 355.1221 to form a section of relief band *c* 52.2mm in length from an edge or margin, possibly part of the contour of the cross.

X.IB 355.3137 joins X.IB 355.329 to form part of a group of fragments that join to create a section of relief band from the contour of the cross.

X.IB 355.1125 joins X.IB 355.756 to form part of a group of three fragments which join creating a straight section of relief band.

7.2.6 The epigraphy of the inscription on the Hilton of Cadboll cross-slab

GEORGE THOMSON

Introduction

The face of the Hilton of Cadboll cross-slab, which was once carved with a cross and reworked as a 1676 memorial to Alexander Duff and his three wives, bears a rather unusual two-line epitaph in Old Scots (illus 6.1). The last word of the first line is superior to it, there is a dedication of two lines, and four sets of initials lie astride an heraldic shield, in a format common in the



Illustration 7.30
Hilton verso. Inscribed lettering on banner in shield (© Trustees of the National Museums of Scotland, photographed by Neil McLean)

17th century. The second quarter of the shield includes a banner on which is cut the letters TB/N (illus 7.30), but these may not be contemporary with the primary inscription.

This is a report on a study of the lettering on the verso that reads

VEIL
HE THAT LEIVES VEIL DOOES
SAYETH SOLOMON THE VYSE
HEIR LYES ALEXANDER DVF
AND HIS THREE WYVES 1676

and transcribes as

He that lives well does well sayeth Solomon the wise. Here lies Alexander Duff and his three wives 1676.

There are what appear to be point separators between some of the words. The mark between HE and THAT is circular in form, the one between THAT and LEIVES diamond shaped, and between HIS and THREE there appears to be a colon (:). However, there is no logic or consistency to the use of these marks and it is probable that they are due to natural pitting of the sandstone (illus 7.31).

The letters on either side of the shield are:

Α	DVF ¹	(for Alexander Duff)
K	S	
C	V	
Н	V	







Illustration 7.31

Hilton verso. Marks between words resembling point separators (© Trustees of the National Museums of Scotland, photographed by Neil McLean)

The last three presumed to be Duff's wives: the first unknown, the latter two being Christian and Helen Urquhart.

Epigraphy

An analysis was made of the inscriptional lettering, based on a comparison with contemporary later 17th-century Scottish inscriptions, especially those in northern Scotland in the old burial grounds of Balnakeil (Sutherland), Dornoch Cathedral (Sutherland), Dunnet (Caithness), Elgin Cathedral (Moray), Inverness Old High Kirk (Inverness), Latheron (Caithness), Reay (Caithness) and Tongue (Sutherland).

The lettering style is incised roman of medium weight, with a clearly defined V-cut and distinct serifs. The inscription is entirely in capitals, the most common format of this period.² Letters are somewhat taller than broad, with wide D, H, W and X and narrow E, F, R and S. The letter cutting is rather poor (cf Campbell-Kease) and at times almost crude, *vide* K in the initial section (illus 7.32), with letters varying in proportion and, to a lesser extent, size. Even allowing for weathering, it is clear that serif formation is inconsistent. There is no evidence that the mason used horizontal guides and, as a consequence, the lines of lettering are not straight. Letter spacing is extremely variable.

The classical style of roman inscriptional capitals, resurrected during the Renaissance, is characterised

by their distinctive proportions and variation in stroke width that, in turn, was derived from script written with a broad-edged pen (illus 7.33). The mason's awareness of



Illustration 7.32
Hilton verso. Capital K from left side of shield (© Trustees of the National Museums of Scotland, photographed by Neil McLean)

this aspect of letterform is a good indicator of his skill and understanding. In more formal inscriptions we can see a distinctive thickening and thinning of the cut in the S and

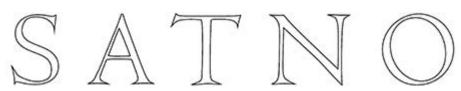


Illustration 7.33
Classical roman capitals showing the variation in stroke width

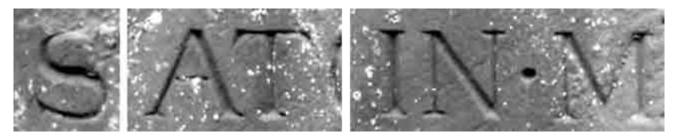


Illustration 7.34
Formal roman capitals from headstone inscription, Haddington 1697 (© George Thomson)



Illustration 7.35
Letters from Hilton inscription (© Trustees of the National Museums of Scotland, photographed by Neil McLean)

O and differential line widths in A, T and N (illus 7.34). In the Hilton inscription there is an attempt to vary line thickness in the E, N, W, O and possibly S (illus 7.35).

There is some inconsistency in the forms of some letters used. The more archaic straight leg form of R is used in the third line in HEIR and ALEXANDER, but the curved leg form is used in THREE in the fourth line (illus 7.36). The form of A used in the four-line inscription

differs from the form with a horizontal bar above used beside the shield (illus 7.37). Differences of this sort are not uncommon at this time. However, the lettering on either side of the shield differs slightly in other ways from that of the main inscription. This could suggest that the mason who cut the shield and adjacent lettering was not the same individual who cut the epitaph and dedication. It is more likely, however, that the differences are due to

the scale of the two sets of lettering as the form of the S, sloping backwards, is very similar in both sections.

The form of the very wide W, comprising two Vs, is typical of northern inscriptions at this time. The use of V for W in VEIL (well) and VYSE (wise) is very uncommon on Scottish graveslab inscriptions. The second occurrence may be explained by the superficial impression of a ligature WY with the V followed by Y but this does not account for repeated occurrence in the first line. The form of Y comprising two, rather than three lines (illus 7.38) is rather unusual and, in the north of Scotland, has been noted only at Reay.

The archaic form of the numeral 6, with the long upturned upper part (illus 7.39) was used later in the north of





Illustration 7.36

Hilton verso. Two forms of capital R used in the same inscription (© Trustees of the National Museums of Scotland, photographed by Neil McLean)

ARTEFACT AND ENVIRONMENTAL STUDIES

Scotland than elsewhere in the country and is the form utilised in this instance.

There are three ligatures. HE in the first line and THE in the second are two of the commonest of the 62 ligatures so far found in Scottish inscriptions.³ However, the ligature VF (illus 7.40) has not been reported before.

The letters TB/N on the banner in the shield are different in both form and proportion from the rest of the lettering. This, together with the serif formation and use of full points after T and B confirms they were not cut by the same mason and are probably not contemporaneous with the main inscription.





Illustration 7.37

Hilton verso. Two forms of capital A from main inscription (left) and left side of shield (right) (© Trustees of the National Museums of Scotland, photographed by Neil McLean)

Conclusions

The lettering on the Hilton of Cadboll stone is typical of roman capital inscriptions of the late 17th century in the northern part of Scotland. Numerous inscriptions in the burial sites used for comparison and listed earlier in this report are of similar style and most have been cut by relatively unskilled masons. As such, the Hilton inscription could be classed as vernacular, rather than formal. This could suggest that the opportunities for masonry training were fewer than those in the more southerly urban areas such as Perth, Dundee, Edinburgh, Glasgow and Dumfries where many memorial inscriptions of the late 17th century exhibit great skill

in their execution. More likely, it could suggest that, in the north, the individuals who cut even the larger memorials were part-time and had to be employed in other fields in order to make a living, as was the case in the rest of rural Scotland.

Notes

- Campbell-Kease 2002; Campbell-Kease mistakenly reads these letters as DYF.
- 2 Thomson 2002.
- 3 Thomson, G unpublished MS.



Illustration 7.38

Hilton verso. The capital letter Y formed of two strokes (© Trustees of the National Museums of Scotland, photographed by Neil McLean)



Illustration 7.39

Hilton verso. Archaic form of the numeral 6 (© Trustees of the National Museums of Scotland, photographed by Neil McLean)



Illustration 7.40
Hilton verso. Ligature VF (© Trustees of the National Museums of Scotland, photographed by Neil McLean)

7.3 Dating and soil

7.3.1 Soil thin section analysis and interpretation

Introduction

Soil micromorphology is a well-established technique in archaeology, with analysis of thin sections increasingly seen as an important extension to both field description and the interpretation of site stratigraphy (Davidson & Simpson 2001, 169). Analysis of micromorphological soil features can not only identify elements relating to human activity which may not be identifiable during excavation, but can also allow these to be set in context with both the natural pedogenetic and disturbance-related processes to which an archaeological site is subject, both during and after its occupation. When coupled with more traditional spatial and stratigraphic archaeological analyses, soil micromorphology can therefore address key archaeological questions on, especially, the mechanics of site formation and the nature of the soils and sediments, and therefore the cultural environment, of the site in question.

At the Hilton of Cadboll site, soil thin section samples were taken from two main areas of interest: from deposits in three key phases, located to the east of the cross setting in the main section line A–B along the 'deep central trench' (see illus 3.4); and from deposits beneath the discarded collar stone (032) in the north-west of the excavated area. In addition to providing a contribution to the overall understanding of anthropogenic activity on the site and the local depositional environment,

these specific sampling points were selected in order to address several key issues for site interpretation. Firstly, thin section samples were deliberately located alongside those taken for Optically Stimulated Luminescence (OSL) dating, in order to provide supporting information on the soil environment and to aid interpretation of dates obtained. Secondly, thin sections were located with the intention of providing information on specific questions of site formation which also have a bearing on the interpretation of the event sequence, and which may thus also influence interpretation of the OSL dating programme. These include, particularly, rates of soil accumulation within particular contexts and the identification of micro-layers within them, and the nature and definition of key context boundaries. These aims have successfully anticipated key issues which have arisen during both excavation and later interpretation, concerning especially the chronology of the cross setting and its subsequent disturbance, and the interpretation of the OSL dating sequence and its integration with other sources of evidence for site formation throughout the

In addition to these general objectives, thin section analysis was aimed at answering several context-specific questions especially significant to the interpretation of the site:

- 1 Does context (026) show evidence of bioturbation, and, if so, might this compromise the integrity of the radiocarbon dates?
- 2 Is there evidence that context (019) accumulated slowly, therefore providing a possible explanation for the range of dates provided both by the pottery and OSL sequences?
- 3 Is there evidence that context (016) derives from (019), and possibly also from (030)?
- 4 Does (007) represent a part of the cross-slab re-carving event at the point of the OSL sample?
- 5 What is the nature and extent of the disturbance seen in context (041), as seen in Slide 2A?

Methodology

Undisturbed samples were collected in Kubiena tins (70mm×50mm×40mm), by John Duncan (GUARD), and thin sections prepared from these at the School of Biological and Environmental Science, University of Stirling, following the procedure of Murphy (1986). All water was removed from the samples by acetone exchange and confirmed by specific gravity measurement. Impregnation was conducted using a polyester crystic resin. The blocks were cured for three to four weeks culminating with four days in a 40°C oven. Blocks were sliced, bonded to a glass slide and precision lapped to 30µm, with cover slipping completing manufacture of the section.

The manufactured thin sections were described using an Olympus BX-50 petrological microscope and by following the procedures of the International Handbook for Thin Section Description (Bullock et al 1985) and the most recent procedures of Stoops (2003). This allows systematic description of soil microstructure, basic mineral components, basic organic components, groundmass and pedofeatures. Additional mineralogical investigation was undertaken using the atlases of MacKenzie and Guilford (1980) and Adams et al (1984). A range of magnifications (×10-×400) and light sources (plane polarised, crossed polars and oblique incident) were used to obtain detailed descriptions and these were recorded using a standard table (Table 7.3). Interpretation of the observed features rests on the accumulated evidence of a number of workers, notably Courty et al (1989), Fitzpatrick (1993) and Stoops (2003).

A detailed discussion and interpretation of significant soil features seen in each thin section sample is presented below chronologically by context, with reference to the phasing discussed in Chapter 3. Within this section, description of key soil characteristics is discussed with reference to the several key issues for site interpretation around which the thin section sampling programme was based. Finally, the conclusion gives a summary of these key points and their bearing on overall site interpretation.

Discussion

Profile 1: Phase 1 deposits Context (023): Slide 1B

Context (023) is sampled in thin section over the bottom two-thirds of Slide 1B, and was described in the field as a yellow sand with brown and orange mottles. This is confirmed in thin section, with a groundmass typical of a medium to slightly coarse sand, largely made up of quartz grains (av 300-600 microns), notably few feldspars, some sandstone and siltstone fragments and small traces of other common minerals (see Table 7.3). This coarse quartz fraction is generally monocrystalline, sub-angular to angular and shows occasional traces of weathering. Occasional polycrystalline grains generally show sutured boundaries, characteristic of quartz from a metamorphic source (Adams et al 1984, 5). This coarse fraction is, however, not particularly well sorted, with several large (max 7000 microns) sandstone fragments present towards the top of the deposit, and smaller, slightly degraded fragments of the same seen at intervals down the sample. While individual mineral grains show some signs of heating, these appear to be intrusive, with the overall deposit showing no sign of heating.

The fine mineral and organo-mineral material seen in association with this coarse grain fraction also indicates a mixed deposit. This ranges in colour from light brown to orange and reddish-brown to occasionally light greyish brown, colour changes which indicate varying levels of organic content among the fine mineral fraction, and thus a variable origin for the material. The distribution of this material is patchy and sparse, with small concentrations of material randomly located throughout the deposit, creating localised areas of intergrain microaggregate microstructure. The majority of the sample, however, shows a general lack of this fine fraction, with only minimal amounts of fine material seen partially surrounding the quartz fraction to create a generally chitonic related distribution pattern.

Closer examination of this fine material shows that it is generally formed into discrete, small (av 10–20 microns) spheroidal to ellipsoidal and occasionally mammilate units, indicative of excremental material produced by soil fauna such as mites and/or worms. Some of these are degraded into coalesced masses while some areas are still extant, again indicating a mixed deposit. This excremental material indicates a degree of biological activity which would be typical of a soil at least partially derived from a midden incorporating anthropogenic material.

Anthropogenically-derived materials are themselves present in small quantities. Several fragments of identifiable wood charcoal are present at the base of the slide and one at the top, near the presumed boundary with context (026) above. These are fairly degraded, as are two small fragments of bone. Occasional pieces of lignified plant material of similar structure are also seen. Small (av 200 microns), generally rounded, sometimes cracked pieces of black amorphous organic material are present throughout the slide, but in the greatest concentration near the base and the top of the context, as is the case for the charcoal. These are likely to represent burnt organics but cannot be identified as to origin. Unburnt plant-derived material is also seen, with occasional cell residue and parenchymatic material identifiable, mainly within the redder areas of fine organomineral groundmass. Occasional limpid red to yellow-orange amorphous organic fragments are also seen in association with these areas, as are a very few phytoliths.

Iron movement is a feature of this context, with the larger sandstone and some metamorphic and siltstone grains showing either Fe concentration or slight Fe depletion at the rims. Particularly towards the middle of the sample, several infillings and coatings of bright reddish amorphous material within the fine fraction indicate Fe concentration. This is likely to be related to illuviation processes throughout the deposit. Such processes are also indicated by the small reddish-brown coatings and 'compound' coatings (ie those consisting of superimposed discrete layers) of clay and silty clay (illus 7.41,1) seen partially surrounding several grains towards the base of the slide, and also occasionally running over several adjacent grains to create a feature known as a 'link capping' (Bullock 1985, 99) (illus 7.41,2). Such accumulations of

fine material, particularly those comprising more than one layer, can indicate a change in environment and the subsequent movement of fine material down-profile. Within this deposit, water movement is the most likely explanation for these pedofeatures. However, slight evidence of more physical disturbance processes is seen in the presence throughout the context of very small, dark brown, organic coatings on the surface of some of the coarse mineral grains. These small coatings are recorded, to a greater or lesser extent, in all thin section samples from Profile 1 (Table 7.3).

The overall appearance of this sample indicates a mixed deposit of sand, incorporating material from different sources plus a small amount of anthropogenic material. This is in keeping with the archaeological interpretation of this context as a wind-blown sand layer whose occasional anthropogenic inclusions indicate that it is likely to have partly accumulated during a period of Pictish activity in the near vicinity. While the poorly sorted nature of the material may be taken to indicate a 'dump', the slight zonation of all the features noted above (eg the concentration of anthropogenic inclusions at the base and top of the sample, the textural pedofeatures towards the base, the slight concentration of Fe-rich material to the middle) rather indicates a gradual build-up of probably windblown material, possibly over some considerable time-frame which allowed for the slight environmental changes indicated by the pedofeatures described above. A gradual build-up is also indicated by the degraded condition of much of the anthropogenic material and several of the larger sandstone fragments. These features tie in well with the wide date range given for this context by OSL.

There is an indistinct boundary with context (026) above, which is discussed further below.

Context (026): Slides 1B and 1C

Context (026) is described in the field as an orange sand with dark brown patches and decaying sandstone, and is interpreted as a second wind-blown sand deposit. Context (026) is seen in two thin section samples: the top third of Slide 1B, where the base of the context is seen to physically seal context (023) described above, and the bottom third of Slide 1C, where the top of the context is seen, physically sealed by context (019). These do not represent a vertical sequence, however, and it should be noted that the base sample (Slide 1B) is located physically beneath the cut of pit (012), while the top of context sample Slide 1C is taken approximately 0.45m to the east and to the east of the pit cut. Some variation between slides of the character of, especially, soil pedofeatures may therefore be attributable to this spatial variation.

Looking first at the base of (026) in Slide 1B, it can be seen that the mineralogy of this context is broadly similar to that seen below in context (023), a medium sand consisting mainly of quartz grains. The context, as seen in this slide, is also poorly sorted, with several large metamorphic and sandstone fragments seen. Overall, the similarity of the coarse mineral fraction with (023) is such that no clear boundary can be discerned between contexts: in particular, it is noted that while 'degraded sandstone fragments' are specified in the field description of context (026), in this slide, these are actually more prevalent throughout (023). This diffuse boundary may also indicate a slow rate of deposition for this material onto (023), and the presence of degraded sandstone throughout both layers may support the view that the degraded sandstone noted in (026) is not derived from the Hilton cross-slab itself (James 2006, 10).

Differences between these windblown contexts can, however, be identified within this slide. This (026) quartz fraction appears slightly more weathered than that seen in (023) (see illus 7.41,2), and slight differences in mineral composition can be seen (Table 7.3). Moving up the context into Slide 1C, the coarse mineral fraction becomes more well-sorted with a more uniform medium sand grain size similar to (019) above. As seen between (023) and (026), this results in the appearance of a diffuse boundary between (026) and (019) in Slide 1C (discussed below).

The fine mineral and organo-mineral fraction of (026), as seen in both the lower and upper parts of the context, is broadly similar in nature to that seen in (023), being patchily distributed and similarly excremental in nature. However, the (026) fine fraction is notably denser and seen in generally larger patches, resulting in a more generally intergrain microaggregate microstructure and a groundmass with a more mixed appearance. The presence of some large voids within (especially) the lower part of the context (Slide 1B), and the recording of animal burrowing in the vicinity (James 2006, 10) has raised the possibility that some of this mixed appearance may be the result of larger-scale animal disturbance. However, the upper part of this layer (Slide 1C) shows little sign of such disturbance, with, for example, no sign of cracking and/or distortion of the large patches of Fe-rich amorphous organic material seen throughout this part of the context (discussed below). It would therefore seem possible that the disturbance features within (026) at the base of the context may be related to the sample's position just beneath the activity related to the cutting of pit (012). Given both this and the excremental nature of the groundmass as a whole, the thin section evidence would indicate that variability in the radiocarbon dates obtained from this context may be either the result of a very gradual build-up of material, perhaps indicated by the more weathered nature of the coarse fraction, or, if disturbance-related, the result of the soil mesofauna action seen throughout the context (see illus 7.41,5).

In contrast to that seen in (023), the fine material fraction is generally more uniformly red to dark reddish brown in colour. This is possibly related to the outstanding feature of this context: the very high concentration of iron-rich mineral and iron-rich amorphous fine material seen throughout the context, mainly seen in close association with both burnt and unburnt plant-derived materials and most clearly visible towards the top of the context in Slide 1C. Here, several large patches of Fe-rich, mainly organic fine material are seen surrounding patches of quartz grains (illus 7.41,3) and/or single large sandstone pieces. Within these patches are located frequent cell residue, some fungal spores, and frequent yelloworange patches of degraded amorphous organic material retaining a residual cell structure. These patches are also linked with burnt material, with several similar areas of individual heated quartz grains held within a matrix of this Fe-rich amorphous red organic material and black, presumably burnt, amorphous organic material. These formations appear to be intact portions of mixed, partially burnt plant material. The concentrated, discrete nature of these patches indicates that they are more likely to represent extant pieces of incorporated midden material, rather than iron-rich areas created through illuviation processes (illus 7.41,4). The survival of these features is also an indication that physical disturbance, for example by animals, has not unduly affected at least this part of the context. Were this the case, features such as these concentrations of plant material would be likely to be smaller and fragmented, and the iron-rich fine material infillings around them stretched and distorted.

As seen in (023), small amounts of other anthropogenically-derived materials are seen throughout the context, and reflect that noted in the field. One large (17×3mm) piece of slightly degraded, unburnt bone, plus several smaller bone fragments, are seen in Slide 1B (illus 7.41,5). Small fragments of charcoal are seen in both slides, and lignified tissue in Slide 1C. Black amorphous organic material pieces are notably larger in the base of (026) than the top of (023) (Slide 1B), and appear to increase up-context until the appearance of the larger burnt areas described above. Smaller, individual areas of red to orange limpid amorphous organic material are also seen, again, mainly in the upper portion of the context adjacent to the large, Fe-rich areas of plant remains (illus 7.41,6).

While iron movement is clearly a feature of this context, other significant pedofeatures indicative of illuviation activity or other disturbance, such as the distinctive compound coatings seen in (023) below, are absent, again suggesting that physical disturbance of this context, and also any material physically above, has been at a minimum. The only slight evidence for physical disturbance are the few small organic coatings seen. Some Fe depletion and accumulation within sandstones

and (especially within Slide 1B) metamorphic grains is seen, as are some amorphous Fe-based nodules. Again, these are indicative of Fe movement, probably a result of illuviation. Overall, this context is mineralogically similar to (023) below, and can be described as a wind-blown sand with some considerable anthropogenic influence. Although there is little sign of zonation of materials which may indicate a build-up rate for this context (except perhaps the location of the Fe-impregnated plant residues described above within the upper part of the context), the generally more weathered appearance of the coarse mineral fraction may suggest a gradual accumulation rate for this context. As (026) shows little sign of physical disturbance, it may be that this gradual accumulation provides an explanation for the variable radiocarbon dates given for this context.

Profile 1: Phase 2 deposits

Context (019): Slides 1C and 1D

Context (019) is well represented in thin section, with the upper two-thirds of Slide 1C showing the base of the context (physically sealing wind-blown sand (026)) and the entirety of Slide 1D showing a section through the complete upper half of the context, just below its physical sealing by sandstone layer (030). As seen in (026), however, the samples are not in vertical section, with Slide 1D located approximately 0.3m to the east of Slide 1C.

Thin section analysis of these sampled portions of (019) clearly shows that this context is composed of a series of smaller layers or lenses of distinctly differing material. Given the varied sampling points taken from this context and the fact that not all of the context is sampled, it is possible that additional layers and/or a more complex microstratigraphy may have been present. As layering such as this is a strong indicator of a gradual accumulation process, it should be borne in mind that a complete event history may not have been sampled in thin section. Context (019) is therefore divided into three layers: a lowest Zone A, sampled in Slide 1C, illus 7.42,7) and also seen in the lowest portion of Slide 1D; a middle Zone B, seen in the middle section of Slide 1D (illus 7.42,8); and an upper Zone C, seen in the topmost section of Slide 1D (illus 7.42,9 & 7.42,10).

Context (019) was described in the field as one deposit: a brown sand with occasional charcoal inclusions. Mineralogically, each zone of (019) is fairly similar both to the other zones and to the wind-blown sand deposits (023) and (026), which Zone A of (019) seals at this point. Slight mineralogical differences are seen in the higher percentage of small fragments of minerals such as muscovite and hornblende seen in areas of (019). These are generally related to the slightly higher percentage of organomineral groundmass (within which they are

largely incorporated) present in, particularly, Zone B of this context (see below). The boundary between context (019) and context (026) below is diffuse, which would tend to indicate a gradual build-up of material rather than the dumping activity implied by the activity of midden redeposition. A gradual build-up of material may also be indicated by the greater degree of weathering seen in the coarse mineral fraction seen in both (019) in Slide 1C and throughout (019) Zone C in Slide 1D. A small percentage of quartz and especially feldspar grains in both slides shows clear surface alteration, pitting, and occasionally Fe impregnation along fissures. However, this need not be the result of in situ grain degradation, but may have taken place prior to the formation of (019). As seen in (026), the deposit is only averagely sorted, with smaller quartz grains tending to be seen in the areas of denser organomineral groundmass characteristic of Zone B (discussed below) and occasional large fragments of sandstone and schistose quartz seen especially within Zone C. It is likely that these fragments may be derived from layer (030), which seals (019) just above the top of this sample point.

Clearer differences between each zone of (019) and the wind-blown sand layers are seen in the fine material fraction. This is generally light-to-mid- to dark brown and is largely excremental and, taking the context as a whole, is seen to be far more prevalent in (019) than either (023) or (026). It is in this fine organomineral fraction that the definite zonality seen within (019) is most clearly expressed. At the base of the context (Zone A in Slide 1C and also the base of 1D), this fine material is fairly patchy and sparsely distributed, creating a largely singlegrain microstructure with a generally chitonic related distribution. However, from just above the base of Slide 1D (and thus approximately midway through the context), this fraction increases notably, creating the strongly intergrain microaggregate microstructure and enaulic related distribution which marks the boundary with Zone B. Zone B is also darker in colour, indicating a higher organic content, and notably, the majority of charcoal inclusions are also present in this area of the context. Just below the top of the slide, this fine material fraction lessens abruptly at approximately at the point at which the larger sandstone and schistose quartz fragments noted above begin to be seen (illus 7.42,9 & 7.42,10), and thus marks the boundary with Zone C.

Depending on the moisture content of the soil, such lensing may not have been visible during excavation, but certainly suggests a slow, perhaps even intermittent rate of deposition for the material in this context: the boundary between the lower Zone A, characterised by largely mineral material, and the more organomineral-rich central Zone B is the clearest boundary seen yet in the thin section sample set. This has a clear bearing upon the interpretation of both the OSL date and the pottery

assemblage from this context, for it would appear that the wide date range given may be a valid reflection of the slow accumulation of this layer.

The range and concentration of anthropogenicallyderived inclusions also partly reflects this lensing within the context. A few fragments of charcoal, lignified tissue and other burnt or partially-burnt black amorphous organic fragments are present in the lower part of the context (Zone A in Slide 1C), as are small amounts of cell residue and orange-to-red amorphous organic material within the excremental fine fraction. Occasional small areas of the organic fine fraction within this zone are dominantly limpid and reddish in colour, which may be related to the diffuse boundary between (019) and the iron-rich context (026) below. These are likely to represent degraded plant materials. However, greater concentrations of all these inclusions are seen in Slide 1D and most particularly in the wide, dark central Zone B described above. Notably higher in concentration are charcoal fragments and large black amorphous organic materials (illus 7.42,8). Parenchymatic tissue, absent from Slide 1C, is present in this zone. One small bone fragment is seen near the top of the context in Zone C. Heated stones, however, are not noticeably more prevalent in this lens than elsewhere in the context.

Unlike the wind-blown sand deposits, illuviation and disturbance pedofeatures are rare in this context. Occasional Fe accumulation and depletion is seen in some of the larger sandstone fragments, and there are occasional Fe-rich nodules. These are slightly more prevalent towards the top of the context. No clear large-grain coatings are seen, although there is a small presence of dark, fine organic coatings, similar to those seen elsewhere in the sample set. A general lack of these features may be taken to indicate minimal disturbance to the soil profile in this area, but it is possible that this lack of downward movement of fine material may also be related to the assumed lack of fine material in the sandstone layer (030) directly above. However, with no thin section sample of this material available, this is conjectural.

Context (019) is interpreted as an organic-rich layer derived from redeposited midden material from nearby settlement (James 2006, 16, 27–8). The deposit is dated by an OSL sample taken at the top of the context (adjacent to Slide 1D) to AD 1140 ± 70 , notably earlier than the 13th- to 15th-century dates provided by the pottery assemblage. Given the clear lensing seen throughout the context in thin section, an extension to this interpretation is that this redeposition is perhaps likely to have taken place as a series of at least three distinct events, and therefore that context (019) is likely to have accumulated over a relatively long period of time, a fact that may explain the discrepancy between the dates provided from the pottery and OSL. However, without a complete thin section

record from this deposit, further interpretation of the length or complexity of this sequence is not possible.

Profile 1: Phase 2 deposits

Context (016): Slide 1A

Context (016) was described in the field as a mid-brown sand, and as the primary fill of pit cut (012), seen in section on the east side of the cross-slab.

The mineralogy of (016) is relatively similar not only to context (019), but also to the other contexts so far examined in thin section: a medium sand deposit, dominated by quartz grains. As seen in other contexts, this quartz is generally subrounded and subangular, generally monocrystalline but with some compound and polycrystalline grains. As seen in especially the lower 'lens' of (019), this coarse fraction shows strong signs of weathering, with pitting and alteration visible on the surface of quartz and especially feldspars (illus 7.42,11).

A closer look at the mineral makeup of (016), however, shows less similarity with both (019) and the two windblown sand deposits. Feldspars and perhaps also biotite are notably more prevalent in this context. This is a very minor difference, and more notable is the lack of larger sandstone fragments, which are a feature of Zone C in (019) and especially (030) from which this deposit is also assumed to originate. By contrast, (016) lacks any larger rock fragments and is noticeably well sorted.

This high level of sortedness may be related to the low occurrence of fine mineral and organomineral material concentrations in the slide (as the opposite is noted for the less well sorted (019) above). There is very little fine material present in the deposit, especially within the lower half of Slide 1, which is almost entirely composed of a single-grain microstructure and monic related distribution. Moving up the slide, a fine mid-brown organomineral fine fraction gradually increases in concentration, with one large (7mm) discrete concentration of this material located at the very top of the slide. This material is similarly excremental in character to that seen in both (019) and other sampled contexts, indicating a degree of biological activity.

Anthropogenically-derived inclusions are similarly rare in this sample. Occasional black amorphous organic fragments, generally < 200 microns, are seen throughout. One piece of lignified material is identified. Occasional, similarly small patches of limpid yellow-orange amorphous organic material are seen, occasionally in association with small pieces of cell residue, and mainly in the vicinity of the discrete area of organomineral material. Within this organomineral area, very occasional fragmentary diatoms can be identified. A very few slightly heated mineral grains can be seen. Textural pedofeatures are likewise largely absent from this sample, with some small amorphous Fe-impregnated nodules of material

seen, and some very slight Fe depletion in individual, mainly siltstone, grains.

Two interpretations of the stratigraphic position of (016) have been suggested which have serious implications for the interpretation of the sequence of events regarding the chronology of activity around the cross-slab. While the field interpretation concluded that (016) was the second fill of the original setting an alternative explanation may be that (016) was the primary fill of a 'robber pit' which completely truncated the original cut for the cross-slab setting. An OSL date of AD 1120 ± 70 obtained for (016) may therefore either date the original setting of the crossslab, or its later disturbance (see Chapter 3). The second of these interpretations concludes that the origin of (016) is slumped material from contexts (030) and especially (019) at the side of the pit, a view supported by the similarity in colour and composition of (016) and (019) in the field, and also possibly by the similarity in OSL date between these two deposits. Thin section interpretation of the nature of this deposit, and especially its similarity to Context (019), is therefore a key issue for this analysis. Context (016) is seen in thin section in Slide 1A, taken from the central area of this deposit.

While no microlaminations which may be indicative of gradual slumping processes were noted, the position of the sample point, towards the centre of the deposit, may mean that this effect may not be seen. The very well sorted nature of the deposit would appear to be more indicative of a gradual slumping of material within one size range, rather than a deliberate backfill event. However, given the similarity in size fraction of all the sand deposits through which cut (012) is taken, such a backfill may in fact appear very similar.

While differences in the mineralogy of contexts (016) and (019) may be fairly minimal, an overall view of these contexts sees noticeable differences in the distribution and concentration of the fine, especially organomineral fraction, plus the differences in occurrence of anthropogenic features such as charcoal, which would seem to indicate that context (016) is unlikely to be derived from either (019) or (030). However, the variability also noted between the individual 'lenses' in context (019) (see above) means that this is not necessarily the case. While there is a great variation in soil characteristics between the darker, more anthropogenically-influenced Zone B of context (019) and context (016), the differences between (016) and Zones A and C of (019) are in fact minimal. It should also be remembered that, despite its prominence within the deposit, Zone B within (019) appears to take up only approximately a fifth of its depth. It is therefore more than possible that the majority of (019) may be composed of a relatively organomineral-free microstructure that may indeed have contributed to slumping into the robber pit, and, indeed, the almost definitely structurally looser sand indicated in this lower area of the context would have

been more likely than the more organic fraction to slump in this way. Despite this, if (016) is indeed derived from (019), it seems unusual that so little evidence for material from this distinctively dark Zone B area is seen in (016).

Thin section evidence for the relationship of these two contexts is therefore equivocal, with both similarities and differences seen between the contexts. It should therefore be remembered that, despite the detail of analysis provided, both contexts are represented here in thin section by only a fraction of their total content.

Context (007): Slide 1E

Context (007) was described in the field as a mid-brown sand containing carved stone chips. It is seen in the lower two-thirds of Slide 1E taken adjacent to the position of the OSL sample discussed above, and is sealed by context (002), sampled in the top third of the slide.

The contrast between these two deposits is immediately clear in this slide: the boundary seen between contexts (007) and (002) is the clearest yet seen within this sample set. Context (007) is dominated by several large (max 13×.25mm) sandstone fragments, the majority of which are positioned horizontally or vertically adjacent to one another to create a clear boundary at the top of the context (illus 7.42,12 & 7.43,13). At high (×10–×40) magnification, these large sandstone fragments are seen to be similar in composition, consisting of mainly quartz grains with muscovite and small veins of occasionally iron-rich metamorphic material (illus 7.43,14 & 7.43,15). They appear in a range of sizes, with some of the smaller pieces seeming slightly degraded and possibly fragmented from the larger pieces.

Aside from these large sandstone pieces, the overall mineralogy of context (007) is similar to that seen in previous deposits. Notable, however, is the high degree of weathering and poor sorting seen in (007), which results in a larger proportion of small quartz grains and some compound quartz fragments than that seen within the generally uniformly sized medium sands of earlier deposits. Again, this preponderance of smaller grain sizes appears to be connected to a higher concentration of fine mineral and organomineral groundmass. In context (007), a fine mid-to-dark and occasionally slightly reddish brown fine material fraction is distributed fairly evenly throughout the context, creating an intergrain microaggregate microstructure and enaulic related distribution. This is dominantly excremental. With the possible exception of the organic-rich lens of (019), this context has the highest organic fraction of any so far seen in this sample set.

Anthropogenic inclusions are similarly frequent. Several pieces of charcoal are present, including one very large (2500 microns) fragment (illus 7.43,16). There are frequent, generally small inclusions of black amorphous organic material, and one distinctive dark reddish-black

amorphous organic fragment containing small mineral inclusions. This is characteristic of a possibly turf-derived and burnt material (illus 7.43,17); however, such a small inclusion of this kind does not indicate a surface at this point in the sequence. Smaller fragments of light yellow and orange amorphous organic matter are also present, as are fungal spores, lignified, parenchymatic and cell residue material, and occasional heated mineral grains. No bone is present. There is some indication of iron movement throughout the deposit, with occasional depletion in small siltstone fragments, and occasional iron-based nodules present.

Context (007) was interpreted in the field as a spreadlike continuation of the debris relating to the re-carving of the Hilton cross-slab packed within the upper fill of pit cut (012). However, the precise nature and extent of this layer, both in terms of its actual relationship to the pattern of stone debris and its differentiation from the very similar context (002) above, has proven to be a key issue for the interpretation of site chronology at this point. Postexcavation spatial analysis indicates that very few crossslab fragments were recovered beyond pit fill (011), and an OSL date taken from (007) is approximately a century earlier than that historically indicated for the re-carving of the slab (James 2006, 21). It is therefore suggested that, rather than representing a spread associated with the re-carving event, (007) may be unrelated to this disturbance and may instead relate more closely to postmedieval debris layer (002) above.

However, the presence of this density of sandstone fragments would seem to indicate that (007) as sampled at this point does indeed represent a spreadlike continuation of the re-carving event recorded in (011). But other aspects of mineralogy, fine material characteristics and even anthropogenic inclusions, (007) show some significant similarities with (002), especially (002) as seen at the top of Slide 1E, and similarly significant differences with the generally fairly similar sandy deposits described previously. Firstly, although large sandstone fragments are absent from context (002) in Slide 1E, one similarly sized (although slightly different in internal structure - see above) sandstone fragment is seen at the base of (002) in Slide 1F (illus 7.43,18 & 7.43,19). The generally weathered and notably poorly sorted character of context (007) is also seen in context (002). Finally, the high concentration of both fine organomineral material and anthropogenic inclusions seen in both deposits give context (007) more in common with context (002) (described below) than with any of the previous deposits sampled.

While the distinctive sandstone fragments seen in context (007) would seem to connect the deposit to the re-carving event, other aspects of its micromorphology draw closer parallels with the later context (002). A closer look at the soil matrix material surrounding the 'stone

chips' concentrated in pit fill (011) might further resolve this issue – is this material similar in composition to (007) as described here? What is its similarity to context (002)? A further possible contribution to the interpretation of these deposits would be to compare the mineralogy of the sandstone fragments seen in this context to those securely identified as coming from the Hilton cross-slab, either through comparative work with available thin sections of the upper portion of the cross-slab, or perhaps through the preparation of a thin section of one of these (007) fragments itself.

Profile 1: Phase 5 deposits

Context (002): Slides 1E and 1F

Context (002), described in the field as a brown sandy soil with stone chips and angular rubble (James 2006, 24), is essentially a topsoil deposit present across the whole excavation area to a depth of 0.15m. Context (002) is interesting in thin section for the comparative material it provides with which to assess the origin of spread (007) and the subsequent interpretation of the OSL date from this area, as discussed above. Context (002) is therefore seen in two thin section samples, with the base of the context seen sealing (007) in the top third of Slide 1E, and the entirety of Slide 1F showing a section through a slightly higher portion of the deposit, located immediately above the OSL date discussed above.

The mineralogy of contexts (007) and (002) is generally similar, as discussed above and recorded in Table 7.3. While the coarse mineral fraction is still dominated by quartz, (002) has a relatively lesser concentration of quartz fragments within the sample as a whole compared to earlier medium sand deposits, and a greater proportion of smaller grain sizes. The coarse fraction as a whole is generally poorly sorted, but absence of the range of large sandstone grains seen in (007) makes this less obvious a feature than noted for (007).

The single large sandstone fragment recorded in context (002) is seen at the base of Slide 1F, and is 18×9mm in size. This fragment appears to be of a slightly different origin than those seen in context (007), possibly supporting the interpretation that the sandstone inclusions in the latter are indeed derived from the Hilton cross-slab (again, a thin section example of a known fragment from the slab could perhaps clarify this). The fragment seen in (002) shows frequent hornblende and muscovite inclusions largely absent from the sandstones in context (007), and the quartz grains show a pronounced horizontal elongation, giving the fragment an appearance slightly similar to sheared quartz (Adams *et al* 1984, 5) (illus 7.43,18 & 7.44,19).

As seen in (007), a fairly high concentration of fine mineral and organomineral material is seen. This appears more mixed than in (007), with some discrete areas of

light, mid- and dark brown material seen, particularly towards the top of Slide 1F, nearer to the modern turf layer (illus 7.44,20). This is dominantly excremental. Anthropogenic inclusions are similarly frequent, though not quite so much as seen in context (007). Charcoal and black amorphous organic material is present in small quantities, two of which show small mineral inclusions, possibly indicating a burnt fragment of turf-based material. Some small concentrations of reddish amorphous organic material are seen throughout and indicate degraded plant material. These are often in association with extant cell residue material (illus 7.44,21). Unsurprisingly, there are frequent parenchyma, particularly towards the top of the context, and some phytoliths in the fine material fraction in Slide 1E. A tiny bone fragment is noted at the interface with (007). An interesting feature of this context is a large, discrete patch of dense mid-brown organic and organomineral material containing phytoliths, fungal spores and cell residue, the density of which stands out among the generally open excremental soil fabric (illus 7.44,22). Much smaller fragments of similar material are seen throughout the top portion of the slide. This is most likely to be a fragment of turf-based material which, given its position at the top of Slide 1F, is most likely to be recent.

Adjacent to this turfy patch is the most distinctive feature of Slide 1F: a large, hollow nodular formation of amorphous organic material, varying between bright red to black in colour and showing some extant cell structure (illus 7.44,23). This is a plant pseudomorph: a plant fragment (here, most probably a root) which has become impregnated with iron to such an extent that the now almost entirely iron-based feature retains the structural appearance of the plant fragment itself. Throughout this top portion of the slide, there are also several iron-rich areas of amorphous organic infills and slightly iron impregnated compound grains, indicating a degree of illuviation at this level in the context.

Profile 2: Phase 1 deposits

Context (041): Slides 2A and 2B

Context (041) is a wind-blown sand deposit located to the north of the deep central trench, and is interpreted as an equivalent deposit to (026) in Profile 1 (see Chapter 3). Context (041) is sealed by a fairly similar sand deposit (042) (see below) which is in turn physically sealed by a large broken collar-stone of yellow sandstone (032), along the break of which the sampled section was located. Context (041) is sampled in both thin sections taken from Profile 2, with Slide 2A entirely located within (041), and Slide 2B providing a slightly overlapping sample point to the left of this, within which context (041) is seen in the lower part of the slide, and context (042) in the upper.

While context (041) is generally similar in character in both slides, the defining feature of Slide 2A, and thus context (041) as a whole, is the disturbance seen extending vertically throughout the right-hand side of Slide 2A, which can clearly be seen with the naked eye and is expressed as a darker colour to the groundmass (illus 7.44,24). There are two likely origins for the introduction of this material: firstly, animal disturbance by either burrowing animals or the activity of soil fauna such as mites or worms; and secondly, physical soil disturbance through human activity, perhaps associated with either the deposition or smashing in situ of the collar-stone (032). A third possibility, impossible to resolve completely using the limited area of the thin section sample, is that this change in material represents a different deposit cutting (041). Given that this disturbance was not noted during selection of the sampling position, this seems unlikely, and the undulating (although sharp and clear) boundary between the two materials further identifies this darker area as a disturbance feature. A separate assessment of the characteristics of this material alongside those of both (041) and (042) is undertaken to aid identification of these disturbance processes. The undisturbed and disturbed areas of context (041) are therefore recorded separately as: Zone A, undisturbed, recorded in both Slide 2A and 2B; and Zone B, disturbed, recorded in Slide 2A.

Both the undisturbed Zone A and (presumably) intrusive Zone B area of (041) show a broadly similar mineralogy, which differs only very slightly from that seen in the assumed equivalent context (026) in Profile 1 (Table 7.3). The deposit is dominated by quartz grains of medium sand size, which are slightly weathered and occasionally altered, and is generally well sorted. Degraded sandstone fragments are seen in the base of Slide 2B and also near to the boundary with (042) in this slide. A greater difference in the concentrations of minor minerals (eg hornblende) is noted between profiles, for example (026) and (041), than between Zone A (undisturbed) and Zone B (disturbed) areas of Slide 2A, possibly indicating that this intrusive Zone B material is of a very local origin.

A greater difference is obviously noted between the fine mineral and organomineral fractions of the disturbed and undisturbed areas of the slide. The undisturbed Zone A area of context (041) in Slide 2A is low in organics, showing a largely single grain microstructure and chitonic related distribution, with occasional small patches of dark brown, generally excremental, organomineral groundmass. A similarly minimal excremental fine mineral fraction is seen in context (041) in Slide 2B. This is, however, generally a lighter brown, and becomes more prevalent moving up the slide into a possibly diffuse boundary with the more organic context (042), although this boundary is actually very clearly marked by the immediate preponderance of large rock fragments to the base of (042). By contrast, the disturbed Zone B area

of (041) shows a mid-to-dark brown and occasionally dense organomineral groundmass with an intergrain microaggregate microstructure.

Anthropogenic inclusions within the largely mineral undisturbed Zone A of (041) are limited, with no charcoal or bone identified. There are occasional small, angular and rounded black amorphous organic fragments, some parenchyma, phytoliths (not seen in the undisturbed Zone A), cell residue material (increasing in concentration towards the top of both slides), and some occasional small yellow-orange and limpid orange-red amorphous organic material, probably degraded plant fragments. The anthropogenic input to the undisturbed area of (041) therefore appears significantly less than that seen in equivalent context (026) (see above). However, this lack of directly anthropogenic material is also seen in the darker, more organic disturbed Zone B area of the context, save for a very few identifiable phytoliths.

The most distinctive feature noted in this sample is in fact seen in the disturbed Zone B area of (041). This is a series of three discrete, apparently intrusive patches of disaggregated sandstone, distinguished by their lighter brown to greyish-brown colour, composed of a distinctively smaller, rounder quartz fraction than that seen elsewhere in the groundmass, and incorporating some muscovite (notably more than seen elsewhere in the context) and some degraded plant-based fragments and cell residue (illus 7.45,25). These fragments are similar to the several degraded pieces of sandstone seen towards the base of Slide 2B and at the boundary with (042), and may indicate that the intrusive material represented in Zone B may have come from context (042).

Textural pedofeatures are absent from this deposit, save for some slight depletion seen in sandstone and siltstone grains in Slide 2B. This would appear to indicate little physical disturbance and/or illuviation processes throughout the (041)–(042) sequence, which is slightly surprising, given the destruction activity on the collarstone (032) and the recorded disturbance in this context. A diffuse but clear boundary is seen with context (042) above.

Profile 2: Phase 2 deposits

Context (042): Slide 2B

Context (042) was described in the field as a mid-brown to orange sand with sandstone fragments which seals (041) and is sealed only by topsoil (002), giving a potentially long period of accumulation for this layer. However, in the sampled Profile 2 (Table 7.4), (042) is physically sealed by broken collar-stone (032). Context (042) is identified as possibly equivalent to (019) in Profile 1 (Table 7.3), having produced a similar OSL date for the 12th century, and is of interest here also as a likely source for the intrusive material seen in context (041) below.

		Related distribution	Monic to chitonic, occasional close porphyric	Monic to chitonic, occas ional close porphyric	Monic to chitonic, occasional close porphyric to enaulic	Monic to chitonic, occasional enaulic	Monic to chitonic, occasional enaulic	Close to single- spaced porphyric	Monic to chitonic, occasional enaulic	Monic to chitonic, occasional porphyric	C lose ena ulic, occasionally chitonic	Clos e enaulic, occa sional porphyric and chitonic	Close enaulic, occasional porphyric and chitonic
		Groundmass b-fabric	Weakly stipple-speckled	Weakly stipple-speckled	Stipple-speckled	Stipple-speckled	Stipple-speckled	Stipple-speckled	Stipple-speckled	Weakly stipple-speckled	Stipple-speckled	Weakly stipple-speckled	Weakly stipple-speckled
		Coarse material arrangement	Random basic Quite poorly sorted	Random basic Quite poorly sorted	Random basic Poorly sorted	Random basic Sorted	Random basic Sorted	Random basic Sorted	Random basic Sorted	Random basic Well sorted	Random basic Poorly sorted	Random basic Poorly sorted	Random basic Poorly sorted
		Microstructure	Single grain to intergrain microaggregate	Bridged grain to intergrain microaggregate	Single to bridged grain to intergrain microaggregate	Single to bridged grain to intergrain microaggregate	Single to bridged grain to intergrain microaggregate	Intergrain microaggregate	Single to bridged grain to intergrain microaggregate	Single grain, small areas intergrain microaggrega te	Intergrain microaggregate	Intergrain microaggregate	Intergrain microaggregate
		Excremental (spheroidal)	*	*	*		*	:	*	*	:	:	*
	s	Depletion Excremental (mamillate)	*	-	-			-	-	*	-	-	-
	Pedofeatures	Amorphous crypto-crystalline			* *	-	*	*	*	±	-	*	*
	adofe	Organic coatings					÷	+			÷	+	÷
	ď	Silt coatings	4										
		Clay coatings Clay infills											
		554,400	-										
	terial	(snoizulani) zuodqromA				+		+				+	
	Fine organic material	(Aphous (yellow-orange)	-	ė.	*	₽	÷	₽	٠		*	₽	-
		Amorphous (brown)	*	٠	:	÷	÷	*	٠		÷	÷	÷
	ne or	Amorphous (black)	*	*	:	*	+	:	+	4	*	+	÷
	Œ	Cell residue	+		+	-	+	*	-	-	-	-	*
	Coarse organic material	Charcoal						:			:		*
		Parenchymatic tissue			₽	÷.	÷		Į.		÷.	÷.	
		Lignified tissue	*							÷.	*	*	-
	ŭ	Fungal spores	-	٠	+	_ +	_ +	+	_ +	_ +	+	+	*
		Fine mineral material	Light red & dark brown heterogeneous organo- mineral. Dotted limpidity	Brown to reddish brown heterogeneous organo- mineral. Dotted limpidity	Brown to reddish brown heterogeneous organo- mineral. Dotted limpidity	Light brown organo-mineral heterogeneous Dotted limpidity	Light brown organo-mineral heterogeneous Dotted limpidity	Dark and reddish brown heterogeneous organo- mineral. Dotted limpidity	Light brown organo-mineral heterogeneous Dotted limpidity	Light brown organo-mineral heterogeneous Dotted limpidity	Light, mid and red brown heterogeneous organo- mineral. Dotted limpidity	Light and mid brown heterogeneous organo- mineral. Dotted limpidity	Light mid and red brown heterogeneous organo- mineral. Dotted limpidity
		Rubified mineral	÷.	٠	+	+	+	+			+	+	+
	erial (< 10 μ m)	Bone	÷	*					-		÷	÷	
		Phytoliths Diatoms								-			+
		Metamorphics	-								*		
		Siltstone	- -	· .	±	+	*	±		*		*	*
	l ma	Sandstone	*			÷.	*		:	ė.	:		
	Coarse mineral material (< 10 μ m)	Compound grains	*	*	*	*	*	*		*	*	*	*
		Homblende	4	+	+	*	*	*	*	*	+	+	+
		Garnet	*	*	*	*	*	*	*	*	*	*	*
		Biotite Muscovite	4	+	+	*	+	*	-	-	+	+	*
		Feldspar	+		+	+	+	+	+	* t	+	+	
		Quartz	*	*	*	*	*	*	*	* * * * * *	*	*	*
		Zone	*	*	*	*	*	*		*	*	*	*
						*	*	ш	U				
		Thin Context section number sample	81	18	10	10	10			41	16	16	7
		Context	023	026		010				016	000	005	

Frequency class refers to the appropriate area of section (Bullock et al., 1985); t Trace * Very few ** Few *** Frequent/Common **** Dominant/Very dominant Frequency class for textural pedofeatures (Bullock et al., 1985); t Trace * Rare ** Occasional *** Many

Table 7.4 Profile 2

	R elated distribution	Monic to chitonic, occasional close porphyric	Close porphyric to close enaulic	Monic to chitonic, occasional close porphyric	Close enaulic to porphyric, occasional chitonic
	Groundmass b-fabric	Weakly stipple-s peckled	Stipple-speckled	Stipple-speckled	Stpple-speckled
	Coarse material arrangement	Random basic Moderately sorted	Random basic Moderately sorted	Random basic Moderately sorted	Random basic Poorly sorted
	Microstructure	Single grain to bridged, occasional intergrain microaggregate	Intergrain microaggregate	Single grain to bridged, very occasional intergrain microaggregate	Intergrain microaggregate
	Excremental (spheroidal)	*	÷	:	:
	Excremental (mamillate)		-		-
tures	Depletion			÷	
Pedofeatures	Organic coatings Amorphous crypto-crystalline				
Pec	Silt coatings	-	•	-	-
	Clay infills				
	Clay coatings				
erial	(snoizuləni) suodqromA				
c ma1	Amorphous (yellow-orange)	÷.			
rgani	(nword) suondromA	-		+	*
Fine organic material	Cell residue Amorphous (black)	÷	٠	+	+
ш			-	-	*
Coarse organic material	Charcoal				
rse orga material	Lignified tissue Parenchymatic tissue	٠	٠	÷	
Coar	Fungal spores	_		_	
	Fine mineral material	Occasional dark brown heterogeneous organo- mineral. Dotted limpidity	Dense dark brown heterogeneous organo- mineral. Dotted limpidity	Mid to darkish brown heterogeneous organo- mineral. Dotted limpidity	Yellow, light, mid and dark brown heterogeneous organo- mineral. Dotted limpidity
	Rubified mineral	÷	-	-	-
_	Diatoms Bone				
$^{0}\mu$ m	Phytoliths				
	Metamorphics	÷.	-		-
ateria	Siltstone	*	*		:
E E	Compound grains Sandstone	+	٠	+	:
mine	Hornblende	_	-		:
Coarse mineral material (< 10 μ m)	Gamet	*			
U	Muscovite	÷	٠	÷	÷
	Feldspar Biotite	+	+	+	-
	Quartz	* * * * *	:	:	:
	Zone	<	80		
	Thin section sample	2A		28	28
	Thin Context section number sample	041			042
	ΟE				

Frequency class refers to the appropriate area of section (B ullock et al., 1985); t Trace * Very few *** Few *** Frequent/Common **** Dominant/Very dominant Frequency class for textural pedofeatures (Bullock et al., 1985); t Trace * Rare ** Occasional *** Many

Table 7.5 Archaeological feature summary

	Profile 1								Profile 2		
	(023)	(026)	(019) A	(019) B	(019) C	(016)	(002)	(002)	(041) A	(041) B	(042)
Direct anthropogenic influence? (charcoal, bone, bumt organic material)	Some	Some	Some	Frequent	Rare	No No	Frequent	Common	NO N	ON N	Some
Indirect anthropogenic influence? amorphous organic material, plant-derived materials)	Some	Common	Some	Frequent	Some	Some	Frequent	Frequent	Some	Some	Common
High temperature heating? (red and/or yellow groundmass colours in oblique incident light)	No	0 Z	o N	o N	o Z	N _O	ON	ON	No N	ON	o N
Within-context bioturbation? (excremental soil fabric, turbated groundmass)	Common	Common	Rare	Common	Some	Common	Common	Common	Some	Common	Common
Stratigraphic disturbance? (intrusive soil materials, turbated groundmass)	ON	0 Z	o N	o Z	o Z	ON N	O N	Some	Yes	Yes	Possibly
Likely rate of deposition? (mineral weathering, microlamination, sortedness)	Probably slow	Slow	Probably slow	Probably s low	Probably s low	Slow	Unclear	Unclear	Unclear	Unclear	Unclear
Evidence for water movement? (iron-rich or depleted areas or grains, clay to silt coatings)	Common	Frequent	Rare	Rare	Some	Rare	Rare	Common	Rare	Rare	Rare
Evidence for material movement down-profile? (silty and organic coatings and infillings)	Some	Some	Rare	Rare	o Z	o Z	Rare	Rare	Rare	Rare	Rare

The mineralogy of this context is broadly similar to other deposits seen on the site, including both (019) and (041) in this profile, being dominated by slightly weathered quartz grains. These are, however, not noticeably heavily weathered compared to other contexts, which may indicate a quicker period of deposition than that indicated by the sequence (042)-(002). Mineralogically, the outstanding feature of context (042) is the presence of two large, elongated sandstone fragments of almost siltstone fineness (100–150 microns), which overlap each other slightly to span the width of the slide, about midway down the sampled portion of the context (illus 7.45,27). Rock fragments of this size are not present in (019), and these fragments are the first of several features indicating that, although (019) and (042) may be contemporary deposits, they are unrelated in either mineral composition or anthropogenic character.

It is noted that one of the larger decorated cross-slab fragments recovered from the site came not from spread (007) but layer (042) (James 2006, 21). However, the internal structure of the sandstone fragments seen in this context differs from both those seen in context (007) (assumed to be part of the Hilton cross-slab), and context (002). The (042) fragments are both finer and slightly more degraded, and show cracks and fissures along both fragments. Such damage indicates that these fragments could in fact be chips from the broken collar-stone slab (032), which is assumed to have been broken in situ.

The fine mineral and organomineral fraction of (042) also varies greatly from that seen both in the various lenses of (019) and in (041) below. Context (042) shows a very mixed, dense organic and organomineral groundmass in a range of colours, indicating varying concentrations of organic residues and incorporating a variety of anthropogenically-derived materials. This mix of materials ranges from small patches of pale yellow to orange concentrations of partially degraded cell residue, to discrete areas of light to mid- to dark brown fine organo-mineral material, to paler grey, dominantly mineral patches largely composed of small, closepacked quartz grains and sometimes partially degraded sandstone fragments. These last are strongly similar in colour and composition to the disaggregated sandstone fragments seen in the disturbed Zone B area of context (041) below, indicating that the origin of this material is likely to be (042) above. This variety of fine fractions ranges from closely to loosely packed, creating a varied microstructure and giving a turbated, mixed appearance to the deposit. While most of this fine material is excremental, some large, closely-packed areas are not (illus 7.45,28).

Anthropogenic inclusions are present throughout context (042), though not in particularly high concentrations. Charcoal is seen towards the base of the

context, with one noticeably large piece (2.5mm× 1.2mm). Adjacent to this are several smaller inclusions of black and dark red amorphous organic material, both of which are seen to gradually decrease up-context. Plant remains such as cell residue and parenchymatic tissue are frequent throughout the sample. Heated mineral grains are rare, and there are no textural pedofeatures noted, with the exception of some small Fe-rich nodules. During excavation, (042) produced fragments of industrial slag but, unfortunately, no trace of smelting residue or heating activity in general was identified in thin section.

Conclusions

The descriptions and analyses of the Hilton thin section samples discussed above and summarised in Tables 7.3–7.4 have provided an insight into both the varying degrees of anthropogenic activity seen in the deposits sampled and the local depositional environment of the two profiles. Key features among these which are of particular relevance to the archaeologist have been summarised in Table 7.5.

Several general points can be made concerning the nature of the deposits sampled in these two areas of the Hilton site. Perhaps most notable is the overall similarity of the majority of the sandy deposits which make up the majority of the sample set. In many cases, there are few diagnostically different soil features and/or fabrics seen, and this restricts micromorphological interpretation.

A second notable feature of the sample set is the generally limited amount of anthropogenic material seen in all deposits. With a few exceptions, direct evidence for anthropogenic activity, such as bone or charcoal, is at a minimum. Again, this offers few opportunities for detailed interpretation of the archaeological context of these deposits.

Thirdly, the generally excremental nature of the organo-mineral (as opposed to coarse mineral) fraction of the soil matrix indicates ongoing and extensive biological reworking of the fine material in these deposits (and possibly therefore organic anthropogenic features) by soil fauna such as worms and mites. This is likely to have affected the preservation of anthropogenic materials and possibly therefore the level of interpretation.

All of the above phenomena are likely to have, in some way, contributed to the generally diffuse nature of the context boundaries seen in thin section. There is, therefore, no suggestion from the thin section sample set that any of these boundaries have been misinterpreted on site. This detailed analysis has also provided answers to the set of more specific questions posed at the beginning of this report. Discussed in greater detail in the context-specific sections, this analysis will conclude with a summary of these findings.

1 Is there bioturbation seen in context (026), and does this compromise the integrity of the radiocarbon dates?

This seems unlikely. There is actually very little real sign of bioturbation and disturbance in (026), with the only possible sign of physical disturbance being the larger void space and patchier groundmass seen at the base of the context. This could well be more directly related to disturbance immediately above, connected with the cutting of pit (012). Within the deposit, signs of iron movement indicate a degree of illuviation, but a lack of other textural pedofeatures and the good preservation of the introduced iron-rich probable midden material fragments indicate that physical disturbance is not a key feature of this context. Variability in the radiocarbon dates may therefore either indicate that there has been a gradual deposition of the material, or, if disturbancerelated, may be the result of the soil fauna activity seen throughout the context.

2 Is there evidence that context (019) accumulated slowly, therefore providing a possible explanation for the range of dates provided by both pottery and OSL?

Yes. Clear lenses can be identified within the context, to the extent that (019) has been recorded in thin section as four separate micro-layers. A lack of disturbance pedofeatures may also indicate that these layers gradually accumulated rather than being deliberately dumped.

3 Does context (016) derive from context (019) (and possibly also (030)?

Possibly. Due to the similarity of all the sand deposits sampled in Profile 1, it is not possible to identify the origin of context (016) within the sample set through mineral composition. Neither do anthropogenic inclusions indicate a relationship between the two contexts. This question is further complicated by the variability of the lensing recorded within (019) and, therefore, the relatively limited sample available from what may have been a more complex series of layers than that recorded in the field.

4 Does (007) really represent a part of the cross-slab re-carving event at the point of the OSL sample?

This would seem likely, given the concentration of sandstone fragments seen in this context in thin section. However, it is not possible to state conclusively whether these fragments come from the cross-slab itself. There are also general similarities between contexts (007) and (002) which indicate that these two later deposits may be more closely related than the sequence of sands sampled in the remainder of the profile, which implies that the (007) sandstone fragments are also later. However, the answer to this question ultimately depends on understanding

the relationship between context (007) and context (011) (the pit fill representing the debris securely identified as being from the re-carving event). As context (011) was not sampled in thin section, this cannot be explored further. The presence of cross-slab fragments in a range of both earlier and later contexts (see Chapter 3) also indicates that the presence of cross-slab fragments in a deposit may not indicate a direct relationship with the re-carving event.

5 What is the nature of the disturbance seen in Profile 2: context (041) Zone B?

Micromorphological analysis strongly indicates that this intrusive material has at least partly travelled down-profile from (042) above. It is not possible to identify the cause of this disturbance as only a portion of the disturbed area is sampled. However, a general lack of evidence for down-profile movement and/or disturbance throughout the adjacent undisturbed areas of (041) suggests that this disturbance is localised and small-scale, with the sampled portions of contexts (041) and (042) in Slide 2B showing no sign of physical disturbance of this kind.

7.3.2 Luminescence dating of sediments

DAVID SANDERSON AND IONA MURRAY

Summary

This report presents details of the application of Optically Stimulated Luminescence (OSL) dating to the Hilton of Cadboll site. OSL dating operates by measuring the intensity of luminescence signals which are induced by long-term exposure of minerals such as quartz to ionising radiation in the environment. OSL signals are bleached by exposure to daylight and build up while the sample is enclosed in the archaeological monument. Providing the sample has been reset at time of deposition, the combination of OSL measurements of the radiation dose received and assessment of the environmental radioactivity of the sample and its context can be used to date depositional events.

Two series of samples were collected from the Hilton of Cadboll site during a visit in September 2001. Small profiling samples were used to evaluate mineralogy, luminescence sensitivities and to make preliminary stored dose measurements to identify the most appropriate luminescence approach. Larger dating samples collected in opaque tubes, and accompanied by in-situ measurements of the local gamma radiation fields of the site were used for dating measurements. Four dating samples were collected. One sample (context 042, SUTL 1447) was collected from a sand layer underneath the broken collar stone (032). The other three were from the vicinity of the lower portion of the Hilton of Cadboll cross-slab, which represented a secondary or later setting of the

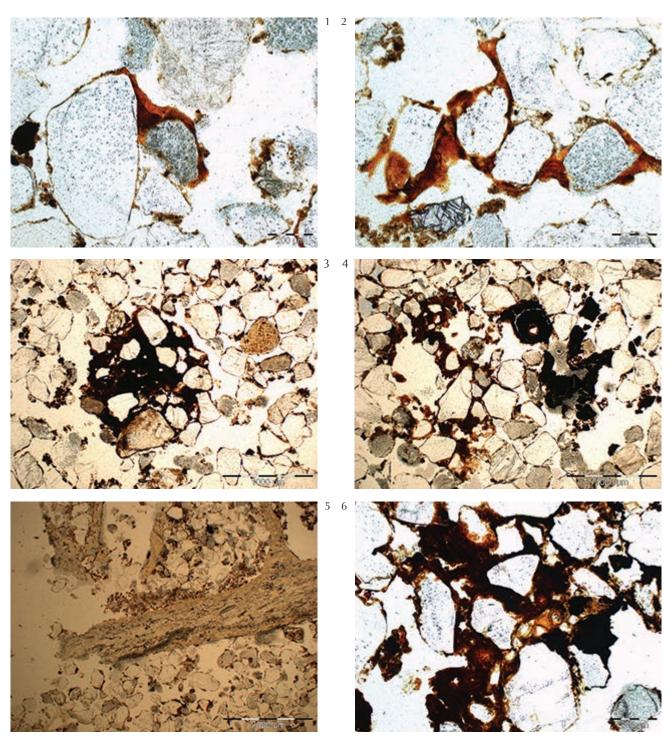


Illustration 7.41

(1) Context (023) in Slide 1B. Compound coating: superimposed layers of fine clay and silty clay upon quartz grain indicate down-profile movement of material, possibly through illuviation. (2) Context (023) in Slide 1B. Link capping: a continuous clay coating joins several slightly weathered quartz grains. (3) Context (026) in Slide 1C. Iron-rich fine clay infilling surrounding quartz grains. An indicator of illuviation processes. (4) Context (026) in Slide 1C. Black, red and reddish-brown iron-rich amorphous organic material, probably decayed plant material. Black areas indicate burning and thus a likely anthropogenic source. Note scored and weathered appearance of quartz grains. (5) Context (026) in Slide 1B. Fragment of degraded bone. Note light brown fine organo-mineral excrements surrounding top edge of fragment. (6) Context (026) in Slide 1C. Cell residue seen in matrix of iron-rich fine material. All plane polarised light.

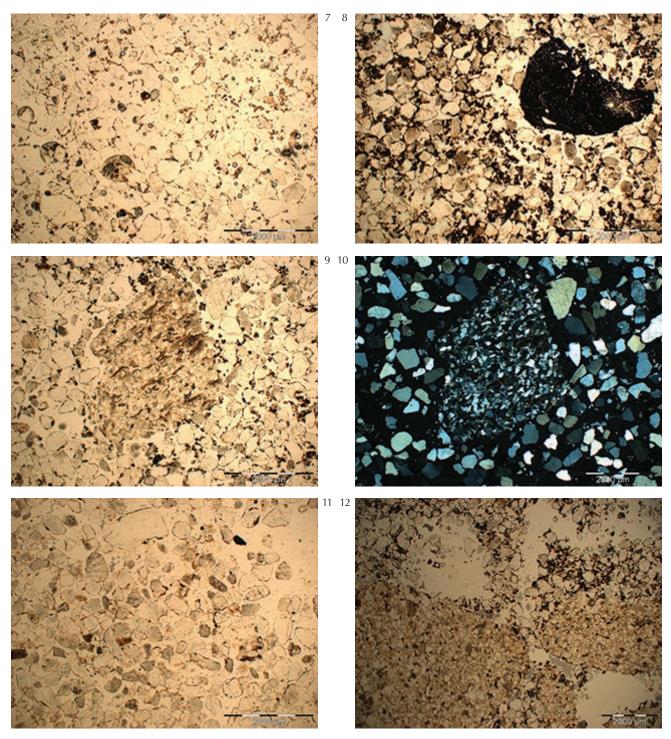
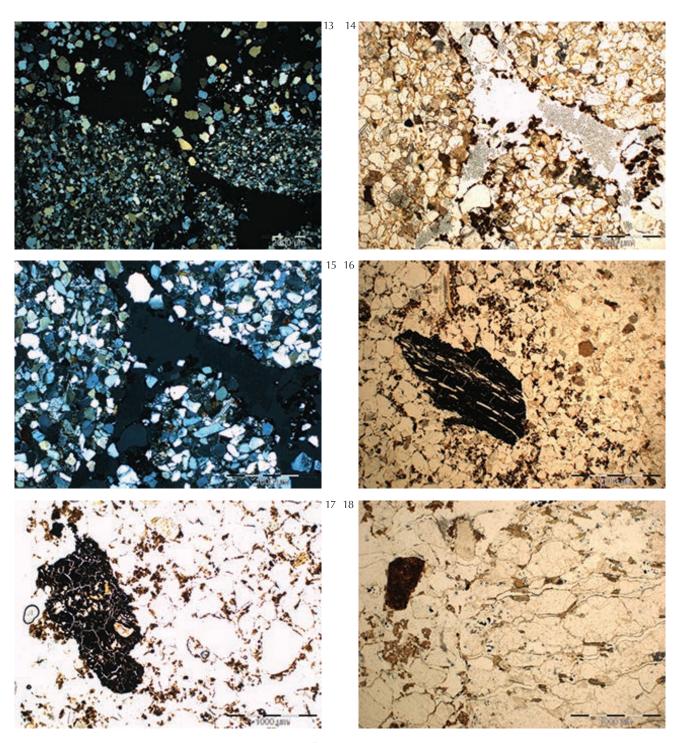


Illustration 7.42

(7) Context (019) in Slide 1C. General view of Zone A in Slide 1C. Note dominance of coarse mineral fraction. (8) Context (019) in Slide 1D. General view of Zone B in Slide 1D. Note dominance of fine organo-mineral fraction and higher concentration of anthropogenic material. (9) Context (019) in Slide 1D. General view of Zone C in Slide 1D, showing large fragment of sandstone. Note dominance of coarse mineral fraction, similar to that seen in Zone A. (10) Context (019) in Slide 1D. General view of Zone C in Slide 1D, showing large fragment of sandstone. Note dominance of coarse mineral fraction, similar to that seen in Zone A. Cross polarised light, ×2. (11) Context (016) in Slide 1A. General view showing frequent weathered grains. Note similarity to Zones A and C in context (019), but not to Zone B. (12) Boundary between Contexts (007) and (002) in Slide 1E. Note clear boundary indicated by layer of sandstone fragments seen marking the top of context (007). All plane polarised light except (10).



 $Illustration\ 7.43$

(13) Boundary between contexts (007) and (002) in Slide 1E. Note clear boundary indicated by layer of sandstone fragments seen marking the top of context (007). Cross polarised light. (14) Context (007) in Slide 1E. Sandstone fragment consisting of mainly quartz grains with muscovite and small veins of occasionally Fe-rich metamorphic material. (15) Context (007) in Slide 1E. Sandstone fragment consisting of mainly quartz grains with muscovite and small veins of occasionally Fe-rich metamorphic material. Cross polarised light. (16) Context (007) in Slide 1E. Large charcoal fragment. Note extant cell residue to top of image. Plane polarised light. (17) Context (007) in Slide 1E. Large fragment of cracked reddish-black amorphous organic material containing small mineral inclusions. Possible turf-derived burnt fragment. Plane polarised light. (18) Context (002) in Slide 1F. Sandstone fragment consisting of quartz with frequent hornblende and muscovite inclusions. Quartz grains show a pronounced horizontal elongation, giving the fragment an appearance similar to sheared quartz. Note difference with sandstones seen in Context (007). Plane polarised light.

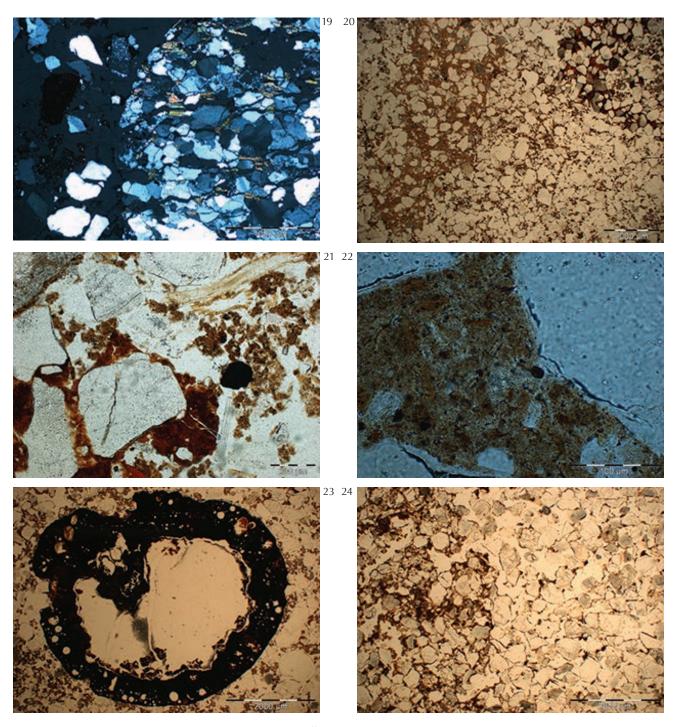


Illustration 7.44

(19) Context (002) in Slide 1F. Sandstone fragment consisting of quartz with frequent hornblende and muscovite inclusions. Quartz grains show a pronounced horizontal elongation, giving the fragment an appearance similar to sheared quartz. Note difference with sandstones seen in Context (007). Cross polarised light. (20) Context (002) in Slide 1F. Groundmass variability near to the modern surface. To the left, dense mid-brown organic and organomineral material containing phytolith fragments: modern turf-based material. To the right: iron-impregnated groundmass. Plane polarised light. (21) Context (002) in Slide 1F. Reddish amorphous organic material in association with cell residue material. Degraded plant fragments. Plane polarised light. (22) Context (002) in Slide 1F. High magnification view of possibly modern turf-based material seen in Hilton-20. Note phytolith in centre of image. Plane polarised light. (23) Context (002) in Slide 1F. Plant pseudomorph: a root fragment impregnated with iron to such an extent that the now almost entirely iron-based feature retains the structural appearance of the root. Plane polarised light. (24) Context (041) in Slide 2A. Contrasting groundmass characteristics: undisturbed (Zone A, right) and disturbed (Zone B, left) areas of context (041). Plane polarised light.

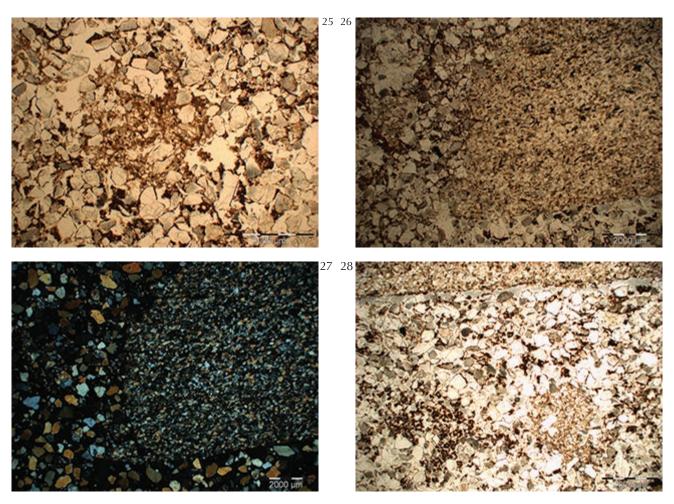


Illustration 7.45

(25) Context (041) in Slide 2A, Zone B. Discrete patch of disaggregated sandstone within disturbed soil area, similar to that seen in (042) above, indicating that Zone B material may originate in context (042). Plane polarised light. (26) Context (042) in Slide 2B. Fine sandstone fragments mark the boundary between contexts (041) and (042). Plane polarised light. (27) Context (042) in Slide 2B. Fine sandstone fragments mark the boundary between contexts (041) and (042). Cross polarised light. (28) Context (042) in Slide 2B. Groundmass variation in context (042). Note small fragments of disaggregated sandstone, coarser in composition to the much larger fine sandstone fragments seen in 26 and 27 and similar to those fragments seen in the disturbed Zone B area of context (041). Plane polarised light.

stone prior to its destruction and 17th-century re-use as a memorial slab. The sample from context 016 (SUTL 1448) represents sand that infilled the pit originally cut when the stone was re-set in its final resting place; sample 019 (SUTL 1449) is from a sand layer located stratigraphically above the primary fill of the final stone setting. Sample (SUTL 1450) comes from a layer (007) which includes fragments of the broken slab surface.

The quartz single-aliquot regenerative OSL dating procedure was applied successfully to all four samples. Radiation dosimetry combined field gamma spectrometry, thick source beta counting and high resolution gamma spectrometry. In all four cases it was possible to use the

OSL data to determine equivalent doses for the samples. All samples were initially measured with 16 aliquots. For samples 016 (1448) and 019 (1449) additional sets of 32 aliquots was also examined. The variance and dose distributions from replicated aliquots were used to assess the extent to which homogenous, well-bleached sands were encountered.

The results suggest emplacement of the broken collar stone (032) in the early 12th century, sample 042: AD 1100 ± 70 (SUTL 1447). The results from the sands associated with the lower portion also suggest emplacement in the 12th century, context 016: AD 1120 ±70 (SUTL 1448) and context 019: AD 1140 ± 70 (SUTL

1449). The dose distribution from context 016 showed bimodality suggesting partial inheritance of an earlier OSL age representing mixture of 9th-century and 12th-century material. This is tentatively attributed to partial bleaching during the final emplacement activities, with the older material representing the depositional age of the older land surface into which the stone was inserted. The layer with carved fragments 007 gave an OSL date in the late 16th century, AD 1570±25 (SUTL 1450), which corresponds approximately to the Scottish Reformation. The OSL date associated with defacement thus predates the inscribed date for re-use of the slab for memorial purposes in the 17th century.

The OSL analysis and results raised a number of hypotheses that have fed into other parts of the archaeological research at Cadboll. The original stratigraphic interpretation of the layers associated with the OSL dating samples was reviewed during postexcavation work, and several scenarios considered, taking account of the OSL evidence and other archaeological observations. The OSL results for the three samples associated with the repositioning of the collar stone and the final stone setting, all suggest a 12th-century resetting, which has been assimilated into the overall archaeological interpretation of the site. The implication from the date from context 007, that the defacement of the stone may have occurred significantly earlier than its re-use as a memorial slab also raised important hypotheses. The OSL work led directly to consideration of the historic context of the later reformation period in respect of possible defacement of the stone. The other corollary of the OSL date was the implication that debris from the initial defacement may have a separate spatial distribution on site, than the debris associated with re-dressing the slab in the 17th century for memorial use. Both of these aspects have been considered further in the archaeological work reported here. In these respects the OSL information not only provided a partial environmental context and chronology, but has also fed important ideas into the broader interpretation of the archaeological material recovered.

Introduction

This report presents sampling details and results of investigations of optically stimulated luminescence (OSL) from sediment samples recovered from the Hilton of Cadboll Chapel site, Ross and Cromarty, during excavations conducted by GUARD in 2001.

The context of the cross-slab setting is clearly rather complex, involving an active post-medieval burial site, in which there may have been one or more Pictish period stone settings, followed by medieval re-siting of the stone, and its re-use in the late 17th century. At start of excavation it was known that the site had a sandy substrate of presumed Aeolian origin. With this in

mind provision was made for collecting samples for OSL investigation during the excavation. The aims of the OSL work were to attempt to characterise materials associated with the stone settings and their environmental context, to assess whether OSL could be used as a tool to date archaeologically significant horizons on the site.

Optically stimulated luminescence originates as a consequence of energy deposited within sedimentary minerals in response to naturally occurring ionising radiation in the sample and its environment. By stimulating the minerals in the laboratory using lasers or other suitable light sources, part of this stored energy is released, resulting in measurable luminescence which can be measured to quantify the radiation history of the sample. Luminescence signals can be erased either by heat or by exposure to daylight, leading to the two main classes of materials which can be dated using this approach. Heated materials such as ceramics or burned stones are effectively zeroed by a prior thermal event (eg firing of pottery, heating of a hearth), thus resetting the luminescence age information within the system. For sedimentary materials exposure to light during erosional and transport phases acts as the zeroing mechanism. Enclosure of the sediment after final deposition protects it from light and initiates the accumulation of luminescence signals that can be used for age estimation.

In both cases (heated materials and sediments) the luminescence age is determined by combining luminescence determinations of the radiation dose equivalent to the signals recovered from the samples (the equivalent dose), with measurements of the radiation dosimetry of the sample and its environment (the dose rate). The luminescence age is the quotient of equivalent dose over dose rate.

With sediment dating it is important to recognise that the luminescence age might represent an accumulated signal originating from many cycles of erosion, transport, bleaching and deposition. Only in the situation where undisturbed sediments are available and associated with effective zeroing at time of deposition can sediment dates be interpreted in terms of simple events. Whereas early sediment dating research was conducted using thermoluminescence readout methods (Aitken 1985: 1998) resulting in considerable ambiguity in initial conditions for many young holocene deposits, considerable progress has been made recently both through the use of photostimulation, or optical stimulation to target readily reset luminescence systems, and through development of highly sensitive automatic instrumentation (eg Bøtter-Jensen et al 2000), which can record weak luminescence signals from young sedimentary materials. development of regenerative procedures for determining the stored dose within single aliquots or mineral grains (Murray & Wintle 2000, Sommerville et al 2001; 2003)

has provided a means of investigating the distribution of doses within sediments. This approach has provided important information in diagnosing mixed sedimentary systems where heterogeneous material is encountered (Olley et al 1998, 1999; Lepper et al 2000; Duller et al 2000; Spencer et al 2003). Combined with exploitation of the differential sensitivities to bleaching of luminescence signals from quartz and feldspars (Sanderson et al 2001, 2003) this provides means of characterising the depositional circumstances of young sediments and assisting to interpret luminescence ages.

The challenges presented by a site such as Hilton of Cadboll should not be underestimated. At the outset there was no prior knowledge to indicate whether or not the available minerals had sufficient luminescence sensitivity to quantify signals associated with the last 1000 years or so. Nor could the availability of well-bleached, undisturbed, Aeolian sediments in useful archaeological contexts be assumed in advance of the excavation. Nevertheless in view of the interest in this site, a field visit was arranged to recover samples for OSL investigation, during the excavation.

This report outlines the samples collected, the measurements undertaken, and the conclusions that can be drawn from the results. It has been possible to utilise the quartz SAR method to estimate the depositional history of arguably the most significant features associated with the setting and destruction of the Hilton of Cadboll cross-slab.

Sampling

Sampling trip

During a site visit by Iona Murray on 8 September 2001 sediment samples were collected from deposits associated with the base of the symbol stone and the collar stone which may have been related to an earlier setting. The purposes of the visit were to examine possible sampling locations for OSL investigations, to collect suitable samples, and to make environmental gamma radiation measurements from sampling contexts to facilitate luminescence dating. Eight small samples were collected from two profiles for the purpose of general characterisation of the luminescence properties of available sediments. The profiles represented accessible areas in the vicinity of the stone lower portion (profile 1, Table 7.6), and underneath one of the collar stones (profile 2, Table 7.7). Sampling was performed in conjunction with sampling for micromorphological characterisation of the soils and sediments (Duncan 2003). It was not possible to obtain a deep suite of samples to define the complete environmental history of the site within the constraints of the excavation. Nevertheless the profiling samples do provide a means of assessing the local depositional environment of the main significant archaeological

features being investigated. Four bulk samples were also collected in tubes for the purpose of luminescence dating measurements.

Profiling samples

Two sets of profiling samples were collected from stratigraphically significant deposits associated with the lower portion (context 008) (profile 1) and the collar stone (context 032) (profile 2). The samples were collected in 1-cm diameter plastic tubing, and protected from light exposure.

Table 7.6 summarises the sampling details for the five samples collected from the deposits revealed in section to the west of the stone lower portion at the time of the fieldtrip. As noted above it was not possible to obtain samples from depth within the sedimentary substrate, however the lowest sample in the sequence does come from a sand layer which was assumed, at time of excavation, to represent the substrate of the stone setting. It would have taken a far more extensive and invasive excavation to reveal the full archaeological and natural sequence of the site, and therefore it is doubtful that any of these samples were entirely free from anthropogenic influence. The depths recorded in Table 7.6 represent depths beneath the local surfaces exposed in the excavated section. The sampling positions were also recorded on archaeological section drawings, from which the absolute depths could be determined if required.

Table 7.7 summarises the sampling details of the three samples collected from profile 2, in the vicinity of the broken collar stone. Depths again were related to a local datum, representing the exposed top of section at time of sampling, and marked on section drawings in the primary site record. Again the sampling depths were limited to the dimensions of the excavated sections at time of sampling, but they include at least the upper layers of sand layers assumed to represent substrates.

If the site were subject to further excavations in the future it would be relevant to consider extending sampling depths in order that a more complete record of the environmental history of the context could be assembled, and the working assumption that the basal sand layers were essentially unaltered natural sediments could be assessed.

OSL tube samples

OSL tube samples were collected from four locations. All samples were collected using 15–20cm lengths of 19mm diameter copper tubing and protected from light exposure, and sealed to retain moisture at time of sampling. Sampling was performed under a temporary cover, and the sections cleaned back immediately prior to insertion of the sampling tubes in order to avoid incorporation of sediments that had been exposed to daylight, or cross-

ARTEFACT AND ENVIRONMENTAL STUDIES

Table 7.6
Sampling details for Profile 1

Profile no	SUTL no	Depth in cm	Description of context	Stratigraphic significance
1–1	1497	60	(023) a sterile sandy layer	Upper part of sedimentary substrate for the stone setting
1–2	1498	50	(016) sandy layer	Primary fill of pit for Setting 2
1–3	1499	30	(019) a sand layer	Sand layer above 016. Field interpretation was as an upper fill to the stone setting (thus giving taq for the setting). It is cut by the robber pit
1–4	1500	18	(030) a layer of crushed sandstone	Cut by the pit associated with defacement of the stone; therefore predates this operation
1–5	1501	12	(007) sandy layer containing fragments	Associated with deposition of the carved fragments

contaminated as a result of excavation. Sample locations are summarised in Table 7.8.

Gamma ray spectra were recorded for the tube sampling sites and one of the profiling locations using a portable spectrometer (Rainbow 1-7010 with 1in x 1in Nal detector probe). Readings were taken over five or ten minute periods in 4π geometry and used to estimate local gamma ray dose rates using calibration factors established at SUERC. It was noted that higher dose rates were obtained from positions in close proximity to stone fragments, in keeping with experience elsewhere in many sand-rich deposits (Table 7.9). The use of a small gamma spectrometry probe of comparable dimensions to the OSL sampling tubes is advantageous in these circumstances.

Luminescence analysis

Sample preparation

The profiling samples were processed simply to recover minerals for luminescence characterisation. For the larger tube samples mineral separations were accompanied by dosimetric measurements to facilitate age estimation subject to satisfactory luminescence results. All sample handling and preparation was conducted under safelight conditions in the SUERC luminescence dating laboratories.

The profiling samples were wet sieved to extract $90-150\mu m$ and $150-250\mu m$ size fractions. These were treated with 1M HCl for 30 minutes and a subsample of the $90-150\mu m$ fraction extracted for polymineral analysis.

 $\begin{tabular}{ll} \it Table~7.7\\ \it Sampling~details~for~Profile~2\\ \end{tabular}$

Profile no	SUTL no	Depth in cm	Description of context	Stratigraphic significance
2–1	1502	15	(041) a sterile sandy layer – 15cm below collar stone 032	Wind-blown sand probably pre-dates the settings
2–2	1503	10	(041) Thin sandy layer – 10cm below collar stone	As above
2–3	1504	5	(042) a sand and gravel layer – 5cm below collar stone	Layer possibly equivalent to 019. Predates the re-positioning of the broken collar stone

Table 7.8
Sampling details for the four OSL tube samples

OSL no	SUTL no	Description of context	Stratigraphic significance
1	1447	Thin sandy layer (042) below broken collar stone (032)	Should give tpq for final placement of broken collar stone
2	1448	(016) sandy deposit, primary fill of stone setting	Should give taq for Setting 2
3	1449	(019) sandy deposit cut by 'robber' pit	Should give taq for Setting 2
4	1450	(007) layer of carved fragments	Associated with deposition of the carved fragments

The remaining material was given a 40-minute 40 per cent HF treatment, followed by 30 min 1M HCl to prepare a quartz concentrate. Both quartz and polymineral samples were washed repeatedly in deionised water, and then rinsed three times in acetone. Samples were dried in a 50°C oven for 1 hour prior to dispensing, and then dispensed onto 1cm diameter 0.25mm thick stainless steel discs sprayed with Electrolube silicone grease. Two discs of each sample were dispensed for polymineral analysis (all 90–150µm fraction). Two etched quartz discs per sample were also prepared from whichever of the sieved size fractions produced sufficient quartz. These samples were used for exploratory luminescence measurements as described below.

For tube samples mineral extraction in this case was aimed at recovery of quartz for analysis by the single aliquot regenerative (SAR) OSL method, and of measurement of does rates from the sample material to facilitate age estimation. The first step was to measure

the initial, dry and saturated weights of each sample to determine actual and saturated water contents. Samples were then removed from the tubes, dried at 50°C and then split to remove 20g of material for does rate measurements. The remaining material was sieved to recover 90–150µm and 150–250µm size fractions. Both fractions were centrifuged in sodium polytungstate solution to remove heavy minerals with densities greater than 2800kg m³. The lighter fraction was split to retain material for future reference, and portions treated with HCl and HF acid in the same manner as described above to recover quartz concentrates for SAR analysis. 16 discs per sample were dispensed.

Measurements

Dose rate measurements

Dose rate measurements from the dating samples were undertaken by Thick Source Beta Counting (TSBC), and

Table 7.9
On-site gamma dosimetry readings

Reading	Context	Associated sample(s)	Counting time(s)	Dose rate (mGya-1)
HCAD-1	Sandy layer below broken collar stone	Profile 2	600	0.199 ± 0.01
HCAD-2	Sandy layer below broken collar stone	OSL1	600	0.284±0.01
HCAD-3	(019)	OSL3, P1–3, P1–4	300	0.302 ± 0.02
HCAD-4	(007)	OSL4, P1–5	300	0.621 ± 0.03
HCAD-5	(023)	OSL2, P1–1, P1–2	300	0.226 ± 0.01

high resolution gamma spectrometry (HRGS) using the 20g dried subsamples referred to above.

Beta dose rates were measured using the SURRC TSBC system (Sanderson 1988). Sample count rates were determined with 10 replicate 1000s counts for each sample, bracketed by background measurements and sensitivity determinations using the SURRC Shap Granite secondary reference material. Dry infinite-matrix dose rates were calculated by scaling the net count rates of samples and reference material to the beta dose rate of the Shap Granite (6.25 \pm 0.03 mGy a⁻¹). The estimated errors combine counting statistics, observed variance and the uncertainty on the reference value.

HRGS measurements were performed using a 50 per cent relative efficiency 'n' type hyperpure Ge detector (EG&G Ortec Gamma-X) operated in a low background lead shield with copper liner. Samples were sealed in 50mm diameter Sterilin petri dishes for a minimum of 2-3 weeks prior to measurement to allow radon equilibriation. Gamma ray spectra were recorded over the 30 keV to 3 MeV range from each sample, interleaved with background measurements and measurements from Shap Granite in the same geometry. Counting times of 85 ks per sample were used. The spectra were analysed to determine count rates from the major line emissions from 40 K (1457 keV), and from selected nuclides in the U decay series (234Th, 226Ra + 235U, 214Pb, 214Bi and 210Pb) and the Th decay series (228 Ac, 212 Pb, 208 Tl) and their statistical counting uncertainties. Net rates and activity concentrations for each of these nuclides were determined relative to Shap Granite by weighted combination of the individual lines for each nuclide. The internal consistency of nuclide specific estimates for U and Th decay series nuclides was assessed relative to measurement precision, and weighted combinations used to estimate mean activity concentrations (in Bq kg-1) and elemental concentrations (per cent K and ppm U, Th) for the parent activity. These data were used to determine dry infinite matrix dose rates for alpha, beta and gamma radiation. These were used in combination with measured water contents, field gamma dose rates and TSBC results, and with estimated internal alpha activity and modelled cosmic ray dose rates, used to determine the overall effective dose rates for age estimation.

Luminescence measurements

The aims of the initial measurements from profiling samples were to establish whether quartz and feldspars were present, to determine their luminescence sensitivities and to assess the extent of archaeological resetting relative to residual geological doses. At this stage polymineral silicates were used to assess the combined feldspar/quartz behaviour. Since luminescence sensitivities of feldspars are typically two or more orders of magnitude greater than quartz, the polymineral extracts can be used

to evaluate the potential for separating feldspars for dating measurements. The quartz samples were used to assess the opportunities for applying the SAR method for dating these materials.

Polymineral discs were subjected to a multiple stimulation measurement procedure using a Riso DA15 Automatic luminescence reader. Samples were initially preheated at 220°C for 30 secs, and then subjected to sequential infra-red stimulated luminescence (IRSL), post-IR blue OSL stimulation, and TL measurements. IRSL measurements were conducted for 60s at 50°C, Blue OSL measurements for 30 s at 125°C, in both cases 60 per cent of the available instrumental stimulating power being used. TL was measured from room temperature to 500°C at a heating rate of 5°Cs⁻¹. Following readout of the natural luminescence signals samples were irradiated with a 1 Gy 90Sr beta dose and re-measured as before. Thereafter a 5Gy dose was applied, the measurement cycle repeated, and finally the 1Gy irradiation and readout sequence also repeated. The responses to the 1 Gy and 5 Gy doses were used to assess luminescence sensitivity, linearity of dose rate response and sensitivity changes for the material under IRSL, OSL and TL stimulation. The natural signals in conjunction with these readings were used to provide first estimates of the stored dose in each

The quartz discs from profiling samples were subjected to a Single Aliquot Regenerative (SAR), in which measurements of OSL signal levels from individual discs are calibrated to provide stored-dose estimates using an interpolated dose-response curve constructed by regenerating OSL signals in the laboratory after each readout cycle (see diagram in archive). Sensitivity changes which may occur as a result of readout, irradiation and preheating (to remove unstable radiation induced signals) are monitored using a series of small test dose measurements which interleave the sequence of constructing the dose response curve. Stored doses are determined using normalised OSL signals, whereby each measurement is standardised to the test dose response determined immediately after its readout, thus compensating for observed changes in sensitivity during the laboratory measurement cycle. The ability of this procedure to correct for laboratory induced sensitivity changes is assessed using a recycling check whereby a low-dose irradiation near the start of the sequence is compared with a repeat measurement at the end of the sequence.

For the profiling measurements the natural signal was first read out, followed by a sequence of doses administered to reconstruct the regeneration line. The dose sequence was as follows; 0.5, 1, 1.5, 2, 2.5, 0.5, 0 Gy. The repeated 0.5Gy measurement was used to calculate recycling ratios in order to examine the effectiveness of sensitivity corrections. The zero Gy point at the end was

used to monitor whether any residual OSL signals had accumulated over the measurement sequence. In addition, at the end of the run, a 1Gy dose was given, followed by an IRSL readout to check for possible contamination by IR sensitive minerals.

OSL tube samples were measured using the same procedure as quartz profiling samples, with the exception of preheat temperatures. Four different preheat temperatures were investigated (220, 240, 260 and 280°C), using sets of four discs for each datapoint. This enabled an assessment to be made of the dependence of equivalent dose ($D_{\rm e}$) on preheat temperature. An additional 32 discs were later measured for samples SUTL 1448 and 1449 in order to further investigate the distribution of $D_{\rm e}$ within the samples.

Results

Profiling measurements

As noted above the main aims of the profiling measurements were to assess sensitivities and to make preliminary equivalent dose estimates from both polymineral samples and quartz to assess dating suitability and most appropriate approach for the tube samples. With observed field gamma dose-rates of 0.2 to 0.6 mGy a⁻¹, total dose rates of approximately 0.3 to 1 mGy a⁻¹ are expected. Therefore samples of 500–1000 year age

are expected to have equivalent doses of 0.15 to 1 Gy. These values are useful in making initial assessments of the profiling measurements.

Luminescence sensitivities of the polymineral samples were rather low, implying a feldspar deficient mineralogy for the sediments, and leading to highly scattered equivalent dose estimates from the multiple stimulation runs. The quartz separates were more promising with luminescence sensitivities of approximately 10²–10³ photon counts per Gy, accompanied by fast decaying OSL peaks characteristic of pure quartz and negligible IR response.

Table 7.10 shows the equivalent doses determined from the polymineral and quartz experiments. The poor feldspar sensitivities lead to extremely high fractional errors in equivalent dose, which do not seem to provide a promising basis for determining archaeological doses of the order of 0.1–1 Gy. While it may be possible to enhance feldspar sensitivity by specific feldspar separations, the results do not suggest that this would be a productive route for this site. By contrast the quartz equivalent doses for all sampling positions are broadly consistent with the expected age of the archaeological deposits. Moreover in profile 1 they are in stratigraphic order. In the second profile the upper sample is in close proximity to a stone slab which is likely to enhance the local dose rate in comparison with the lower samples.

Table 7.10 Equivalent dose estimates from profiling samples

Ref	Lab code	Depth in cm	Estimated Equi De/Gy	ivalent Dose		
	SUTL		Polymineral IRSL	OSL	TL	Quartz OSL
1–1	1497	60	2.2±0.6	2.1 ± 0.1	21 ± 11	1.08 ± 0.14
1–2	1498	50	205 ± 150	43 ± 25	250 ± 10	0.99 ± 0.13
1–3	1499	30	5.5 ± 2.4	3 ± 1	34 ± 4	0.78 ± 0.08
1-4	1500	18	7.2 ± 0.2	3 ± 0.7	51 ± 35	0.83 ± 0.11
1–5	1501	12	37 ± 44	6.4 ± 0.8	51 ± 24	0.33 ± 0.04
2–1	1502	15	3.6±1	4.3±0.5	29±22	1.08 ± 0.23
2–2	1503	10	8.3±8.9	1.3 ± 0.2	25±9	0.76 ± 0.12
2–3	1504	5	12 ± 0.3	7.3 ± 1.4	14 ± 1.5	1.22 ± 0.11

Sample	Activity Cond	centrations/Bqk	\mathbf{g}^{-1}	Equivalent C	oncentrations ^{1,2}	
(SUTL)	К	U	Th	K (%)	U (ppm)	Th (ppm)
1447	97.8 ± 22.1	5.3 ± 4.3	4.6 ± 2.2	0.32 ± 0.07	0.43 ± 0.35	1.13 ± 0.54
1448	213.3 ± 22.4	11.9 ± 4.3	6.8 ± 2.2	0.69 ± 0.07	0.97 ± 0.35	1.67 ± 0.55
1449	197.3 ± 22.3	9.2±6.3	5.3 ± 2.2	0.64 ± 0.07	0.74 ± 0.51	1.31 ± 0.54
1450	232.7 ± 22.8	5.5 ± 4.4	8.4±2.2	0.75 ± 0.07	0.45 ± 0.36	2.07 ± 0.54

Table 7.11
Activity and equivalent concentrations of K, U and Th for samples SUTL1447-1450 as determined by HRGS

Taking this into account the results are broadly consistent with expectations. These preliminary results were used in formulating the decision to concentrate the tube sample preparation on quartz extraction for SAR analysis, with retention of sieved material as a contingency in case there was a need to attempt pure feldspar concentrations.

Dose rate measurements and calculations

Annual dose rates were estimated from the combination of on-site gamma spectrometry and laboratory measurements by TSBC and HRGS. Whereas field measurements were performed with the moisture content present at time of sampling, all laboratory measurements were conducted on dry samples. Water contents however were measured in the laboratory and used together with water attenuation corrections and microdosimetric grain size attenuation factors to calculate effective dose rates. Whereas the major sources of dose for dating could in principle have been estimated simply on the basis of field gamma spectrometry and TSBC, the addition of HRGS provides opportunities for independent verification of the inferred values, and also to evaluate the composition of the dosimetry in terms of relative contributions from U, Th and K, and sensitivity both to internal and external sources of radiation. The measured values from each technique, and their reconciliation and use to evaluate effective dose rates for 125-250µm quartz are summarised in tabular form below.

Table 7.11 presents HRGS results from each of the four dating samples both as activity concentrations (Bq kg^{-1}) and as equivalent concentrations, assuming, in the case of the U and Th series, full series equilibrium. The data were

calibrated with respect to the SURRC secondary Shap Granite sample, and uncertainties have taken account of both analytical errors and the error in the reference values. Mean parent concentrations from all four samples were 0.55 ± 0.1 per cent K, 0.65 ± 0.13 ppm U, and 1.55 ± 0.21 ppm Th. These concentrations are lower than for many terrestrial soils, but are not atypical for either quartz rich or calcareous sands, which form the majority of the samples. The mean Th/U concentration ratio of all four samples is 2.4 ± 0.6 , which is consistent with typical crustal values. The K concentration is broadly consistent typical proportions relative to U and Th.

Table 7.12 collates dose rates from laboratory and field gamma spectrometry plus thick source beta counting. The precision of dry infinite matrix dose rates by HRGS and TSBC is limited for the majority of these samples to some 10 per cent, mainly by the influence of background count rates on both forms of spectrometry and the relatively low radioelement concentrations. To improve on laboratory measurement precision for these low activity samples would require a combination of larger samples, longer counting times and reduced system background rates. The mean ratio of dry infinitematrix beta dose rates determined by HRGS and TSBC is 1.25 ± 0.2 , of debateable significance. Whereas the HRGS measurements were conducted with sealed samples which had been stored for radon accumulation, TSBC measurements were conducted in open geometry after drying the sample and would therefore not be expected to retain full equilibrium radon levels. It is thus possible that the differences between HRGS and TSBC measurements are partly due to the radon retention conditions of the

¹ Conversion factors (based on OECD,1994): ⁴⁰K: 309.26 Bq kg-1 %K⁻¹; ²³⁸U: 12.34787 Bq kg-1 ppmU⁻¹; 232 Th: 4.057174 Bq kg-1 %⁻¹.

² Working values for Shap Granite :4.43+-0.03%K, 12.00+-0.06 ppm U, 28.5+-0.26 ppm Th. In Bq kg-1: K- 1370+-10 Bq kg-1, U-238 148.17+-7.4 Bq kg-1, 232-Th - 115.6+-1.05 Bq kg-1. Based on high resolution gamma spectrometry relative to CANMET and NBL standards by from Sanderson, 1986.

Table 7.12	
Dose rates determined by HRGS, TSBC and field gamma measurements	3

Sample (SUTL)	Dry Infinite M	atrix dose rates ¹ by I	HRGS/mGya ⁻¹	TSBC /mGya ⁻¹	Field γ /mGya ⁻¹
	Dα (dry)	D6 (dry)	Dγ (dry)	Dβ (dry)	Dγ (wet)
1447	2.03 ± 1.05	0.36 ± 0.08	0.18 ± 0.05	0.49 ± 0.05	0.28 ± 0.01
1448	3.91 ± 1.06	0.76 ± 0.08	0.32 ± 0.05	0.51 ± 0.06	0.23 ± 0.01
1449	3.04 ± 1.48	0.68 ± 0.10	0.31 ± 0.07	0.44 ± 0.05	0.30 ± 0.02
1450	2.77 ± 0.75	0.75 ± 0.08	0.34 ± 0.05	0.63 ± 0.06	0.62 ± 0.03

¹ Based on dose rate conversion factors from Aitken 1983.

measurements. However it should also be noted that the U series contributions to beta dose rates for these samples are only some 10–15 per cent of the total beta dose rates. Taking account of all these considerations the beta dose rate estimates from both methods were combined.

Table 7.13 presents measured and assumed water content for all samples. Water content corrections have been applied to the average beta dose rate from HRGS and TSBC (Zimmerman 1971), and to the dry gamma dose rates determined by HRGS. Effective beta dose

rates combine water content corrections with grain size attenuation corrections giving results which are broadly similar from sample to sample, with a mean value of 0.42 ± 0.04 mGya⁻¹.

Calculated wet gamma dose rate values determined by HRGS are also tabulated. Comparison of these values with on-site gamma measurements indicates that samples SUTL1448 and 1449 are representative of their external gamma ray environment. Therefore the mean value of both sets of data has been used in final calculations.

Table 7.13
Annual dose rates for samples SUTL1447-1450

Sample	Water (Content		Effective β	Dγ (wet) by	Effective γ dose	Total dose
	FW/ %	SW/ %	Assumed/ %	dose rate¹ /mGya⁻¹	HRGS/ mGya ⁻¹	dose rate /mGya ⁻¹	rate ² /mGya ⁻¹
1447	9	31	20 ± 10	0.31 ± 0.05	0.15 ± 0.04	0.28±0.01	0.78 ± 0.06
1448	3	36	20 ± 10	0.46 ± 0.06	0.30 ± 0.05	0.26 ± 0.03	0.91 ± 0.07
1449	6	29	20 ± 10	0.41 ± 0.06	0.25 ± 0.06	0.28 ± 0.03	0.87 ± 0.07
1450	5	39	20 ± 10	0.50 ± 0.06	0.28 ± 0.05	0.62 ± 0.03	1.31 ± 0.07

¹ Effective beta dose rates combine water content corrections with inverse grain size attenuation factors obtained by weighting the 200 micron mean grain size attenuation factors of Mejdahl (1979) for K, U and Th sources by the relative contributions to beta dose rate from each source determined by HRGS.

² Obtained from the combination of effective beta and gamma dose rates and an additional 0.185 mGya⁻¹ allowance for the dose rate due to cosmic radiation (Prescott & Hutton 1994).

Laboratory data from samples SUTL1447 and 1450 both imply 40–50 per cent lower gamma dose rates than those measured in the field. In both cases the higher field gamma dose rates are attributed to the presence of the *in-situ* collar stone and other rock fragments in the vicinity of the sampling position. In these circumstances the field measurement is the more appropriate value to carry forward, and this has been used in subsequent calculations.

Calculated total effective dose rates vary from $0.8-1.3~{\rm mGya^{-1}}$, values which are broadly consistent with those assumed during profiling assessment. The overall uncertainties in dose rate combining all data sets and corrections vary from ± 5 per cent for sample 1450 to ± 8 per cent for sample 1447. As stated above the relatively low activity levels of the samples, as well as consideration of the site stratigraphy and uncertainty in past water content determine these precision limits,

which carry through to the individual age calculations below. The dosimetry of these samples is relatively well balanced between Uranium series activity and the more geochemically stable K and Th contributions. External gamma radiation represents between approximately 30 per cent and 50 per cent of the dose rate for these samples, which in view of the relatively complex stratigraphy again highlights the importance of utilising field measurements of gamma dose rates at time of sampling.

Single aliquot OSL results

Data from the single aliquot regenerative dose determinations were analysed both using the Risoe 'Analyst' programme, which constructed individual dose response curves and estimated doses for each disc, and using Excel spreadsheets and Jandel Sigmaplot software to examine composite data sets. Each individual

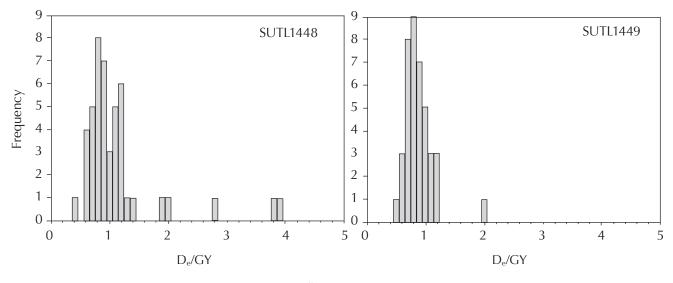
Table 7.14
Summary of SAR results from 16 disc runs

Sample	1447	1448	1449	1450
Mean Sensitivity/Counts Gy ⁻¹	5600	4500	4060	7400
Sensitivity change/% per cycle	-5.20	-1.23	-0.199	-1.05
Recycling ratio	0.977 ± 0.026	0.987 ± 0.012	1.068 ± 0.046	1.006 ± 0.013
D _e at 220°C/Gy	0.694 ± 0.061	0.717 ± 0.177	1.157 ± 0.343	0.590 ± 0.092
D _e at 240°C/Gy	0.834 ± 0.058	1.276 ± 0.493	0.716 ± 0.261	0.532 ± 0.046
D _e at 260°C/Gy	0.703 ± 0.092	0.793 ± 0.159	0.811 ± 0.072	0.584 ± 0.036
D _e at 280°C/Gy	0.610 ± 0.037	0.914 ± 0.212	0.872 ± 0.069	0.578 ± 0.039
Combined D _e /Gy	0.711 ± 0.045	0.939 ± 0.148	0.871 ± 0.108	0.570 ± 0.035
De Precision/%	6.3	15.7	12.3	6.1
Effective Dose Rate/mGy a ⁻¹	0.78 ± 0.06	0.91 ± 0.07	0.87 ± 0.07	1.31 ± 0.07
Age/ka	0.91 ± 0.09	1.03 ± 0.18	1.00 ± 0.15	0.435 ± 0.035
Date AD	1090 ± 90	970 ± 180	1000 ± 150	1570 ± 35
Weighted D _e /Gy	0.703 ± 0.012	0.765 ± 0.013	0.865 ± 0.016	0.565 ± 0.01
Age/ka	0.902 ± 0.071	0.842 ± 0.066	0.984 ± 0.081	0.432 ± 0.024
Date AD	1100 ± 70	1160 ± 70	1020 ± 80	1570 ± 25

measurement was scrutinised for OSL decay shape and signal consistency relative to the other measurements in the sets of 16 discs per sample originally examined. Checks for zero level were satisfactory in all cases (representing less than 1 per cent of the test dose response), as were the IR tests with the exception of one disc which also showed an anomalous OSL decay shape and intensity. A small number of outlying data points was also excluded from final analysis on the basis of consistency with the overall group. For all four samples there was clear evidence that the measured variance of regenerated dose response points (typically reproduced with $\pm 2-3$ per cent or better within groups of discs from the sample sample) was significantly smaller than the distribution of normalised natural OSL signals (which varied from $\pm 4-5$ per cent to > 15 per cent depending on the sample). This was taken as an indication that the dose response curves from individual discs in each could be treated as random samples from the same underlying form. Moreover there was no evidence of significant differences in normalised OSL ratios (both in natural and regenerated dose points) between the subsets of discs pre-heated at temperatures from 220°C to 280°C. Accordingly composite dose response curves from all discs for each sample were constructed and used to estimate equivalent dose values for each of the individual discs, and their combined sets. Linear fitting was used in determining parameters for the dose response curves, and it was also noted that the coefficients determined from each sample were within statistical limits of each other.

Table 7.14 summarises the SAR characteristics and results, together with age determinations based both on unweighted and weighted combination of data from the individual discs. Clearly the choice of pre-heating temperature does not have a systematic effect on estimated dose. It is notable that the overall precision attained from unweighted analyses of samples 1447 (under the broken collar stone) and 1450 (from the rubble-filled layer) of approximately 6 per cent is better than from the sand samples 1448 and 1449, associated with the stone lower portion, at approximately 15 per cent. The use of weighted combinations tends to reduce uncertainty estimates, and for samples 1447, 1449 and 1450 makes little difference to the age estimates. However for sample 1448 the use of weighted combination appears to influence both the age estimate and the uncertainty.

Additional measurements were performed for samples 1448 and 1449, for which a a further 32 discs were investigated in an attempt to improve improve precision based on a larger data set, and to understand the distributional properties of the samples. The single aliquot dose distributions from the combined data sets (of 48 measurements per sample are shown in illus 7.46. The upper sand sample SUTL1449 shows a main singlemode dose distribution, with aslight suggestion of skew, and one outlying disc with a stored dose of approximately twice the modal value. The lower sand shows more evidence of mixed age behaviour. Five discs can be considered as outliers on the high dose side, one seems potentially low, and there is evidence of a bimodal distribution in the



 ${\it Illustration~7.46}$ Single aliquot dose distributions from SUTL 1448 and 1449

ARTEFACT AND ENVIRONMENTAL STUDIES

Table 7.15
Single aliquot results from SUTL1448 and SUTL1449 based on 48 replicate measurements

	SUTL1448 (cont	ext 042)	SUTL 1449 (cont	text 019)
	De/Gy	Date/years AD	De/Gy	Date/years AD
All discs unweighted	1.08 ± 0.11	820 ± 150	0.814 ± 0.04	1070 ± 85
All discs weighted	0.805 ± 0.01	1120 ± 70	0.753 ± 0.01	1140 ± 70
Unweighted without outliers	0.877 ± 0.04	1040 ± 80	0.79 ± 0.02	1095 ± 80
Weighted without outliers	0.804 ± 0.01	1120 ± 70	0.749 ± 0.01	1140 ± 70
Lower peak (1447)	0.8 ± 0.1	1120 ± 130		
Upper peak (1447)	1.1 ± 0.1	790 ± 140		

central area with components of approximately 0.8 and 1.1 Gy equivalent dose respectively. In both these cases the results suggest a degree of mixing of sands which have been zeroed at different times in the archaeological formation of the site. Given the sampling locations, and greater degree of mixing in the lower sample, these results could perhaps be viewed in terms of partial re-setting of sands re-deposited during the stone setting operation. In this interpretation the bimodal distribution would indicate both the inherited substrate age and the influence of the re-setting event.

Table 7.15 summarises equivalent doses and estimated ages from samples 1448 and 1449 based on the enlarged data set of 48 measurements. Taking all valid measurements the combined dose estimates from sample 1448 are still sensitive to whether weighted or unweighted combination is used; the former leading to a ninth-century age estimate, the latter to a 12th-century result. The differences for sample 1449 are not pronounced. When the outlying results (one observation for 1449; 6 for 1448) are removed the results are much more consistent, and not surprisingly the estimated dating errors are reduced. Table

Table 7.16 Final age estimates

SUTL no	Context	Stratigraphic significance	Luminescence age
1447	Thin sandy layer (042) below broken collar stone (032)	Should give tpq for final placement of broken collar stone	ad 1100 ± 70
1448	(016) sandy deposit, primary fill of pit for Setting 2	Should give taq for Setting 2	AD 1120±70 ¹
1449	(019) sandy deposit cut by pit for Setting 2	Should give taq for stone setting (and tpq for 'robber' pit	AD 1140 ± 70
1450	(007) layer of carved fragments	Associated with deposition of the carved fragments	AD 1570 ± 25

¹ As noted in Table 9.15 there is evidence of bimodality for this sample with apparent ages of AD 790 and 1120 for the two peaks in the dose distribution.

7.15 also shows the equivalent ages for the two modes of the central dose distribution of sample 1448, confirming that materials with both ninth- and 12th-century ages are present. If the data sets were separated into discs corresponding to each peak, the resulting distributional widths would be much closer to estimated measurement errors than for the mixed material.

For homogeneous samples the choice of whether to use weighted or unweighted combinations is largely unimportant. Where differences are evident arguably weighted combinations are preferable, and these are reproduced in Table 7.16 as the final age estimates for the four samples.

Discussion and conclusions

As noted in the introductory sections of the report, application of OSL dating methods to complex archaeological sites is potentially both challenging and rewarding. Careful selection of samples, which involves good planning of the work between excavator and the laboratory is a prerequisite. The suitability of available sample mineralogy, luminescence sensitivity and radiation dosimetry needs to be evaluated on the basis of laboratory results. It is also hard to prejudge whether or not sediments have incorporated mixed-age material, although the recent availability of single aliquot methods which can be used on many sub-samples to evaluate sample homogeneity has greatly helped in this respect.

In this project the use of small samples to evaluate mineralogy, luminescence sensitivity and potential suitability was useful in demonstrating the opportunity for applying quartz SAR methods to tube samples. The profiling results not only confirmed that quartz with an adequate luminescence sensitivity was available from all samples, but also yielded stored-dose estimates which were quantitatively consistent with the expected archaeological ages, and which were in stratigraphic order within each feature. Dose rates for these small samples were not explicitly determined, and therefore age estimates can only be made by assuming dose rates, either from co-located tube samples(where dose rates were measured) or by using mean values across this site (which are subject to variation). Therefore only broad chronological interpretation of the profiling data is possible. However it is apparent from the lowest sample taken in Profile 1, which comes from approximately 5cm into the sandy substrate into which the final lower portion setting was cut, that this surface corresponds to a stored dose (1.1 Gy) which is consistent with a late first millennium AD depositional age. This is also concordant with three radiocarbon dates from material within the layer ranging from AD 650-1160. Whether the surface is composed of natural aeolian material, or forms part of an earlier anthropogenic feature is not entirely clear from the excavation. It would be valuable in future work to explore the earlier environmental history and context of the site further. Profile 2 results also indicate the later first or early second millennium ad.

The results from OSL dating samples which are accompanied by full dosimetric measurements and detailed investigations of dose distributions, provide a more informative basis for evaluating the chronology of the main features associated with the stone setting. The use of up to 48 subsamples for the two sand samples was helpful in characterising the dose distributions, and dealing with the minor evidence of mixing in the upper sand (SUTL1449). The dose distribution in the lower sand (SUTL1448) shows demonstrable bimodality. The majority of discs correspond to a 12th-century age. A significant minority population however apparently registers an earlier event, equivalent to the late eighth/ early ninth century AD. This would correspond both to the expected art-historical age of the Cadboll stone itself, and also according to the profiling results, to the age of the upperpart of the substrate into which the stone was finally set.

The sample from the layer thought to be assocaited with the defacement of the Cadboll stone is also interesting. The final luminescence age given by SUTL1450 (AD 1570 ± 25) is statistically earlier than the late 17th-century family inscription carved on the defaced stone. The luminescence age, however, corresponds remarkably to the Scottish Reformation, and it is possible that the initial destruction of the stone took place up to a century before its re-use as a memorial.

As noted in the summary the implications of the OSL results have had an important influence not only on defining some of the key chronological markers of the history of the stone and its setting, but also in raising hypotheses (for example the two-stage defacement followed by re-use, which had not hitherto been suspected) that could be assessed using the archaeological data set. The success of OSL in this project is most probably the consequence of a steadily accreting landsurface which has received prolonged input of aeolian material that has been well zeroed in the near-shore environment. The conditions under which OSL dating works well appear to be satisfied by this site, and the results obtained suggest that it could be a useful method to apply in a more comprehensive manner, both for dating and for use as a tracer of stratigraphic sequence if further excavations at the Cadboll site were to take place in the future. With hindsight it would have been extremely useful to have had a more comprehensive set of small samples to assist interpretation of the stratigraphy and to have sampled the stone setting in a more comprehenive manner, with particular attention to the material in Setting 1. Nonetheless the work conducted has made an interesting and potentially revealing contribution to understanding the site and the material recovered from these important excavations.

7.3.3 Radiocarbon dates

SCOTTISH UNIVERSITIES RESEARCH AND REACTOR CENTRE

Initially, six samples for radiocarbon dating were submitted to the Scottish Universities Research and Reactor Centre (East Kilbride) and were measured at the University of Arizona AMS Facility (Table 7.17). Three of these samples were of human bone from the cemetery and three from context 026 (Phase 1). Subsequently, three further bone samples were submitted for dating. Two were human bones from layer (026) and one was a horse jaw from the pit fill (context 011).

7.4 The ecofacts

7.4.1 Archaeobotany

JENNIFER MILLER AND SUSAN RAMSAY

Introduction

Soil samples for botanical analysis were derived from free-draining contexts in which uncarbonised ancient plant remains were unlikely to have been preserved. Consequently, all samples were processed using a Siraf flotation system with 500µ and 1mm sized sieves and the resultant flots and retents dried and sorted. Following this, laboratory examination and preliminary identification were undertaken using low power microscopy at variable magnifications of between ×4 and ×45. The anatomical characteristics of charcoal were observed at ×200 using the reflected light of a Zenith metallurgical microscope. Identification of seeds was initially by reference to the texts of Beijerinck (1947) and the extensive reference collection of Glasgow University. Charcoal was identified using the text and photographs in Schweingruber (1990). Vascular plant nomenclature follows Stace (1997), other than cereals, which follow Zohary and Hopf (2000).

Results

Context (026) (Phase 1)

Context (026) is a layer of wind-blown sand, which is sealed by (019) (Phase 2). It contained only a trace amount of poorly preserved charcoal, which could only be identified to cf birch. It was not abraded. It is difficult to use the botanical remains from this context to provide any further interpretation. Three radiocarbon dates have been returned from birch charcoal from this deposit.

Context (019) (Phase 2)

Context (019) was a more extensive layer that contained medieval pottery. Small fragments of charcoal identified as alder, birch and oak were recovered from this context along with a single grain of six-row barley (*Hordeum vulgare sl*). This assemblage is in keeping with domestic occupation debris brought on to the site rather than resulting from on-site habitation.

Context (030) (Phase 2)

Context (030) consisted of a layer of weathered sandstone fragments that contained sherds of medieval pottery of 13th- to 15th-century date and that sealed layer (019). It produced only very small quantities of charcoal of birch, heather type and oak but no other carbonised remains. Again, it would appear that this context represents trace evidence for domestic hearth waste, which has been brought onto the site accidentally.

Context (047) (Phase 2)

Context (047) was sand sealing the *in situ* collar-stone (052). medieval pottery (13th to 15th century) was recovered from this layer. It was suggested during excavation that this material might have contained re-deposited midden material used to hide an earlier setting for the cross-slab. The carbonised assemblage from (047) was entirely in keeping with this suggestion and was remarkably similar to contexts (036) and (038), both of which were also interpreted as dumped midden material. These three contexts were the only ones from the entire site to contain oats and hazel nutshell.

Context (006) (Phase 3)

Context (006) was a sandy loam with 'shelly mortar' and contains only very small quantities of carbonised remains. Charcoal of heather type (Ericales) and oak (*Quercus*) was present in trace amounts along with a single indeterminate cereal grain and carbonised seeds of plants associated with grassland habitats. This layer seals context (030) which contains medieval pottery of 13th- to 15th-century date and the botanical assemblage is completely in keeping with a date around this time. The assemblage as a whole has the appearance of re-deposited midden material either brought onto the site accidentally or as fill during improvements to the site.

Context (016) (Phase 2)

Context (016) was the primary fill of a pit (012) cut to the west of the lower portion and thought to represent a failed attempt to remove the cross-slab. This context contained charcoal of alder (*Alnus*), birch (*Betula*), heather type (Ericales) and willow (*Salix*), in addition to a single grain of cf barley (cf *Hordeum vulgare sl*). The variety of charcoal types present in this context suggests that the material originated from hearth waste as a result of burning wood collected from the local area in addition to heather or possibly turves collected from nearby heathland. The quantities of carbonised material involved again suggest that there was not domestic occupation on site but that these carbonised remains were brought in from elsewhere.

Table 7.17 Radiocarbon dates

Lab code	¹⁴ C BP	Calibrated date	2 σ	Delta ¹³ C	Material Context
AA-54981 GU-11010)	205 + 50	ad 1520–960	-20.2‰	Human bone: left Ulna	Skeleton 1
AA-54982 (GU-11011)	485 + 50	ad 1310–1620	-16.1‰	Human bone: left tibia	Skeleton 3
AA-54983 (GU-11012)	425 + 45	ad 1410–1630	-18.2‰	Human bone: left femur	Skeleton 4
AA-54984 (GU-11013)	1295 + 40	AD 650-860	-25.3‰	Charcoal: cf Betula	Context 026, orange sand with dark brown patches and decaying sandstone, seals layer 023 and dressed sandstones 031, sealed by layer 019.
AA-54985 (GU-11014)	1225 + 40 вр	ad 680–900	-25.2‰	Charcoal: cf Betula	Context 026 (see above)
AA-54986 (GU-11015)	985+35 вр	ad 980–1160	-25.6‰	Charcoal: Betula	Context 026 (see above)
SUERC-9141 (GU-13807)	1215 + 35	ad 680–900	-19.1‰	Human bone (cervical vertebrae)	Context 026 (see above)
SUERC-9142 (GU-13808)	1225 + 35	ad 680–890	-18.1‰	Human bone (first metatarsal)	Context 026 (see above)
SUERC-9143 (GU-13809)	170 + 35	ad 1650–960	-21.9‰	Horse bone (jaw)	Context 011, fill of pit

Context (021) (Phase 3)

Context (021), when excavated was thought to be the equivalent of (006) (Phase 3). The charcoal types present within it, however, are not identical, with only heather type being present in both. Context (021) has alder and birch as additional types and oak is not represented as it is in (006). Both (006) and (021) contain a single indeterminate cereal grain. Although these two contexts contain different charcoal assemblages, it is still possible to interpret both as containing general domestic occupation detritus, which has been brought onto the site.

Contexts (036) and (038) (Phase 4)

These deposits formed the core of an earth and stone bank thought to be of post-medieval date. The samples were extremely similar with respect to taxon composition, and are in keeping with re-deposited midden material. The presence of oats concurs with a medieval or later date for this feature. Both contexts contained hazel (*Corylus avellana*) nutshell, adding further weight to the theory of re-deposited midden.

Context (046) (Phase 4)

Context (046) was a pebbly sand near the chapel wall and contained 18th- or 19th-century pottery. The carbonised assemblage from (046) was scant, including only two tiny heather family twig fragments and several indeterminate stem fragments. Nothing further can be determined from these remains.

Discussion

The charcoal assemblage is in keeping with domestic occupation debris, probably from hearth waste. However, the small size and scarcity of fragments

found, many of which were in poor condition, strongly suggests re-deposited material rather than material originating from *in situ* occupation. All of the tree and shrub types identified would have been available in the local environment, and there is no evidence for either the selection of specific types for use, or of the utilisation of driftwood or imported timber.

Cereal grains found were generally in very poor condition, and were often not identifiable to type. However, oats, hulled barley and a single, very small wheat grain were recorded. The oats and barley would certainly have been grown locally, although this cannot be said with certainty for the wheat grain. However, it is possible that this may have been grown in sheltered areas, given the coastal location of the site. The three finds of oats are all from contexts associated with medieval or post-medieval activity, which concurs with regular occurrences in the archaeological record for this cereal in Scotland for this period (Dickson & Dickson 2000). These three contexts of re-deposited midden material (036, 038, 047) also contained the only evidence for hazel nutshell from the site, and this similarity of composition hints at a possible single event for the incorporation of this domestic waste, or a common initial origin. This suggests that the site landscaping, involving the building of an enclosure wall and earthen bank, may be broadly contemporary with the sealing of the collar-stone.

7.4.2 Faunal remains

CATHERINE SMITH

Bones were retrieved from both hand-excavated contexts (Table 7.18) and from sieved samples (Table 7.19). A more detailed description by context is held in the archive. Larger animal species present in the hand-excavated material were cattle, sheep/goat, pig, horse, roe deer, dog, canid/dog, and cat. Human bones were also recovered. Smaller species were field vole (*Microtus agrestis*), bird (probably snipe), fish and amphibian (frog or toad). Present in the sieved samples were field vole, shrew (*Sorex* sp), fish, amphibian, Passerine bird species (eg sparrow), probable cattle, sheep/goat and human. Most abundant in the retents were the bones of small fish and amphibians, for fish bones were present in all but one of the nine samples and amphibian bones were present in three out of nine samples.

Discussion

The cattle, sheep/goat, pig and roe deer bones are probably all from animals whose meat was eaten by people who lived in the vicinity, as are the fish remains. The horse remains from the fill of the robber pit in Phase 4 (context 011; find nos 153, 161 and 253) are probably all from the same very elderly individual and represent the burial of a natural casualty.

The domestic animal bones are all from fairly small, unimproved types, typical of the period prior to the 19th century, and may well be post-medieval or medieval in date on the basis of size and butchery evidence. The recovery of a baculum or os penis from a canid of dog size is interesting, since this was the only surviving dog bone in context (043), Phase 3. However, a piece of dog skull (petrous) was recovered from context (037) (in Phase 5, but in the vicinity of 043) and, thus, these two bones may have come from the same individual. If the bones are not associated, it is possible that the baculum was kept as a talisman, a practice known from the Roman period.

Small mammal remains from voles (*Microtus agrestis*) indicate an open grassy environment around the site, while the bones of frogs or toads are an indicator of a localised supply of fresh water. There is also a possibility that the vole, shrew and amphibian bones originated from owl pellets.

Table 7.18

Faunal remains from hand-excavated contexts

M = Indeterminate manufacture I I I = I arge ungul

Key: IM =	Indeterminate mammal; LU =	Large ungulate;
	SU = Small ungulate	

Phase	Context	SF no	Species	Bone
1	023	48	Fish	Vertebra
1	023	48	Fish	Mandible
1	023	?	Cattle	L astragalus
2	016	46	IM	
2	019	106	Fish	Vertebra
2	019	218	?Horse	Tooth
2	019	218	IM	
2	019	218	LU	Vertebra
2	019	218	LU	Rib
2	019	246	Cattle	Mandible
2	019	-	Cattle	Tooth
2	034	78	Sheep/goat	Metatarsal
2	047	228	IM	
2	047	228	Sheep/goat	Tooth
2	047	263	cf Cattle	Mandible
				<u> </u>

Table 7.18 (cont)
Faunal remains from hand-excavated contexts

Phase	Context	SF no	Species	Bone
3	006	-	cf Sheep	cf humerus
3	020	213	IM	
3	021	54	Bird cf Snipe	Tibio-tarsus
3	043	170	LU	
3	043	194	Canid cf dog	Os penis
3	043	194	IM	
3	043	194	SU	Vertebra
3	061	241	Sheep/goat	L mandible
3	067	242	Cattle	R mandible
3	067	242	LU	
3/4	006/007	27	IM	
3/4	006/007	30	Fish	Vertebra
3/4	006/007	30	IM	
3/4	006/007	112	Fish	
4	005	236	IM	
4	005	236	LU	Rib
4	007	11	IM	
4	007	12	Horse	L calcaneum
4	007	18	IM	
4	007	23	IM	
4	007	80	cf Sheep	Tibia
4	007	123	Cattle	R femur
4	007	123	IM	
4	007	126	Sheep/goat	Tooth
4	007	216	IM	
4	011	108	LU	
4	011	113	Human	3rd Phalange

4 011 113 Pig Tooth 4 011 147 LU Rib 4 011 147 LU Rib 4 011 153 Horse L&R mandible 4 011 153 Horse Tooth 4 011 153 Horse Tooth 4 011 161 Horse L mandible 4 011 161 Horse Tooth 4 011 161 Horse Tooth
4 011 147 LU Rib 4 011 153 Horse L&R mandible 4 011 153 Horse Tooth 4 011 153 Horse Tooth 4 011 161 Horse L mandible 4 011 161 Horse Tooth
4 011 153 Horse L&R mandible 4 011 153 Horse Tooth 4 011 153 Horse Tooth 4 011 161 Horse L mandible 4 011 161 Horse Tooth
4 011 153 Horse Tooth 4 011 153 Horse Tooth 4 011 161 Horse L mandible 4 011 161 Horse Tooth
4 011 153 Horse Tooth 4 011 161 Horse L mandible 4 011 161 Horse Tooth
4 011 161 Horse L mandible 4 011 161 Horse Tooth
4 011 161 Horse Tooth
4 011 161 Horse Teath
4 011 101 1101SC 100th
4 011 253 Horse Splint
4 011 253 IM
4 011 253 Sheep/goat Tooth
4 015 35 Sheep/goat L tibia
4 015 41 ?Bird
4 015 52 cf Cat Humerus
4 015 159 IM
4 015 211 Horse Tooth
4 015 255 Horse Metapodial
4 015 255 IM
4 025 101 Fish Vertebra
4 025 101 Fish Rib
4 025 ? Fish
4 027 62 ?Fish
4 027 62 Amphibian Innominate
4 027 62 Amphibian Humerus
4 027 62 Field vole Skull
4 027 62 Field vole L&R maxilla
4 027 62 Field vole R mandible
4 027 62 Field vole Mandible
4 027 62 Field vole L&R maxilla
4 036 134 Cattle L radius

ARTEFACT AND ENVIRONMENTAL STUDIES

Table 7.18 (cont)
Faunal remains from hand-excavated context

Phase	Context	SF no	Species	Bone
4	036	137	Sheep/goat	Tooth
4	036	138	Cattle	Tooth
4	036	202	Cat	R radius
4	036	202	Fish	Vertebra
4	036	202	Fish	
4	036	202	IM	
4	036	202	Sheep/goat	Tooth
4	037	40	Pig	1st phalange
4	037	42	cf Cattle	Mandible
4	037	55	Canid cf dog	Skull
4	037	187	IM	
4	038	129	IM	?rib
4	038	129	Sheep/goat	R metatarsal
4	038	129	Sheep/goat	Tooth
4	038	136	Cattle	1st phalange
4	038	136	Cattle	3rd Phalange
4	038	136	Fish	Vertebra
4	038	136	IM	
4	038	136	SU	Vertebra
4 4	038	136 206	SU Fish	Vertebra Vertebra
4	038	206	Fish	Vertebra
4 4	038 038	206	Fish Fish	Vertebra
4 4	038 038 038	206 206 206	Fish Fish	Vertebra Cleithrum
4 4 4	038 038 038	206 206 206 206	Fish Fish Fish	Vertebra Cleithrum Vertebra
4 4 4 4	038 038 038 038 038	206 206 206 206 206 206	Fish Fish Fish Horse	Vertebra Cleithrum Vertebra

4	046	247	Pig	Fibula
4	049	192	IM	
4	049	240	Cattle	Skull
5	002	9	Dog	Tooth
5	002	36	IM	
5	002	85	IM	
5	002	86	Roe deer	Tooth
5	002	91	IM	
5	002	92	IM	
5	002	118	IM	Rib
5	002	118	IM	
5	002	119	cf Sheep	L scapula
5	002	119	Fish	Skull
5	002	120	IM	
5	002	120	Horse	Tooth

Table 7.19
Species present in the nine sieved samples that contained bone

Species	No of samples
Field Vole (Microtus agrestis)	1
Vole sp	1
Rodent, eg Vole	1
Shrew (Sorex sp)	1
Small Mammal	1
Bird cf Passerine sp	1
?Bird	1
Amphibian	3
Fish	8
cf Cattle	1
Sheep/goat	2
Large Ungulate	1
Indeterminate Mammal	6
?Human	2

Table 7.20 Human remains: age at death

Skeleton/context number Age at death		
1	25 to 35 years	
3	12 to 15 years	
4	2 to 4 years	
007	0 to 3 months	
025	Adult	
065a	0 to 2 months	
065b	0 to 2 months	

7.4.3 Human remains

JULIE ROBERTS

Introduction

This report presents the results of osteological analysis of the seven articulated skeletons uncovered. With the exception of skeleton (025) (Phase 4), which was represented only by a fragmented cranial vault and left femur, the state of preservation of the remains was good. There was some mixing of the remains, and associated animal bone, coffin nails and wood were also present in some contexts (see Burial Record below).

Age at death

The age at death of all the individuals was determined using standard methods outlined by Buikstra and Ubelaker (1994). Five of the seven individuals were immature, therefore age could be established with relative accuracy using dental development and stages of epiphyseal fusion. The estimation of age in older adults is notoriously problematic as age related changes occur at different rates in different individuals, depending on such factors as lifestyle and physical activity, and genetic predisposition. Although Skeleton 1 had reached dental and skeletal maturity, the individual was sufficiently well preserved to allow the use of multiple ageing methods, including the appearance of the auricular surface of the ilium, the pubic symphysis, and the sternal end of the fourth rib. Dental attrition and cranial suture closure were also considered, although these can be highly variable and are therefore less reliable as a means of determining age. The poor state of preservation of the remaining adult, context (025), meant that an age range could not be ascribed with confidence, although cranial suture closure indicated an age of greater than

25 years. Table 7.20 summarises the age at death of all the individuals.

Seventy-one percent of the individuals analysed were immature and, of these, 60 per cent had died before they were three months old. The two individuals (context 065, Phase 4), aged zero to two months were apparently buried within the same grave, and it is possible that they were twins that did not survive for more than a few weeks after birth.

The demographic profile of the group cannot be considered as a whole, due to the small sample size and uncertainty regarding the relationship between the burials. It can be said, however, that a high death rate in the zero-to-three months age group is typical of a premodern population, where vaccination and antibiotics were not available to treat the infections that can be fatal in individuals of this age (Roberts & Manchester 1997). A much larger proportion of the cemetery would have to be excavated in order to determine whether this sample was representative of the local community as a whole.

Worthy of note is the discrepancy that was evident in the ages indicated by dental development and those suggested by long bone length (Bass 1995), in Skeletons 3 and 4 (Phase 3). The ages indicated by long bone length, particularly in the case of Skeleton 3, were younger than those indicated by dental development. After birth, factors such as nutrition and disease can affect bone growth, whereas they have comparatively little effect on dental development. The fact that these individuals were small for their age is probably an indication that they were under nourished or unwell. The pathological conditions observed in both skeletons support this interpretation (see below).

Sex

Standards for determining sex of the two adults were in accordance with those outlined by Buikstra and Ubelaker (1994) and Krogman and Iscan (1986). As yet, there are no acceptable standards for the determination of sex macroscopically in immature individual.

Skeleton 1 (Phase 4) was undoubtedly male. The sexually dimorphic features of the cranium, including the glabella, supra-orbital ridges and mastoid processes, were particularly pronounced. There was little surviving of the skeleton in context (025) (Phase 4), however, the zygoma was typically male and the femur was large and robust. A probable male sex was therefore assigned.

Stature

A living stature of 173.53 ± 2.99 cm (5' 7") was calculated for skeleton 1 (Trotter 1970). This compares well with the average height observed at a number of other medieval Scottish sites (Roberts 1999). The femur belonging to the skeleton in context (025) was incomplete, therefore it was not possible to calculate stature. The surviving part of the

element was, however, large and robust, suggesting a well built individual

Pathological conditions

A number of pathological conditions were identified on the skeletal remains, including traumatic injury, iron deficiency anaemia, periostitis and dental disease.

Iron deficiency anaemia

Evidence of iron deficiency anaemia, characterised by *cribra orbitalia* was observed in three of the skeletons. All of these were immature. In two cases, skeletons 3 and 4, the condition was severe (classification after Stuart Macadam 1992). There are many causes of iron deficiency anaemia, amongst the most common being lack of absorbable iron in the diet and a high pathogen load within the body (Grauer 1993). Both skeletons 3 and 4 were small for their age, and skeleton 3 also suffered from dental enamel hypoplasia, a recognised 'stress indicator' (see Dental disease). These combined disorders suggest that the infants were malnourished either because of a poor diet, chronic illness, or both.

Traumatic injury

Skeleton 1 had a healed fracture of the distal shaft of the right ulna, and a soft tissue injury that had affected the bone in a corresponding location on the right radius. The fracture had healed well and was in good alignment, but there was still a moderate amount of callous around the fracture site, indicating that healing was not totally complete. The injury may have been sustained as a result of warding off a blow, although it was located nearer to the distal end of the bone than a typical parry fracture, or it may simply have been the result of an accident. Complications arising from the fracture would have been unlikely.

Periostitis

Evidence of periostitis, inflammation of the periosteum and soft tissues around the bone, was observed on the left femur of the skeleton in context (025). The type of bone growth present indicated that the causative infection was not severe, and that it was no longer active at the time of death. This condition is frequently observed in archaeological skeletons and can relate to a number of disorders, including specific infection or direct trauma to the soft tissues.

Dental disease

Skeleton 1 had suffered from caries, a dental abscess, and had lost one tooth prior to death. A moderate-sized carious lesion was present on the mesial surface of the tooth crown of the right maxillary first molar. This disease occurs when oral bacteria metabolise any fermentable

carbohydrates (eg sugars) present on a tooth, which then becomes de-mineralised. This is usually the result of poor oral hygiene, but research has shown there is also a greater prevalence in populations whose diet was primarily carbohydrate based or where sugar consumption was high (Larsen 1984).

Dental abscesses occur when the pulp inside a tooth dies and toxic products are formed which diffuse out of the apex of the tooth and into the periodontal ligament. This results in localised resorption of the bone and the formation of a draining sinus, often around the apex of the root. In skeleton 1, a very large, externally draining, periapical abscess was associated with the left mandibular central and lateral incisors. In addition, the right mandibular third molar had been lost prior to death, and the tooth socket had been almost completely resorbed. The most common cause of ante-mortem tooth loss is periodontal disease, inflammation of the soft tissues and bone around a tooth.

Calculus, the mineralised form of plaque, was present on the lingual surfaces of the mandibular anterior teeth, and the buccal surfaces of the maxillary molars. It was moderate in severity (Brothwell 1981). This condition is frequently observed on the teeth of archaeological skeletons, and again, it is generally caused by poor oral hygiene.

A reference was made above (in association with iron deficiency anaemia) to dental enamel hypoplasia. This disorder is characterised by defects, linear grooves and pits, which appear in the enamel of a tooth representing a cessation in its growth and development. Febrile infections, malnutrition and metabolic disorders have been cited as possible causes (Aufderheide & Rodriguez-Martin 1998; Goodman *et al* 1984). The condition was evident in a moderately severe form in the 2–4 year old, skeleton 4. Slight calculus was also present on the buccal surfaces of the right maxillary teeth, and the individual was prognathic (had a marked overbite).

Discussion

A total number of seven articulated skeletons were examined. Of these, two were adult and five were immature individuals (three aged less than three months at death). The two youngest individuals, aged zero-to-two months, had been buried within the same grave. This raises the possibility that they were twins. Overall, the health of the children did not appear to be good. Three suffered from iron deficiency anaemia, one of these also had dental enamel hypoplasia, and two were short in height for their age. All of the above factors suggest malnourishment and a failure to thrive. Whether this was representative of the health and nutritional status of the majority of the immature individuals from this population, cannot be determined without examining a larger proportion of burials from the cemetery.

Burial Record
Skeleton 1 (Phase 4)

Preservation Good. > 90 per cent complete. Minimal surface erosion

Age at Death 25–35 years

Sex Male

Stature $173.53 \pm 2.99 \text{ cm/5}' 7"$

Pathology Healed fracture distal shaft of right ulna, enthesopathy distal shaft right radius, dental abscess,

caries, ante-mortem tooth loss, calculus

Comments Double atlas facets and calcaneal facets (right and left), Occipital bun with ossicles at lambda

and both lambdoid sutures.

Skeleton 3 (Phase 3)

Preservation Very good. 90 per cent complete. Minimal surface erosion and fragmentation

Age at Death 12–15 years (probably at younger end of range)

Sex NA

Pathology Cribra orbitalia

Comments Lay directly beneath Skeleton 4 (below). Long bone age considerably younger than age based on

dental development.

Skeleton 4 (Phase 3)

Preservation Very good. 85 per cent complete. Minimal surface erosion but cranium fragmented

Age at Death 2–4 years (probably younger end of the range)

Sex NA

Pathology Cribra orbitalia, dental enamel hypoplasia, slight calculus

Comments Marked prognathism. Long bone length gave a slightly younger age than age based on dental

development.

Context (007) (Phase 4)

Preservation Fair. 50 per cent complete. Moderate surface erosion

Age at Death 0–6 months (probably 0–3)

Sex NA

Pathology None observed

Comments Associated small coffin nails and fragments of wood. Green staining on right humerus

Context (025) (Phase 4)

Preservation Very poor. Fragmented cranial vault, zygoma, and left femur only.

Age at Death Adult. Probably 25+ years

Sex ? Male
Stature Unknown
Pathology Periostitis

Comments Right and left parietal foramen, left hypotrochanteric femur. Remains mixed in with animal bone

Context (65a) (Phase 4)

Preservation Fair. Cannot estimate completeness as co-mingled with 65b. Slight surface erosion and some

fragmentation

Age at Death 0–2 months

Sex NA

Pathology Cribra orbitalia

Comments Remains mixed with infant of same age (65b). Possibly twins.

Context (65b) (Phase 4)

Preservation As above
Age at Death 0–2 months
Sex NA

Sex NA

Pathology None observed Comments See above

Table 7.21
Disarticulated human bone

Disarticulated human bone						
Phase ———	Context	SF no	Species	Description		
1	026	223	Human	Vertebra		
1	026	225	Human	Tarsal		
1	026	225	Human	Metatarsal		
2	019	106	Human	Tooth		
2	019	106	Human	1st phalange		
2	019	106	Human	1st phalange		
2	019	106	Human	2nd phalange		
2	019	246	Human	Pelvis		
2	019	246	Human	Femur		
2	019	246	Human	Tibia		
2	019	246	Human	Tarsals		
2	019	246	Human	?humerus		
2	034	71	Human	?femur		
3	043	194	Human	Vertebra		
3	043	194	Human	Metapodials		
3	043	194	Human	1st phalange		
3	067	242	Human	Radius		
3	068	232	?Human	Skull		
3	068	232	?Human	Rib		
4	007	156	?Human	Innominate		
4	007	156	?Human	Tibia		
4	007	156	?Human			
4	007	216	Human	Skull		
4	011	147	?Human	Rib		
4	037	187	?Human	Skull?		
4	038	136	Human	Skull		
4	046	247	?human	Vertebra		
4	046	247	Human	Vertebra		
4	049	219	Human	Tarsal		
4	060	212	?Human	?fibula/ulna		
5	002	58	Human	Tooth		
		118				

The adult male, skeleton 1, was in a good state of health, although he had some dental disease and a healed fracture of his right forearm. His height was within the normal range for a medieval male, and his bones showed no evidence of nutritional disease. The poor state of preservation of the skeleton in context (025) precluded an assessment of his health status.

[See Burial Record]

The human bone identified by Catherine Smith from among the mammal bone consisted mainly of disarticulated fragments from the hands and feet, although a few vertebrae, ribs and long bone fragments were also recovered (Table 7.21). Human remains, or bones thought very likely to be of human rather than animal origin, came from Phase 1 (context 026), Phase 2 (contexts 019 & 034) Phase 3 (context 006, 043, 068), Phase 4 (contexts, 007, 011, 049, 046, 060, 036, 037, 038), and Phase 5 (context 002), including two out of a total of nine sieved samples.

7.5 The finds

7.5.1 The fragment of a medieval relief cross

ISABEL HENDERSON

Finds Number: 10001030.001 (Kirkdale 2001)

Stone type?

Context 007
The fragment consists of the top left quadrant of a relief ringed cross (illus 7.47). It has a flat finished surface on

ringed cross (illus 7.47). It has a flat finished surface on the back. The cross is carved on a piece of stone with a rounded end and a well-formed shoulder c 70mm deep. The ring is 30mm wide and meets what appears to be the top arm of the cross-head, which when complete would have been c50mm wide. The length of the surviving arm is 90mm. The ring meets the arm about half way along its length. The arm is superimposed on the ring and passes over it. There are surface traces at the top of the shoulder which suggest that the top arm may have projected beyond the top edge of the shaped stone. The arm has a small rounded arm-pit the appearance of which, in spite of loss of surface, can be seen. The left arm of the cross has also lost its surface but can be seen to meet the ring. A stub on the left edge may be the remnant of its projection beyond the left edge of the stone. The uncarved surface of the front face of the shoulder appears to meet the ring at this point. Both the rounded shoulder and the background surface of the cross are dressed more roughly than the surviving surfaces of the cross-head. The outer arc of the ring is

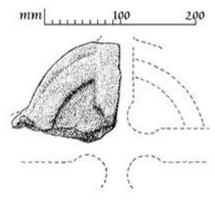


Illustration 7.47 Medieval relief cross (scale 1:5; drawn by Ian G Scott)

formed by a pecked incised line while the inner arc is more fully defined.

The fragment is part of a substantial cross-marked stone carved on one side only, but its form is not altogether typical, particularly if the cross arms projected from the edge of the stone. The most familiar feature of the cross design is the thistle shape at the angles of the arms. This shape is formed by near circular armpits and the location of the ring towards the upper ends of the arms. Such small rounded arm-pits constrict the size of the area where the arms cross. A group of cross-marked stones at Portmahomack are of this type (X.IB 347, 356, 357 and 360), but none of these, or any of the other cross-marked stones at Portmahomack, has rings.1 The collection at Rosemarkie has a number of relief ringed crosses. One of these, X.IB 128, a boulder stone with a relief carved equal-armed cross, provides a closer, but not exact, local analogy for the relief cross from the Hilton site.² An unpublished fragment of a deeply incised ringed cross, with a single quadrant surviving, found in a grave in Rosemarkie Churchyard in 2004, has the same thistle-shape at the angle of the arm and, like the Hilton fragment, lacks the more usual contouring of the cross. The Rosemarkie fragment preserves what appears to be an original straight edge and presumably is part of a regularly shaped slab. The format of the Hilton relief cross is unclear. If its arms projected, one would expect it to have been free-standing. There are no local analogies for this format other than the small cruciform stones at Portmahomack. An unpublished cruciform stone with very small arm projections was found a few years ago at the west end of Nigg Old Parish Church, but it is merely shaped with no relief carving expressing a cross. In spite of the lack of close analogies, the competent carving technique and the thistle shape at the angles support a medieval date.

Notes

- 1 Sculpture found during the excavations at Portmahomack, Tarbat, is displayed at the Tarbat Discovery Centre but has National Museums of Scotland accession numbers. For a published example of this type of unringed cross-shape see Carver 2005, fig 2.7, TR 21 (= X.IB 347).
- 2 Henderson & Henderson 2004, fig 312.

7.5.2 An unshaped stone with an incised linear cross

ISABEL HENDERSON

SF 226 (GUARD 2001)

Stone type?

Context 061

The stone has a maximum height of 250mm, a maximum width of 320mm, and a maximum thickness of 70mm (illus 7.48). The cross is lightly incised on an approximately central position of a flat, comparatively smooth, area. This flat area is probably part of a bedding plane, as is the naturally flat back. The rest of the face with the cross is rough and broken at the right and lower edges. The left edge slopes at an angle of 45° to the cross-shaft but has a straight edge. The top left corner appears to have been roughly shaped for the purposes of some primary or secondary use for the stone. The transverse arms of the cross span 45mm. They are set comparatively high on a line, 60mm long, representing the shaft and the upper arm. Two similar cross-marked unshaped stones are found at Portmahomack, Tarbat. Both have simple linear crosses set deliberately at the broader ends of unshaped stones with a vertical format.¹

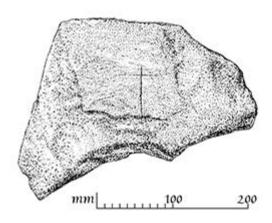


Illustration 7.48

An unshaped stone with an incised linear cross (scale 1:5; drawn by Ian G Scott)

The Hilton stone has a more horizontal format, but the position for the cross has been equally carefully chosen. Such crosses could be of any date but the scratch-like incision of the cross, and its careful placing combined with the selection of a suitable unshaped stone, is typical of such simple cross-marked stones, whether in incision or relief, in the west Highlands and islands, and at ecclesiastical sites throughout Scotland north of the Forth/Clyde line.² Both of the Hilton cross-marked stones are appropriate finds for a medieval ecclesiastical site, but they do not provide an adequate monumental context for the production of the Hilton of Cadboll cross-slab, and they have lost their locational context within the cemetery at the site.

Notes

- 1 X.IB 350 =TR24 and X.IB 351 = TR25 Tarbat Discovery Programme 1997, Appendix 2.
- 2 Fisher 2001; Henderson & Henderson 2004, Map 5, 158.

7.5.3 The architectural fragment

RICHARD FAWCETT

An architectural fragment was retrieved by Kirkdale from context 002 (illus 7.49). This is either a broken fragment

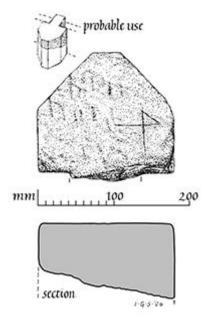


Illustration 7.49
Architectural fragment with mason's mark (scale 1:5; drawn by Ian G Scott))

of either a window mullion or a vaulting rib, probably the former. The five leading faces have been carefully dressed with diagonal tooling, albeit with vertical tooling at the upper edge to finish it off more neatly. It also has a dressed upper (or lower?) face, which has been quite deeply stugged, presumably to provide keying for mortar. This upper face also has what appears to be a mason's mark in the form of an incised X with unequal arms. The fragment was evidently originally the upper (or lower?) part of a larger stone, since the lower face is irregularly broken. Several of the arrises are weathered, but one has been quite badly chipped. At the back of the stone there are short dressed faces on each side, with a wider broken face between, from which it is likely there was originally a rectangular tongue-like projection. The rebates on each side of this tongue are likely to have been the seating for internal glazing frames or armatures. Alternatively, they could have been the seating for the webbing of stone vaulting, though there is no sign of curvature to the stone and this makes it less likely that it was a rib. A stone vault might be rather unexpected in this context.

If it was a window mullion, it is possible that it dates from as early as the 13th century, since rebates for glazing frames were being increasingly superseded in major traceried windows by glazing chases cut into the flanks of the mullions by the later 13th century. However, mullions with rebates for glazing frames continued to be used throughout the later Middle Ages in smaller scale churches and in domestic contexts, and thus it could date from the earlier 13th century onwards, though possibly with slightly greater likelihood in the earlier part of that period.

7.5.4 Selected carved fragments that are not from the cross-slab

DOUGLAS MORTON

Fragments from the Hilton of Cadboll excavations (both Kirkdale and GUARD) were initially sorted during post-excavation by Allan J Hall and Amanda Brend in March 2003. Fragments were sorted into four different 'classes' according to their basic geology and sculpted characteristics. A total of 196 fragments had some evidence of sculpture but were thought not to be from the Hilton of Caboll cross-slab (class 4A) and 3545 fragments lacked any features (class 4b, see Chapter 7.1).

1 Fragments with sculpture but not from the Hilton crossslab (class 4A)

With the exception of X.IB 355.239 and X.IB 355.238, the class 4A fragments are bagged and contained within two labelled boxes (Boxes 14 & 23) for NMS storage.

The following general observations were made from an examination of the database entries.

Condition: In general, fragments in the 4A category were in a fair condition with limited damage to any possible carved surfaces or relief features, and only slight surface wear. These fragments were found to be a range of brown-based colours with a significant number being a striking pinkish-brown.

Fracture: Fracture styles varied, with fragments often being of a large and thick size. It was noted that many fragments had, on at least one surface, broken across the grain of the stone. The resultant surface was often smooth, flat, and easily confused with a flat carved surface.

Description: Fragments from the 4A category are, with the exception of mid-portion fragments, the largest fragments contained within the catalogue with an average length and thickness of 57mm and 18mm respectively. The majority are catalogued with very simple entries often only stating that the fragment bears a 'possible relief form' or 'possible carved surface'. It is unfortunate that for the majority of 4A fragments there are no conclusive diagnostic features. This ambiguity is borne out in Table 7.22, which shows the keywords used during the catalogue process to describe the 198 class 4A fragments. The majority utilise only the FRAG keyword in Field 1 and the SURFACE keyword in Field 2. This indicates that the majority of the 4A fragments are simple and fairly ambiguous fragments that bear flat areas or surface features that may have originally been carved surfaces. In many cases, it is not clear whether the recognised feature is actually a carved form or a natural product of the geology. Although the majority of class 4A fragments are somewhat ambiguous, there is a small number for which there is an increased degree of certainty regarding their carved features.

X.IB 355.238 (09851025.102, context 002, Phase 5)

A brownish-grey coloured fragment with a rusty-coloured possible worked surface. The fragment is thick with a flat back. It has a pecked, possibly worked, surface on a narrow edge of the fragment. The surface is rounded and shows a levelling off at one edge before the break. The other feature occurs on a long face of the fragment. This is part of a circular bowl-shaped hollow, with grooves which look as if the stone has been worn away. This circular depression could be from domestic use (such as a socket or door post?) and need not be related to the pecked surface perpendicular to it. It was also considered whether this was a lamp fragment, but there are no signs of burning.

Table 7.22 Keyword usage in class 4A

	K		
Keyword	Field 1	Field 2	Field 3
Band	1	2	2
Frag	188	1	0
Stone	2	0	0
Strip	0	2	1
Surface	5	93	0

X.IB 355.239 (10151055.101, context 020, Phase 3)

A brownish-grey fragment with vertical edges on four edges and a flat back as if smashed. The fragment bears a thick rounded possible band of relief that narrows from 30mm to 25mm at its base. The section of the relief also changes from a gentle D-shape to a more triangular or peaked shape. This was identified by R Fawcett as 'possibly sculptural' and not a piece of architecture.

Discussion

The majority of the fragments in Table 7.23 are from layers 002 and 007. Fragment 3234 was originally thought to belong to context 008, but is probably just a fragment of a blocking stone. Fragment 3239 is of interest as it is the only 4A fragment to have a possible toolmark. Unfortunately, the damage to the fragment prevents any measurement of the mark being made. There is little to draw the class 4A fragments together into any coherent group, however a significant number appeared to have a reddish colour and were large in size. There was no indication that any of these joined to form another carved stone. It is probable that many of the fragments may be natural stones.

Fragments without sculpture and not from the Hilton cross-slab (class 4b)

The 3545 class 4b fragments were examined visually to check for any carved surfaces or other features which may have been missed during the initial inspection. Three fragments were re-classified as belonging to the Hilton of Cadboll cross-slab (one was a bleb, one was a class 1a and one was class 4A) and the remainder were thought to consist of natural stones.

Table 7.23
Other stone fragments with features

Working no	Location no	Context no	Significant feature
3229	10051015.112	007	an amorphous relief form
3234	10001030.009	008 (G)	part of a flat relief band
3239	99999999.005	007	possible toolmark
3241	09951020.324	007?	two flat possibly carved areas
3251	09951035.163	002?	a portion of a relief band
3284	10001035.045	002?	a relief band or strip with brown staining
3292	10051030.135	047?	a wide relief band
3697	10101020.489	007?	a low-relief strip
6527	09951035.226	002?	a wide relief form

7.5.5 Ironworking

MARIA KOSTOGLOU

Introduction

This report presents the analytical results of iron objects and industrial waste found during the investigation of the setting and the context of the Hilton of Cadboll cross-slab. After the first macroscopic evaluation of the material, it was decided that a detailed archaeometallurgical analysis could contribute to the following areas:

- 1 Identification. This includes both identification of evidence for metalworking on the site based on the distribution and context of iron found there, and identification of the finds. Not all iron finds are easily identifiable due to the extensive corrosion that can deform the original features. A detailed recording and measuring of the macroscopic characteristics provides the first typological classification (distinguishing fragments of artefacts from industrial waste). All measurements are approximate due to the extent of corrosion.
- 2 Structural and compositional analysis of finds, which can add an extra dimension to conventional typological studies, providing information on manufacturing techniques, provenance and so on.
- 3 Evaluation of the role of ironworking and iron material in the site.

Methodology

The iron appears to be very corroded, fragmented and badly preserved. During the first part of this work, all material was studied macroscopically and all the external characteristics of the finds (such as size, weight, form, magnetic properties) were observed and recorded in detail. As noticed in the catalogue at the end of this report, most of these characteristics are given in their approximate form: small, medium, large. All the measurements taken are also approximate since iron corrosion is a very active process and the size of the finds will change in the immediate future until they will become fragments of corrosion, as indeed has happened already with most of the material from Hilton of Cadboll.

A number of the best-preserved finds were then chosen for further study (Table 7.24). The stage of corrosion of the nails also made their analytical study problematic. No metallic core seems to be preserved in them as this is indicated by the absence of any magnetic indication. Most of them were very fragmented already and they could not be handled without further damage. The archive includes a detailed description, a black and white photograph and a line drawing of a scale 1:1 of the best-preserved finds.

During the second stage of this work, a representative amount of finds (nails) and all industrial waste (a total of only three fragments) were prepared for metallographic

Table 7.24 Iron finds

Phase	Context	SF no	No of frags	Description	Measurements
1	023	45	4	Two iron nails, one nail head and one fragment of bone	Very fragmented
1	023	47	4	Fragments of iron nails with disk-shaped heads	Various 0.01–0.03m Diameter=0.01m
1	026	43	2	Non-metallic fragments	
1	026	53	5	Non-metallic material – bone?	
2	019	234	1	Small fragment of wood preserved in iron corrosion	<0.02m
2	019	247	2	Iron nails with wood preserved in the corrosion	<0.02m
2	030	160	3	Small iron nails with wood preserved in the corrosion layers	< 0.03m
2	034	84	4	Fragments of very corroded iron nails	Various 0.02-0.06m
2	034	84	3	Fragments of very corroded iron nails	Various 0.03-0.08m
2	042	166	1	Medium size fragment of porous, magnetic slag	0.02×0.05 m
2	047	262	1	Iron nail	0.04m
3	006	16	1	Iron nail, very corroded	0.01m
3	021	36	1	Small fragment of light, magnetic, porous slag	0.02×0.02 m
3	021	37	4	Non-metallic fragments of material preserved in iron corrosion (bone?)	<0.01m
3	043	143	1	Iron nail	0.05m
4	005	?	3	Iron nails	0.04-0.06m
4	005	141	1	Iron nail	0.05m
4	005	237	1	Iron nail	0.03m
4	007	17	3	Non-metallic fragments of material preserved in iron corrosion (bone?)	<0.01m
4	007	26	Many small	Fragments of iron corrosion	<0.01m
4	007	49	1	Wood fragment preserved in iron corrosion	<0.015m
4	007	121	3	Two iron nails and one small fragment of wood	Nails < 0.05m Wood < 0.02m
4	007	139	1	Iron nail	0.05m
4	007	158	1	Small iron nail in L-shape with soil trapped in the corrosion layers	0.02m

ARTEFACT AND ENVIRONMENTAL STUDIES

Table 7.24 (cont)
Iron finds

Phase	Context no	SF no	No of frags	Description	Measurements
4	007	169	Many	Small fragments of iron corrosion with wood	<0.03m
4	007	249	1	Disk-shaped head of iron nail, very corroded	Diameter = 0.01m
4	007	251	1	Fragment of iron nail	0.04m
4	011	254	1	Non-metallic material – bone?	
4	015	39	3	Small iron nails	0.03-0.05m
4	015	104	1	Iron nail	0.05m
4	015	179	1	Iron nail	0.04m
4	015	190	1	Complete iron nail with disk-shaped head	Length = 0.04m Diameter = 0.01m.
4	025	99	6	Small fragments of very corroded iron nails with wood preserved	Various 0.01–0.03m
4	033	171	1	Iron nail with disc-shaped head and square cross-section profile	Length = 0.04m Diameter = 0.01m
4	033	173	1	Iron nail	0.07m
1	036	204	1	Iron nail	head 23 mm; length 17 mm
4	033	173	1	Iron nail	0.01m
1	037	189	1	Fragment of iron nail	0.06m
4	037	239	1	Iron nail	0.04m
4	037	243	1	Fragment of iron nail	0.02m
4	037	244	1	Fragment of iron nail	0.04m
4	038	132	1	Small fragment of light, magnetic, porous slag	0.02×0.2m
4	046	175	2	Iron nails	0.04m and 0.05m
4	046	176	3	Iron nails	0.02-0.06m
4	049	238	1	Iron nail with disk-shaped head	Length = 0.05m Diameter = 0.01m
5	001	107	2	Two very corroded iron nails with sand and soil around	0.02m and 0.05m
5	002	3	1	Very small, fragment of iron nail with wood preserved in the corrosion layers	Length=0.02m
5	002	8	1	Iron nail	0.03m
5	002	11	Many	Small iron corrosion fragments	<0.01m

Table 7.24 (cont)
Iron finds

		No of frags	Description	Measurements		
5	002	19	1	Disk-shaped head of iron nail, very corroded	Diameter ?0.01m	
5	002	33	1	Iron nail	0.06m	
5	002	34	3	Two fragments of iron nails and one disc-shaped iron nail head	Nails = 0.01-0.03m Diameter = 0.01m	
5	002	57	2	One iron nail and one disc-shaped iron head	Nail = 0.02m $Diameter = 0.02m$	
5	002	61	1	Iron nail with disc-shaped head	Length = 0.04m Diameter = 0.01m	
5	002	68	2	Iron nails	<0.04m	
5	002	72	5	Iron nails	0.05-0.06m	
5	002	81	1	Iron nail with disc-shaped head and soil/sand preserved in the corrosion	Length = 0.05m Diameter = 0.01m	
5	002	87	1	Iron nail with disc-shaped head	Length = 0.07m Diameter = 0.01m	
5	002	93	3	Fragments of iron nails	0.032-0.06m	
5	002	93	3	Iron nails	0.02-0.06m	
5	002	96	1	Iron nail with disc-shaped head	Length = 0.05m Diameter = 0.01m.	
5	002	116	1	Big iron nail with disc-shaped head	Length = 0.07m Diameter = 0.02m	
5	002	117	1	Fragment of wood preserved in iron corrosion	<0.02m	
5	002	214	2	Iron nails with partly preserved disc-shaped head	0.03m and 0.05m	
5	002	235	4	Four identical iron nails	0.05m each	
_	U/s	88	1	Iron nail	0.03m	
-	U/s	233	1	Iron nail	0.04m	

study, providing information on the manufacturing techniques of the nails and the chemical composition of the slag. The metallographic study took place in the Materials Centre in UMIST using standard metallographic microscope. All the samples were sectioned, mounted, grinded and polished by the standard metallographic

techniques. The samples from the nails were etched with Nital solution. The analysis of the chemical composition took place in a Philips, SEM 525M with EDAX microanalyser. The results are quantified and presented in their normalised form and in oxides Wt per cent.

Analytical results

Artefacts

The majority of iron finds consists of nails of various sizes and profiles (see Table 7.24). Two nails were randomly selected for sectioning (SF 237, SF 87). Nail SF 237 comes from the foundation of a post-medieval clay-bonded wall (context 005, Phase 4). Under the metallographic microscope, it shows a high carbon steel structure, with islands of pearlite surrounded by cementite and no slag inclusions. Areas of deformed ferrite (widmanstatten structure) are located around the edges of the sample (representing the surface of the nail) and indicate that slow cooling took place after the carburisation of the nail. Nail SF 235 is the product of a smith highly skilled in the hot working of wrought iron. Nail SF 87 comes from beneath the turf and topsoil (002, Phase 5) and is made from wrought iron (big ferrite grains under the microscope) with a lot of slag inclusions. The iron used in the production of this nail is poor quality, which is more consistent with what is known about iron nails in antiquity.

Industrial waste

All three samples of industrial waste (slag) were very corroded, highly porous and lightly magnetic (context 042, SF 166; context 021, SF 36; context 038, SF 132).

The heterogeneous nature of the material caused problems during both the preparation and the analysis of the samples. Under the microscope, all three samples revealed the three most common phases in slag, namely wustite, fayalite and interstitial glass (see glossary in archive report). In all three samples, the amounts of iron oxide lost in the slag are moderate to low (50–67 per cent in area analysis). The silicate phase (fayalite) is rich in manganese oxide, alumina, magnesia, and lime (see SEM photographs) and the matrix shows high phosphorous content and in one case (SFN132) sulphur, indicating the smelting of ores of organic origin such as bog ores that are located in the area (MacGregor 1996).

Sample SF 36 contained dendrites of manganese rich (4.96 per cent) wustite (white), needles of fayalite rich in manganese (12.60 per cent) and magnesium oxides (2.96 per cent), and interstitial glass (dark grey) rich in alumina (11.68 per cent), soda (2.15 per cent), potash (4.13 per cent), lime (5.91 per cent) manganese oxide (5.97 per cent) and small amounts of phosphorous (0.94 per cent) and sulphur (2.32 per cent) oxides.

Based on their macroscopic characteristics (small, amorphous fragments), metallography and chemical composition all three samples are most likely the by-products of smelting operations. The correlations of aluminium, manganese, magnesium and calcium, along with the high phosphorous in the glassy matrix point to the smelting of bog ores. Bog ores, such as limonite, are

easily smelt despite the low iron content (they belong to the so-called self-fluxing ores). Unfortunately, these samples are not in their primary location and cannot be co-related to any of the features excavated in the site. Therefore, at this stage, the *in situ* smelting of iron ores seems most unlikely.

Finally, the minor amounts of chlorine detected in the slag might be explained by the close proximity to the sea or by the fact that some of the soil used in the site was brought up from there (ie SF132 is from context 038 which was rich in shells).

Discussion and conclusions

The iron finds consist almost totally of iron nails of small or medium size with square cross section and disk-shaped heads. With regards to their typological distribution and frequency it is apparent that most of the nails were found in contexts (002) (Phase 5) and (007) (Phase 3) in the immediate vicinity of the chapel wall. Nails were also found in all phases of the site apart from Phase 2 and Phase 5. Nail typology: mainly small (0.01-0.04m) or medium size (0.04-0.07m) nails. The size and their form (with the disc-shaped head) along with the wood preserved in the corrosion of many of them (Table 7.24) suggest that they were used to hold wooden constructions. The presence of wood preserved around nails in Phases 5, 4 and 3, as well as the presence of human bones with indications of iron corrosion, suggests that several of the nails were coffin nails.

The slag fragments are most likely in a secondary deposition. There is no indication for any kind of activity related to iron smithing or smelting and no evidence for any kind of metallurgy related workshop. However, the analysis of the slag samples indicates the smelting of bog ores

7.5.6 The pottery

DEREK W HALL

This excavation produced 146 sherds of pottery of medieval and early modern date. All the sherds have been examined by eye and, where possible, assigned a recognised fabric name (Table 7.25). No petrological analysis has been undertaken.

Local redware (illus 7.50,1-5)

The assemblage is dominated by this fabric which accounts for 106 of the 146 sherds. It is commonly an oxidised red-brown colour although there are variants present which are grey in colour. Three of the sherds from contexts (007), (040) and (051) are slipped white on their external surface, a technique which is common on other Scottish redwares. The most common vessel

Table 7.25
Pottery catalogue by context, fabric and vessel type

Phase	Context	Redware	Yorks type	TGE	Org temp	Tile	Jug	Cooking pot	Spot date
2	016	1					1		13-15
2	019	3	1				4		13-14
2	020	1					1		13-15
2	030	3					3		13-15
2	034	3					3		13–15
2	047	26					24		13-15
2/4	007 or 030	1						1	13-15
3	006	8				1	6	2	13-15
3	017	2					2		13-15
3	021	2					2		13-15
3	048	1					1		13-15
3	051	1					1		13-15
3	063	2					2		13-15
3/4	006/007	1					1		13-15
4	007	15	1				13	1	13-14
4	015			1			N/A		18-19
4	033			2			N/A		18-19
4	036	2					2		13-15
4	037			2			N/A		18–19
4	038	4	10				13	1	13-14
4	040	3					3		13-15
4	046			7			N/A		18-19
4	049	1					1		13-15
5	001	1					1		13-15
5	002	25	1	13	1		19	7	18-19
	Totals	106	13	25	1	1	103	12	

1. context 007 2. context 007/030 3. context 034 4. context 016 5. context 049 7. context 038

Illustration 7.50
The medieval pottery

Redware: (1) Slightly everted rimsherd from jug. Context 007. (2) Basal angle from cooking pot? Context 007/030. (3) Basal angle from jug. Context 034. (4) Rod handle from jug, with spot of yellowbrown glaze. Context 016. (5) Rod handle fragment, glazed greenbrown. Context 049. (6) Organic Tempered Ware: 6 rimsherd from unidentified vessel. Context 002. Yorkshire Type Ware: (7) bodysherd from jug, glazed lustrous green, with fragment of applied strip decoration. Context 038.

form is the splash-glazed jug, although there are eleven sherds present which are smoke-blackened and may be from cooking vessels. It would appear to belong to an identified Scottish medieval redware tradition and is liable to be of local manufacture (Hall 1998a, 170–8). Similar fabrics have been recovered from excavations at Tarbat (Hall 1998b), Inverness (MacAskill 1982) and Dornoch (Hall forthcoming). This material is dated between the 13th and 15th centuries.

Yorkshire type ware (illus 7.50,7)

There are thirteen sherds in this fabric type which may all be from the same vessel. These sherds are all from a jug, glazed lustrous green with a raised strip decoration on its surface. They may be from a vessel in Scarborough ware as the published fabric description is the closest visual match (McCarthy & Brooks 1988, 230). This fabric is the most popular imported pottery in the Scottish east coast burghs in the 13th and 14th centuries.

Organic tempered ware (illus 7.50,6)

There is a single rimsherd present in this fabric from context 002. This fabric is commonly identified as belonging to a northern Scottish tradition and is notoriously difficult to date when evidence for vessel form is lacking. Tea services in this fabric type were still manufactured in the Hebrides until the 19th century (Cheape 1994, 109–27).

Tin glazed earthenware

There are 25 sherds in this fabric type which would appear to be from plates or dishes. This industrially produced pottery dates to the 18th and 19th centuries.

Discussion

The medieval element of this small assemblage would seem to date to between the 13th and 15th centuries based on its domination by a possible local redware. The presence of sherds of Yorkshire type ware migh allow for this date bracket to be tightened to the 13th or 14th century, but caution is required as all the sherds may be from only one vessel. There is nothing of an identifiable early medieval or Pictish date. When combined with the evidence from Tarbat, Dornoch and limited excavations in Inverness (MacAskill 1982), this small group from Hilton of Cadboll provides further evidence for a local redware pottery industry, presumably using the Carse clays of either the Dornoch or Moray Firths.

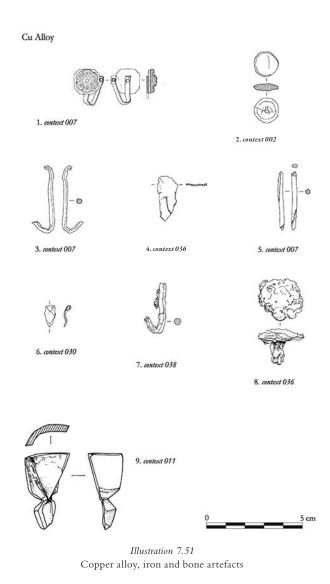
7.5.7 Non-sculptured finds

ADRIAN COX

This section describes the non-sculptured finds of copper alloy, iron and stone from the excavation, discussed by material category and within this by artefact type (Table 7.26). Measurements are expressed to the nearest 1mm except where they are less than this, when they are expressed to the nearest 0.1mm.

Copper alloy objects (illus 7.51)

Six copper alloy artefacts were recovered. No 1 is a mount, fabricated from three components. Its decorative



face is formed by a convex, sexfoil sheet, which is secured to a slightly broader octagonal plate by means of a rivet. A loop is secured to the reverse of the plate. Mounts such as this one were used as ornamentation in a variety of settings. From the medieval period onwards, small sexfoil mounts were used to decorate girdles and other straps, although they also occurred on other types of clothing and on bags and purses. A variety of mounts is also known from book covers, furnishings and horse harness equipment. Contemporary depictions in manuscripts and paintings indicate that medieval and post-medieval mounts on clothing were rarely used singly. Their overall decorative effect appears to have depended to some extent upon repetitive patterns. It seems most likely that no 1 (Phase 4) represents a strap

or clothing fitting, although another decorative use is possible. Its form and composite construction suggests a probable 15th- to 17th-century date.

No 2 (Phase 5) is a small, circular stud, probably of 18th- or 19th-century date. It is decorated by a single circular groove. Evidence survives of an internal iron component that once terminated in a projecting pin or eye. Corrosion of this component has caused it to expand and damage the lower surface.

Part of a loop (no 3), possibly used as a belt or horse harness fitting, came from Phase 4. The loop has been fabricated from tightly-rolled sheet and the surviving fragment incorporates a straight section with angled ends. The method of manufacture indicates a probable 17th-century or earlier date.

No 4, from Phase 4, is a curved sheet fragment with a linear perforation. This is probably part of a repair patch. Patches such as this were frequently used, in conjunction with rivets made from folded sheets, to repair areas of damage on copper alloy vessels. Splits in wooden objects could also have been repaired in a similar manner. This form of repair patch has a long currency. Examples are known from the Viking period (eg Curle 1938, 102) and from medieval contexts (eg Cox 1996, 768; Caldwell 1996, 636), and their use appears to continue well into the post-medieval period.

A shaft fragment from a pin or needle (no 5) was also found in Phase 4. In common with no 3, it was made from tightly-rolled sheet. It is more likely to represent a needle fragment than a pin, and, like no 3, is of 17th-century or earlier date. Needles manufactured in this way have been recovered from other Scottish medieval sites, for example St John's Tower, Ayr (Cox forthcoming). No 6 (Phase 3) is a small sheet fragment, curled at one end. It appears to represent a fragment of a broken object rather than an offcut.

1 Mount

Context 007; SF 13; Phase 4

Length 21mm; max width 17mm; thickness 4mm

Mount incorporating a decorative, convex, sexfoil sheet, secured to an octagonal plate by means of a circular cross-sectioned central rivet. The rivet also secures a narrow strip to the rear of the plate. The strip (now distorted) forms a loop above the mount and includes another circular rivet hole near its terminal.

2 Stud

Context 002; SF 95; Phase 5

Diameter 12mm; thickness 2mm

Circular stud with a plain, slightly convex upper surface and a flat or slightly convex lower surface with a single

Table 7.26
Non-sculptured finds (illustrated)

Phase	Context	Catalogue no	Description
2	030	6	leaf-shaped sheet fragment
2	034	10	pot lid
3	043	12	stone hone
4	007	1	copper alloy mount
4	007	3	copper alloy wire loop fragment
4	007	5	needle shaft
4	011	9	bone toggle or winder
4	011	11	stone disc
4	015	14	roof slate
4	036	4	curved sheet fragment
4	038	7	iron fish hook
5	002	2	copper alloy stud
5	002	13	quern stone

circular groove near the edge. Iron corrosion products are apparent near the centre of the lower surface.

3 Loop fragment

Context 007; SF 250; Phase 4

Length 35mm; width 2mm; thickness 2mm

Fragment of wire of circular to oval cross-section, made from a rolled sheet; broken at both ends.

4 Perforated sheet fragment

Context 036; SF 135; Phase 4

Length 24mm; max width 11mm; thickness 0.3mm

Slightly curving sheet fragment with one surviving straight edge. The remaining edges are broken and irregular. A linear perforation, 7mm in length, lies c4mm from the surviving edge, to which it is roughly parallel.

5 Pin or needle shaft

Context 007; SF 15; Phase 4

Length 30mm; width 2mm; thickness 2mm

Shaft fragment from a pin or a needle of approximately oval cross-section, made from a tightly rolled sheet and broken roughly at both ends.

6 Sheet fragment

Context 030; SF 7; Phase 2

Length 11mm; width 5mm; thickness 0.4mm

Approximately leaf-shaped sheet fragment or offcut, curled over at one end. Weight 0.2g

Iron objects

Two iron objects, a fish hook (no 7) and a nail (no 8), were recovered. Medieval and post-medieval iron fish hooks were made from drawn wire and usually had either a splayed end or, less commonly, a terminal ring or eye, for attachment of a line. Both barbed and unbarbed examples are known. In the case of no 7, the means of line attachment is missing, as is the tip. Both nos 7 and 8 were recovered from Phase 4 deposits and are likely to be of later post-medieval rather than recent date.

7 Fish hook

Context 038; SF 209; Phase 4

Length 25mm; width 4mm; thickness 3mm

Fish hook made from oval to circular cross-sectioned wire, tapering towards the missing tip and angled sharply.

8 Nail (see also Chapter 7.5.5)

Context 036; SF 204; Phase 4

Max width of head 23mm; length 17mm

Nail fragment consisting of a roughly oval head and a remnant of the shaft, possibly of rectangular cross-section.

Bone object (illus 7.51)

No 9, derived from a mammalian long bone shaft, originally had a roughly oval cross-section and was encircled by a broad, V-shaped groove. This may have enabled it to function as a toggle to fasten clothing or a bag, or as a reel for thread. Approximately one quarter of the original object survives. Species identification is by C Smith.

9 Toggle or winder?

Context 011; SF 146; Phase 4

Length 39mm; max width 26mm; max thickness 9mm

Fragment derived from a mammalian long bone shaft (probably that of a large ungulate such as cattle or horse),

sawn across both ends. A broad groove with a V-shaped profile encircles the object. The internal surface of the marrow cavity is present.

Stone objects (illus 7.52)

A roughly circular disc, derived from micaceous stone (no 10) came from Phase 2. Discs of similar size and form have been interpreted as pot-lids (eg Curle 1938, 107) and are known from both Viking and medieval contexts. The deliberately tapered profile of some excavated examples lends support to this interpretation, and it seems a strong possibility in this case. Other functions, as gaming pieces and plugs for other types of containers, have also been suggested for similar discs. A fragment of what was originally a larger disc (no 11) came from Phase 6 and is broken across the point at which a perforation had been started.

No 12, from Phase 3, is a hone of D-shaped crosssection, broken into two pieces. The stone has good honing properties, containing hard, angular minerals set within a softer matrix. The smooth undulations of the object's sides appear to represent wear resulting from its

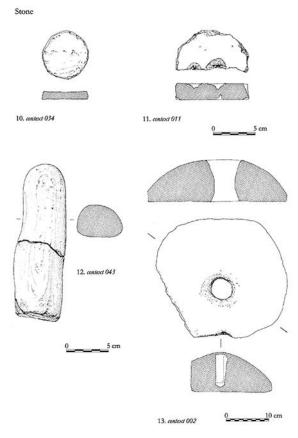


Illustration 7.52 Stone objects

use in the sharpening of blades. There is no evidence of sharpening of fine points. Although the sides are worn in this way, the flat base and the ends of the object do not appear to have been similarly used. Although smaller hones were portable enough to be worn about the person, this example would probably have been used in a workshop.

During the medieval period, most querns consisted of upper and lower circular stones, the upper of which was rotated by hand. It is likely that not all examples were fully-rotating; some may have been intended to oscillate back and forth. Some examples were provided with raised collars or rims, to give them added strength. The primary use of rotary querns was to grind bread flour. Querns survived in use in the Highlands until recent times, despite opposition from the feudal authorities who wished to ensure that grain was ground in the official mills and dues paid accordingly. Querns continued to be used in the 19th century, especially in areas where water mills were few and where barley meal remained popular. No 13 is associated with a late phase of activity at this site and may well be of 18th- or 19th-century date, although it is considerably worn and may be earlier. It has broken across a turning slot which allowed rotation or oscillation of the stone by means of a rod.

10 Disc

Context 034; 95.5/103.5; SF 76; Phase 2 Diameter 54mm; max thickness 9mm Circular disc derived from micaceous stone.

11 Disc fragment

Context 011; SF 248, Phase 4

Original diameter c 84mm; thickness 11mm

Fragment representing approximately half of a disc. The object has broken across the point at which a slightly off-centre perforation has been started.

12 Hone

Context 043; SF 256: Phase 3

Length (conjoined) 186mm; max width 58mm; max thickness 37mm

Hone of D-shaped cross-section in two conjoining fragments.

13 Quern

Context 002; SF 114; Phase 5

Original diameter c 330mm; max thickness 94mm

Upper stone from a rotary quern, possibly derived from mica schist. The outer edge of the stone is heavily worn

and partially broken. The upper surface has a gentle convex profile, flattening towards the apex, around the central, circular aperture, the diameter of which is greatest at the upper surface (*c* 80mm) and then tapers to *c* 46mm. The stone has broken across what appears to be a vertical, circular cross-sectioned turning slot near its edge. This slot penetrated most of the stone, stopping *c* 15mm short of the flat base.

Stone building material

No 14 is a fragment from near the apex of a rather thin roof slate, broken across a perforation to accommodate an iron nail. Given its dimensions, it may have been used on the roof of an insubstantial structure.

14 Roof slate fragment

Context 015; 104.5/105.0; SF 181; Phase 4

Length 44mm; max width 84mm; thickness 5mm

Roof slate fragment derived from micaceous stone, broken across a perforation (max width c 14mm) that has been drilled from one side only. Traces of iron corrosion survive around the edge of the perforation. Two small, additional fragments accompany this find.

7.5.8 Lithics

ELAND STUART

This is a small assemblage of only 10 pieces (none illustrated). There are five pieces of flint, four of quartzite and one of chalcedony that is probably agate (no 3) (Table 7.27).

Flint

Three flints are pale grey in colour (nos 6, 9 & 10), one is a darker grey (no 3) and one is a deep red (no 8). Nos 9, 7 and 10 have a slight surface polish that could be scouring from blown sand or from prolonged contact with the sand. No 9 is probably natural. It has been rolled around but bears no clear sign that it was struck. Some small scars run down one face but are likely to be the result of natural abrasion. No 6 is a platform rejuvenation flake. It was struck across a previous work axis leaving truncated scars. The plunging terminal was brought short when the fracture line met a pair of diametrically opposed incipient cones. No 7 is a blade from a core with at least two platforms. The proximal end is snapped off this blade and might have happened when it was struck. No 8 is slightly ambiguous but might be a chunk from a small core. No 10 is an irregular flake trimmed from a core with at least two platforms.

Quartzite

The anthropogenesis of three quartz pieces (nos 1, 2 & 4) is ambiguous. The fourth (no 5) is natural. The most likely

struck piece is no 1 which is a large irregular flake, with a possible point of percussion visible. One edge is long and curved with possible signs of edge damage.

Chalcedony (no 3)

This piece is most probably a natural fragment of agate.

Conclusions

All the pieces have a unique complexion, except two grey flints that may be of the same parent piece (nos 7 & 10). All the flints (except for no 9) were struck by the human hand. No piece bears any clear sign of either its age or function, but the anthropogenic pieces are consistent with prehistoric lithics assemblages. Only no 2 is from Phase 1 (context 23) while all the other anthropogenic lithics are from post-medieval Phases (6, 7 & 8) and so are most probably residual prehistoric material.

7.5.9 Glass

ROBIN MURDOCH

It is beyond reasonable doubt that all of the clear white glass from this small assemblage is modern (Table 7.28). There is no sign of degradation from burial in the soil nor is seed (small trapped gas bubbles) present in any of these shards. In addition, the surfaces are extremely smooth with no apparent manufacturing irregularities. The wine bottle shards are potash glass and exhibit typical weathering crusts for the period from Scottish contexts. This suggests that the pH of the local soil would almost certainly have resulted in at least some dulling or slight iridescence even in the more durable soda glass if any of similar antiquity were present. There is no discrepancy with the chronology as most of the glass shards were found in Phases 4 and 5. A single glass shard was found in the upper part of context (011) which belongs in Phase 4. As this layer is dated to the 17th century, it is therefore thought to be intrusive.

7.6 Summary of newspaper articles concerning the fate of the Hilton of Cadboll cross-slab in 1921

SIÂN JONES

Highland News, 29/01/1921, 'Another Attraction Gone', states that another attraction, 'although perhaps a minor one', the Hilton stone, is to be lost. This is on same page as other discussions about Invergordon's losses such as the Dockyard and damage to its scenic beauty.

The Scotsman, 03/02/1921, 'The Hilton Stone' 'An Ancient Moray Firth Monument' 'Possible loss to Scotland', brief recent history and description of HoC. Highlights the author's opinion of the importance of the preservation of such monuments in their original location. Also mention

Table 7.27 Catalogue of lithics

Phase	Context	Cat no	SF no	Material	No of pieces	Type	Notes
1	023	2	231	Quartz/quartzite	1	Flake	This primary flake of quartz is ambiguous and may be natural. One edge is concave and perhaps usable, although there is no clear sign that it was in fact used
2	047	5	230	Quartzite	1		Micaceous. Natural
4	007	3	В	Chalcedonyagate?	2	Chunk	This flawed and fragmented piece with a hint of mica is probably natural
4	007	7	127	Flint	1	Blade	From core with 2+platforms, the proximal end is snapped off this blade and might have happened when it was struck
4	007	9	С	Flint	1	Chunk	A rolled piece with no clear sign that it was struck. Some small scars run down one face but piece is a likely natural chunk
4	015	6	103	Flint	1	Flake	This piece is a platform rejuvenation flake. It was struck across a previous work axis leaving truncated scars. The plunging terminal was brought short when the fracture line met a pair of diametrically opposed incipient cones
4	036	10	203	Flint	1	Flake	This large irregular flake may be anthropogenic, with a possible point of percussion visible. One edge is long and curved with possible signs of edge damage
5	001	1	A	Quartz/quartzite	1	Flake	This large irregular flake may be anthropogenic, with a possible point of percussion visible. One edge is long and curved with possible signs of edge damage
5	001	4	148	Quartzite	1	Chunk	Probably natural
5	002	8	32	Flint	1	Chunk	Chunk that might be from small core

of the Scottish Ancient Monuments Board under whose care the stone should have been placed.

Glasgow Herald, 03/02/1921, 'Famous Sculptured Stone' 'Threatened Removal to London', brief des-cription of HoC and its history including local mythology. Also mention of the nearby Tarbat stone.

The Inverness Courier, 04/02/1921, 'A Famous Stone', report on moves to prevent the removal of the upper

portion to England. Also states the Scottish Ancient Monuments Board should have been consulted as the stone is a National monument.

The Inverness Courier, 04/02/1921, 'The Stone Described', description of HoC, its carvings and its history/legend.

Glasgow Herald, 04/02/1921, 'Hilton of Cadboll Stone' 'Demand for Restoration', article discussing the indignation felt in Scottish antiquarian circles at the donation of

ARTEFACT AND ENVIRONMENTAL STUDIES

Table 7.28 Glass shards

Phase	Context	SF no	Description
4	011	_	Shard of probable bottle glass in clear white firebright metal, slight mould mark. Modern, late 20th century
4	013	196	Shard of bottle glass in clear white firebright metal. Modern, late 20th century
4	015	102	Four shards of a wine bottle, pale green metal with moderate to heavy weathering. The diameter over the base ring has been relatively small and the curve through it fairly gentle, all characteristics indicate likely date of around 1670–90. Three thin body shards probably from the same bottle
4	036	6	Very small shard probable bottle glass in clear white firebright metal. Modern late 20th century
5	001	266	Four shards in clear white firebright meal, no tinge, no patination (denaturing). Mid-20th century
5	002	88	Small shard probably from a wine bottle in dull mid-green with moderate to heavy weathering. Late 17th/early 18th century
5	002	97	Small shard probable wine bottle in dull mid-green with mainly secondary surfaces ie moderate to heavy weathering crust has become detached. Late 17th/early 18th century
5	002	98	Four shards in clear white firebright metal, one with embossed lettering. Late 20th century

the upper portion to London. Also mentions the Royal Commission on Ancient Monuments, the Society of Antiquaries and the Ancient Monuments Act 1913.

Glasgow Herald, 04/02/1921, 'Ancient Sculptured Stones', letter discussing the neglect of the carved stones in Scotland and the effects of weathering on those left uncovered in their locations.

Highland News, 05/02/1921, 'The Obelisk of Hilton', legend concerning Hilton, Nigg and Shandwick cross-slabs. Barbarous treatment/defacement of HoC. Description of remaining scene.

The Scotsman, 05/02/1921, 'Hilton of Cadboll Stone', letter of disbelief at behaviour of British Museum in accepting stone contrary to the spirit of the Ancient Monuments Act.

Glasgow Herald, 05/02/1921, 'The Hilton of Cadboll Stone', progress report on protest against removal of stone. Meeting of the Council of the Society of Antiquaries is to be held. Also mentions Mr Munro, Secretary for Scotland. Annoucement expected concerning the Scheduling of the HoC by the Ancient Monuments Board.

Glasgow Herald, 05/02/1921, 'Famous Sculptured Stones', letter demanding return of stone which would

be of benefit to art students and craftsmen in Edinburgh and Glasgow. Claims that London has ignored the Ancient Monuments Act. Uses case of Wallace sword as a comparable example of artefact returned to Scotland.

The Inverness Courier, 08/02/1921, 'Hilton of Cadboll Stone' 'Demand for Restoration', report that the upper portion has been moved. Mentions the Ancient Monuments Board for Scotland, the Ancient Monument Act of 1913.

The Scotsman, 08/02/1921, 'Hilton of Cadboll Stone', letter demanding steps be taken to ensure return of the upper portion. Disapproval of the British Museum's actions. Argues that all items of Scottish antiquaries should be cared for in Scotland not England.

Glasgow Herald, 08/02/1921, 'Hilton of Cadboll Stone: A Correction', letter detailing recent history of the upper portion.

Glasgow Herald, 09/02/1921, 'Famous Sculptured Stones', agrees with safe custody of stone but argues that this need not be in London.

The Scotsman, 09/02/1921, 'Removal of Cadboll Stone' 'Scottish Antiquaries Protest', reports that on the protest

by the Society of Antiquaries of Scotland and the letters sent to the Secretary for Scotland and the Secretary of HM Office of Works. Also mentions the Ancient Monuments Act of 1913.

The Scotsman, 09/02/1921, 'Loss to Scotland', reports on loss to Scotland of historical monument. Brief history of HoC. Criticism of decision for stone to be sent to London and the lack of consultation with the 'Ancient Monuments Department'. Refers to examples of goods returned to Dublin from British Museum and hopes that the same action will be taken.

The Scotsman, 10/02/1921, 'Ancient Scottish Stones Removed', update on the situation. Claims that further fragments of stone sent to London. Communication underway between the Ancient Monuments Branch of HM Office of Works and the Trustees of the British Museum.

Glasgow Herald, 10/02/1921, 'Scottish Sculptured Stones' 'Other Removals to British Museum', claims that a stone from Tarbet Easter Ross has also been sent to London. A description of this stone and a brief history is provided. It is expected that this will also be demanded back.

Glasgow Herald, 10/02/1921, 'Hilton of Cadboll Stone', argues that the Lia' Dail (Stone of Destiny) is a comparable case which was never returned to Scotland. Expresses the injustice of both this and the removal of Cadboll Stone.

Glasgow Herald, 10/02/1921, 'Hilton of Cadboll Stone', letter from Ludovic M'L Mann identifying what he claims are inaccuracies in another correspondent's details and criticising the apathy of the Scottish public in caring for their national monuments.

The Ross-Shire Journal, 11/02/1921, 'Captain Macleod of Cadboll', description of Captain Macleod, his property and position and criticism by Scottish antiquaries ('backed by Scottish sentiment') of his handing over of the Cadboll stone to the British Museum. Also indicates that Macleod may aid in steps to 'secure its restoration to Scottish soil'.

The Scotsman, 11/02/1921, 'Cadboll Stone' 'Protest by Glasgow Archaeologists', resolution made at the meeting expressing disapproval of removal of the stone surprise at the British Museum (in not following the spirit of the Ancient Monuments Act) and supporting placement of stone in Edinburgh.

The Scotsman, 11/02/1921, 'British Museum', Director of British Museum, Sir Frederick Kenyon, expresses surprise at Scotland's protest as they own many such stones and London has no examples on show of early Scottish Art.

The Scotsman, 11/02/1921, 'The Cadboll Stone' in 'Letters to the Editor', describes comparable case of the Lia' Dail

(Stone of Destiny) which was never returned to Scotland. Expresses the injustice of both this and the removal of Cadboll Stone. Same letter was in the *Glasgow Herald* 10/02/1921.

The Scotsman, 11/02/1921, 'The Cadboll Stone' in 'Letters to the Editor', lists a number of journals where HoC has been previously mentioned dating from 1776–1856. Provides a history of the monument.

The Scotsman, 11/02/1921, 'The Cadboll Stone' in 'Letters to the Editor', expresses sympathy for removal of the upper portion to British Museum due to previous neglect by The Council of Antiquaries of Scotland and the Antiquarian Museum of Scotland

Highland News, 12/02/1921, 'Removal of Hilton Stone' 'Protest by Society of Antiquaries', reports that the Council of the Society of Antiquaries of Scotland has resolved to protest about the movement of the upper portion to London and steps would be taken with BM Trustees to ensure its speedy return.

Highland News, 12/02/1921, 'The Hilton of Cadboll Stone', objection that another paper has claimed first intimation of removal of the Cadboll stone when in actual fact it had previously been mentioned in *Highland News* 19/01/1921.

Highland News, 12/02/1921, 'Local questions', three questions are posed: will stone be returned to Easter Ross?; or Edinburgh?; and who was responsible for its placement in London?

Glasgow Herald, 12/02/1921, 'The Hilton of Cadboll Stone', disputing some of points made by Ludovic M'L Mann concerning history of stone in the Glasgow Herald (10/02/1921).

Glasgow Herald, 12/02/1921, 'The Cadboll Stone', points out that the Cadboll Stone is not a scheduled monument so HM Office of Public Works can only use 'moral persuasion' in its meeting with the British Museum Trustees due to take place the next day.

Glasgow Herald, 12/02/1921, 'Scottish Relics', criticism of general apathy of Scottish Nation in its history of handing over artefacts and relics to London. Also mentions Ancient Monument Act.

The Scotsman, 14/02/1921, 'Meeting of British Museum Trustees', report on proceedings of a meeting of the British Museum Trustees. States that they are anxious to acquire stone but will defer decision at present until Secretary for Scotland has conferred with the donor.

The Scotsman, 14/02/1921, 'Hilton of Cadboll Stone', letter disputing the British Museum's claim that it has no comparable examples of early Scottish art.

The Scotsman, 14/02/1921, 'The Removal of the Cadboll Stone' 'Protest by the Scottish Ecclesiological Society', meeting of the Scottish Ecclesiological Society discussing letter from the Society of Antiquaries as well as a letter from Rev Arch B Scott of Helmsdale. The Society agree to support the protest and will write to the Secretary for Scotland and the Board of Works.

The Inverness Courier, 15/02/1921, 'Hilton of Cadbol Stone' 'Ecclesiological Society's Protest', two letters encouraging the Ecclesiological Society to protest against the removal of the stone to London. Report that a meeting of the Society resolved to support the protest in writting to the Secretary for Scotland as well as raising a question in the House of Lords.

Perthshire Courier?, 15/02/1921, 'The Cadboll Stone' in 'Links with the Past' – 'Protest by Perthshire Society', The Perthshire Society will join in the protest against the removal of the Cadboll Stone and send letters to HM Office of Works and the Trustees of the British Museum.

Glasgow Herald, 17/02/1921, 'The Cadboll Stone' 'Viscount Esher and the Facts', defensive letter highlighting that British Museum is entitled to accept the gift of the stone (being an unscheduled monument) and criticism at the tone used in the letters of protest from Scottish Society.

Glasgow Herald, 17/02/1921, 'William Gillies (pres) Peter Bennett (secretary) Royal Philosophical Society', letter protesting at removal of Cadboll Stone to London.

Glasgow Herald, 17/02/1921, 'Gaelic Society', article detailing a letter sent to the Gaelic Society in response to previous correspondence arguing for the return of the Cadboll Stone to Scotland.

The Ross-Shire Journal, 18/02/1921, 'Removal of the Hilton Stone', reporting on the removal of the ancient monument (Hilton stone) from Invergordon Castle to the British Museum and claiming that a further package of nine fragments and a cross-slab found in the Churchyard of Tarbet had been sent.

The Inverness Courier, 18/02/1921, 'The Cadboll Stone' 'Viscount Esher Defends the British Museum', letter highlighting that British Museum is entitled to accept the gift of the stone (being an unscheduled monument) and criticising the tone used in the letters of protest from Scottish Society of Antiquaries and the Glasgow Archaeological Society. Same letter was published in the Glasgow Herald 17/02/1921.

The Inverness Courier, 18/02/1921, 'The Cadboll Stone', reprint of letter protesting removal of stone to London.

The Inverness Courier, 18/02/1921, 'Injured Dignity' and 'The Ethics of the Case', answering Esher's letter (Glasgow Herald 17/02/1921) commenting negatively on

the attitude of British Museum Trustees. Claims that were it not for the War the Hilton stone would be scheduled under 'Ancient Monuments Act'.

The Scotsman, 18/02/1921, 'Cadboll Stone', response to Esher's letter from John Stirling Maxwell Chairman of the Scottish Ancient Monuments Board. Expresses regret and explanation for the stone not being previously scheduled and intentions to rectify this.

The Scotsman, 18/02/1921, 'Cadboll Stone', a description of Cadboll Stone and the Tarbet fragment disputing details previously printed by paper. Sympathy expressed for Captain Macleod.

Highland News, 19/02/1921, 'The Cadboll Stone', criticising incorrect details printed in a contemporary newspaper. Also description of some of Cadboll Stone's recent history, ie its previous location in Invergordon.

The Scotsman, 21/02/1921, 'The Cadboll Stone', sympathy with all parties concerned (British Museum and doner) and general appreciation of the Cadboll Stone

The Scotsman, 22/02/1921, 'Restoration of Stone to Scotland', an update reporting that the situation looks promising regarding the Cadboll Stone's return. Mentions other fragments which were thought to have been sent to London. Also mentions Ancient Monuments Board.

The Scotsman, 24/02/1921, 'Hawick Archaeological Society and the Cadboll Stone', reports that Hawick Archaeological Society received a reply from the Secretary for Scotland stating that their opinion that the stone should be returned had been listened to. Also cites the Ancient Monument Act in support.

The Ross-Shire Journal, 25/02/1921, 'Restoration of the Cadboll Stone', reporting the restoration of the stone and fragments to Scotland. Discusses national sentiment and what the author sees as Ross-shire's original neglect of the stone.

Highland News, 26/02/1921, 'The Hilton Obelisk' 'Why it was removed', describes the recent history of the Stone (ie its placement at Invergordon). Comments that the stone had suffered great neglect and was only valued once removed to the British Museum. Also expresses an interest in the Scheduling of such monuments.

The Times, 01/03/1921, 'Historic Scottish Stone' 'Protests at Removal to British Museum', mentions protest from the Society of Antiquaries in Scotland and the Secretary for Scotland. States that the Cadboll Stone is not a unique example of Scottish artwork. Includes brief history and folklore surrounding stone.

The Scotsman, 04/03/1921, 'The Cadboll Stone' 'Secretary for Scotland to Confer with Captain Macleod', update of situation that Trustees of British Museum have agreed to postpone their decision

The Times, 08/03/1921, 'Scotland's Right to Protest' in 'Cadboll Stone', a defence of Captain Macleod highlighting his approval for the stone to be returned to Scotland and seeking the understanding of the Trustees on the matter.

The Scotsman, 08/03/1921, 'The Cadboll Stone' 'Saint Andrews Society's Protest', reprint of letter supporting the Scottish Ecclesiological Society and Glasgow Archaeological Society in their protest at the removal of the Stone. Argues that all national monuments should stay in Scotland.

The Scotsman, 09/03/1921, 'Cadboll Stone' 'Duke of Atholl on Scotland's Right to Possession', reprint of letter originally appearing in the Times 09/03/1921.

The Scotsman, 10/03/1921, 'Captain Macleod', reports that the Secretary for Scotland has spoken with Captain Macleod who is happy for the stone to be returned and has now contacted the British Museum.

The Ross-Shire Journal, 11/03/1921, 'The Cadboll Stone', reports that a request has been made in the House of Commons that the Stone remain in Scotland as had it not been for the War it would probably have been scheduled under the Ancient Monuments Protection Act.

The Inverness Courier, 11/03/1921, 'The Cadboll Stone', a report indicating that matter should be resolved as Captain Macleod has informed the British Museum of his desire for stone to remain in Scotland. The author is critical of the British Museum Trustees.

Highland News, 12/03/1921, 'Easter Ross Obelisks' 'More Cadboll Stone Memorial Protests', a letter from the St Andrew Society of Glasgow supporting the protest against removal of the Cadboll Stone. States that monuments are 'national possessions' and individuals should not be responsible for their fate but rather the decision should be in the hands of a Scottish institution such as National Museum of Antiquities.

The Scotsman, 15/03/1921, 'Return of the Stone', reports that the Trustees of the British Museum have agreed to return the Stone to Scotland

The Scotsman, 16/03/1921, 'Cadboll Stone', reports that the Cadboll Stone is to be returned to Scotland and thanks relevant parties.

The Scotsman, 16/03/1921, 'The Cadboll Stone' 'To be Retransferred to Scotland', report from the House of Commons where the Secretary for Scotland confirmed that the Cadboll Stone would be returned to Scotland.

The Inverness Courier, 18/03/1921, 'The Cadboll Stone' and 'Its Destination', uses the successful return of the Stone to demonstrate the National importance of such monuments. Also mentions the opinion of the Inverness Field Club and the Ancient Monument Board for Scotland when considering the stone's final destination.

Highland News, 19/03/1921, 'The Cadboll Stone' 'To be Returned to Scotland', reports that the Trustees of British Museum have agreed to return stone although they are disappointed at Scotland's refusal to offer an example of such artwork to the Museum. States that the Duke of Atholl's intervention had much influence on result.

Highland News, 19/03/1921, 'The Cadboll Stone' 'Statement in Parliament', a report that the British Museum had decided to release Captain Macleod from his promise by declining offer of the Cadboll Stone.

Highland News, 02/04/1921, 'Hilton of Cadboll Stone and the Public', the claimed despondancy of the local population in relation to the Hilton Stone is attributed to lack of decent amenities in the village.

The Ross-Shire Journal, 08/04/1921, 'Notes and Comments', announcement by Lady Fowler that Captain Macleod of Cadboll is prepared to facilitate return of the Cadboll Stone to Ross-shire. He will also hand over to a public collection the tombstone fragment and the 'Armada Chest'. Lady Fowler suggests the establishment of a local country museum in Ross-shire to house them.

The Ross-Shire Journal, 08/04/1921, 'Ross-shire Historic Relics' 'Alice Lady Fowler's Proposal' in 'Letters', discussion of the inscribed fragment from Tarbet, which was examined by Rev Browne, former President the Society of Antiquaries, Rev Dr Joass of Golspie and Rev A Scott. Brief discussion of 'Armada Chest'. The author is hoping to raise money to secure objects for a local public collection.

The Ross-Shire Journal, 22/04/1921, 'Stone to be preserved in Scotland', Captain Macleod has offered to hand stone over to the 'Society for preservation' in the Museum of Antiquaries. Although this is deemed preferable to London, the author argues that the Stone should be returned to Ross-shire, its 'native and natural home'.

The Ross-Shire Journal, 20/05/1921, 'Captain Macleod's cease of ownership of land and property in Ross-shire', sale of furniture and lands of Captain Macleod, who now only owns about 50 acres near Invergordon. No reference to the Cadboll Stone.

Chapter 8

Conclusions

HEATHER FJAMES

This project arose from the discovery, in 2001, of the lower portion of the Pictish slab at Hilton, Ross and Cromarty, together with thousands of Pictish carved fragments from the lost front face. It has greatly enhanced our understanding of the value of one of Scotland's premier monuments to contemporary society as well as throughout its history (illus 8.1). This has been achieved though a multi-disciplinary project involving art-history, archaeology, scientific analysis, ethnography and cultural history. The result is a wider understanding of the meaning and relevance of the monument at the time of its first erection and how this has changed through time. The interdisciplinary nature of the project produced a range of perspectives, modes of analysis, and styles of writing. However, it is hoped that the tensions between different approaches are productive and that the diversity of interpretation allows for a wider, multi-vocal approach to the monument and its significance.

The diverse research methods of the project team have included both conventional and more experimental aspects. Within the archaeological sphere, the excavation methodology was of necessity targeted and limited, rather than being a more conventional but expensive and lengthy 'open area' excavation. A recording system which could deal efficiently with the location of the many thousands of fragments was designed for this project. The standard analysis of the artefacts, pottery, soils, faunal remains, human remains and use of radiocarbon dating was expanded to include the more innovative dating technique of Optically Stimulated Luminescence. The reconstruction of the monument has so far involved a conventional 'hands-on' visual approach, with the addition of a pilot study involving a database-driven methodology. The geological work has revealed a potential quarry for the cross-slab nearby at Jessie Port.

The biographical approach to the monument explored in Chapter 6 is part of a growing body of research focusing on the social lives of monuments and artefacts, but it is far from conventional with respect to early medieval sculpture. The resulting biography incorporates the archaeological and art-historical

insights but also draws on historical sources, oral history, folklore, museum research and ethnographic evidence to reveal the complex history of this monument.

The study of the art-historical context of what is now known of the cross-slab when complete contributes to a wider understanding of Pictish art, locally, nationally and within Insular art generally. The Hilton of Cadboll slab, usually regarded as the most secular slab, in subject-matter, of the tall crossslabs of Easter Ross, is now shown to have been profoundly Christian, drawing on venerable Early Christian imagery to convey its message of Salvation. The uniquely architectural, embossed stepped base preserved on the front of the lower portion confirms Pictish sculptors' knowledge of the representation, widely known in the West, of the jewelled cross erected at Golgotha in the fifth century (illus 8.2). Elements of this imagery are found elsewhere in Ross-shire, on the Shandwick cross, on a cross-slab at Rosemarkie and on the Edderton cross-slab, where a stepped base for the cross on the front of the slab was revealed in 2004. The reconstruction of the mid-portion showed that a cross-head of a distinctly Pictish design was set at the centre of the spiral panel on the reverse of the slab. This glorified cross can reasonably be compared to the vision of the cross set against the sun experienced by Constantine the Great before the battle at the Milvian Bridge around AD 312. The vision was associated with Conversion and the Triumph of Christianity and accounts of it had a major influence on the symbolic representations of the cross. The glorified cross and the Eucharistic vine-scroll which borders the reverse of the slab allows a reappraisal of the famous image of a female rider on the Hilton slab. It is argued that this dominant Christian context and the frontal pose of the mounted figure, with its resonance of depictions of Epona and of the Virgin Mary, suggest that, like the male riders on Pictish slabs, the figure is not one of a specific contemporary aristocrat but rather an idealisation of in this instance female authority and Christian integrity. On the front face of the mid-portion a case can be made for identifying the fragments of figural sculpture reconstructed as located on either side of the cross-





The front face of the middle and lower portions of the cross-slab. This is a digitally enhanced version of Illustration 5.33 with the conservator's hands removed (based on images © Trustees of the National Museums of Scotland)

shaft as concerned with Death, Judgement, Heaven and Hell. Hell iconography is a feature of other Pictish sculpture but the figures on the Hilton crossface are very damaged and the interpretation remains uncertain.

The heavy fleshy creatures that flank the cross-base are in a style that can be directly related to the animal art of the other tall slabs of Easter Ross, the St Andrews Sarcophagus and to a number of Insular works of art of the second half of the eighth century, in particular the Anglo-Saxon Gandersheim Casket. This whalebone house-shaped liturgical Casket was made in Mercia in the late eighth century, and thus the connection bears out the long perceived relationship between Mercian and Pictish works of art and provides in its shared

Illustration 8.1

The Hilton of Cadboll cross-slab on display in the National Museum of Scotland, Edinburgh (© Trustees of the National Museums of Scotland)

stylistic background the most secure approximate date for the Hilton cross-slab. The condition of the carving on the hitherto unknown bottom edge of the Hilton vine-scroll shows that the same animal style is used both for the inhabitants of the scrolls and for animals on the upper portion. This uniformity of style is the creation of the Hilton sculptor, as is the unique arrangement of the animals flanking the growing point of the vine where the creatures face the same way. This rather quirky innovation matches the known discrepancy of the organisation of the vine-scroll borders on the upper portion. The art of the Hilton cross-slab underscores the relationship between the sculpture north and south of the Grampians evident in the other tall slabs of Easter Ross. It is no longer possible to treat the northern sculpture as an isolated phenomenon, nationally or internationally.

The archaeological excavations led to the discovery that the cross-slab had been broken twice early in its life, the first time when the tenon broke and the second time when the upper portion fell, leaving the lower portion in the ground. The excavations also revealed that its original location was probably close to where it was re-erected in the mid-12th century, perhaps even where the collar stone was found, rather than an elevated position close to the sea. Closely associated with this early setting was early medieval evidence for a burial, a stone-built structure and for a settlement nearby. This suggests that there was possibly a Pictish chapel here accompanied by burial, which acted as a satellite site to the Pictish monastery at Portmahomack, as may the sites at Nigg and Shandwick. The medieval context for the second setting, possibly slightly pre-dating the construction of a medieval chapel and children's graveyard, has showed the continued importance of the site to medieval society and the desire to express veneration and respect for this Christian monument. Despite the small area of the graveyard that has been examined, it can be seen that its use changed after the Reformation to include the adult population. The surrounding deposits are not rich with artefacts but are consistent with a site that was in the vicinity of medieval and post-medieval settlement.

The biographical approach has enabled the changing meanings and values of the monument to be traced though time and contributed to a wider understanding of attitudes towards early medieval sculpture. Historical research has unearthed important sources pertaining to the monument and its wider contexts. For the early medieval and medieval periods these are often remote from the cross-slab and its Tarbat environment, and we have had to draw on wider historical research to set the context for what at times are inevitably speculative arguments. For more recent phases in its biography, historical sources pertaining directly to the monument or its immediate context have been enlightening. For instance, the serendipitous discovery of George Mackenzie's letter of 1675 about a storm the year before which toppled a large obelisk has been important in our interpretation of 17th-century events surrounding the cross-slab. Furthermore, whilst at times frustrating in their silences, historical documents from the 17th century onwards have enabled a much fuller picture to be drawn of the monument and the various people who have engaged with it, ranging from Alexander Duff and his wives, to early antiquarians and travellers, to the Macleods of Cadboll and the seaboard communities of Easter Ross. Undoubtedly the richest body of documentary sources relates to the 1921 events surrounding the upper portion's brief sojourn at the British Museum and its return to Scotland.

which have enabled fascinating insights into the monument's national significance (see Chapter 7.6).

The ethnographic research, involving qualitative interviews and participant observation, has also proved to be very important revealing the depth and range of meanings and values attached to the monument in contemporary society. Through these modes of research it has been possible to explore the unusual and unique circumstances behind this particular project, and to gain insights into local feelings of ownership and attachment, which can conflict with the aims and priorities of archaeologists, art-historians, heritage managers and museum professionals. This research has deepened our understanding of the significance of the later locations in which crosses are found and will underpin future strategies for the protection, preservation and curation of carved stones.

Nevertheless, the project as a whole has not been without its limitations, which have left some gaps in our knowledge. The restrictions placed on the extent of the excavations meant that it was not possible to explore the monument's wider Pictish and later medieval context. This is in contrast to the site at Portmahomack where full-scale excavation revealed a wide range of sculpture, traces of metalworking and leather workshops in addition to a monastery, mill and farm (Carver 2004). The departure from comprehensive open area excavation has also left many stratigraphical relationships unresolved and therefore the stratigraphy remains more difficult to understand and prone to uncertainties. Little has been revealed about the origins of the chapel, when it was built and whether there was a stone-built predecessor. There remain contradictions within the archaeological evidence, such as the dating of the fragment scatter by OSL to possibly the 16th century while the record of a stone falling in a storm in 1674 would suggest that the defacement took place after this date, unless there were two phases of defacement, the implications of which are explored in Chapter 6. The spread of carved fragments around the cross setting seems to confirm two separate defacement events, the first of the cross specifically and a second which involved the removal of the remaining carving in preparation for the 17th-century memorial. However, there is no clear evidence indicating how much time passed between these two events, which could have been separated by days or decades.

Although considerable progress has been made with the reconstruction of the mid-portion, the need to come to an 'honourable stop' has meant that the original cross-shape has not been revealed, although



Illustration 8.3
Heather James and Colin Muir discuss the discovery during excavation of the lower portion of the cross-slab

the investigators believe that the majority of the carved surface has been retrieved and catalogued. This was confirmed by calculating the density of the fragments retrieved which returned an estimate of between 70 per cent and 85 per cent of the monument having been recovered (excluding the missing tenon). The reconstruction drawing also shows that there are no missing fragments large enough to have acted as a lintel stone for a building in the village, as was once rumoured, although this rumour could perhaps relate to other fragments of the medieval relief cross that was also found.

Computer-aided methods for reconstructing the cross-face involving scanning the fragments to create surface models and then refitting them digitally, or even automatically, have not been explored. Whilst some projects have used this approach on stone fragments (eg Stanford Digital Forma Urbis Romae Project, http://formaurbis.stanford.edu/), they involve greater hardware resources and funding than was

available to this team and required the development of bespoke software systems. Even with access to enhanced resources, automatic refitting would have been significantly hampered by the large number, small size and abraded surfaces of much of the Hilton of Cadboll assemblage. Crucially, the fact that much of the assemblage was worn and further abraded after it was initially dressed off the monuments suggests that no attempt at automated refitting, however sophisticated, would yield results likely to justify the required investment.

Some might also say that the inability to re-unite the lower portion with the fragments and upper portion in the Museum of Scotland in Edinburgh was a limitation for the project, particularly for the reconstruction work. However, there is a considerable amount of work that can still be done with the fragments themselves, before exploring whether it is feasible to display all the portions together. Clearly one of the greatest contributions of any future project

to Pictish studies would be the reconstruction of the entire cross face from the many thousands of carved fragments. It is possible that only by reconstructing the uncarved inner layer and the core of the mid-portion of the monument would the outer carved fragments ever be put in their correct positions, and this would be a major undertaking. In the meantime there is further work that could be done with the individual types of ornament, such as key pattern which, it is thought, may constitute a significant element of the design. The possibility could also be further investigated that the red staining noted on the surface of the fragments derives from an applied paint.

There is significant archaeological potential remaining at the chapel site which encompasses Pictish and later activity and which has only been very partially investigated so far. We do not know to what kind of structure the sandstone rubble and fragment of dressed stone belonged and whether there were other structures on this site during the Pictish period, or the nature of settlement in the vicinity. Further archaeological investigation of these structures would contribute to our understanding of the relationship between Hilton of Cadboll and the monastery at Portmahomack. There may even be another setting, consisting of a massive basal slab, as was found beneath the Shandwick crossslab. What was excavated as the first setting still lies in situ in the ground at Hilton and the results so far achieved by the OSL dating method suggest that it would be worthwhile re-excavating this setting and applying OSL dating to the surrounding sand in order to achieve a more accurate date. Further work could also examine whether there is evidence of Pictish activity on top of the hill in the vicinity of Cadboll Mount as has been suggested by Carver (2004).

The medieval context requires further examination, including the remains of the chapel, which has remained essentially untouched, as this would reveal much about the date of construction, the development of the Church on the Tarbat peninsula, and the role it played in the local community. The size of the medieval graveyard is still unknown and the appearance of disarticulated human bone in rabbit burrows around the site indicates that it is not confined to the area to the west of the chapel. Further work could investigate whether the graveyard was segregated by age or sex, how long it was in use, or whether the archaeological

evidence so far, which suggests that it was for children only, is misleading. There may be additional features within the chapel enclosure, such as other crosses, which would help to ascertain the importance of this site.

Outside the chapel enclosure there are several features identified by the University of York's geophysical survey, which could relate to the documented medieval fishing village. Investigation of these features could reveal the settlement morphology and the activities taking place in the vicinity of the chapel, which are probably the source of the domestic material found within the wind-blown sand on the chapel site.

An investigation of the post-medieval context could focus on evidence for the impact of the Reformation on the site and its transfer to secular ownership. Documentary sources provide some understanding of the wider historical context but shed little light on the specific events surrounding the chapel itself. Further archaeological investigation could address the decay of the chapel fabric, the nature and extent of the post-medieval burials (including the possibility that they were cholera burials) and the construction of the rectangular plantation bank which surrounds linear features to the east and south of the oval-shaped bank.

It is hoped that this project, and its the publication, will spur academic interest in the Hilton of Cadboll chapel site and that a wider public awareness will be fuelled by the data being made fully available on the web by the Archaeology Data Service (York University). While this project has not required us to re-write the archaeology of the Picts, it has revealed the complex biography of the Hilton of Cadboll cross-slab and has increased awareness of the potential for this approach on such a significant monument. It was the grandeur of the stepped cross-base and the completion of the vinescroll frame, coupled with the challenges presented by the historical and archaeological remains and the many carved fragments from the upper portion that has inspired the project team to appreciate with new eyes the craftsmanship and cultural milieu of Pictish sculptors whose monuments form such a significant part of our heritage. This project has greatly increased our appreciation of the Hilton of Cadboll cross-slab as a national treasure.

Appendix 1

Hilton of Cadboll: assessment and project design 1998

MARTIN CARVER

Produced for the University of York 1998 (reproduced here without the illustrations and annexes)

Introduction

This paper concerns the proposed archaeological investigation of the site of a ruined chapel at Hilton of Cadboll (Plate I, Fig 1) where it is proposed to erect a replica of the famous Hilton of Cadboll stone (Plate II).

The evaluation to date suggests that a full investigation of the site and the surrounding area would be desirable, to understand the nature of occupation in the ninth century, the period in which the stone was probably made and first erected.

Presented here is a preliminary assessment of the site and a suggested programme of action. It is offered as a basis for discussion between interested parties.

Objectives:

- * To erect a replica of the Hilton of Cadboll stone at Hilton
- * To develop the site so that it can be visited by the public
- * To evaluate the site prior to any development
- * To investigate the site in the context of a major programme of research into early historic Easter Ross, currently under way.

Participants:

- * Highland Council are sponsors and will need to be approached for planning permission to erect the stone (Jim Patterson).
- * Historic Scotland have given Scheduled Monument Consent for a geophysical survey, and will need to be approached in the event of any more work on the chapel site (Nick Bridgland).
- * The Royal Commission of Ancient and Historical Monuments have contributed a topographical survey (Graham Ritchie).

- * The Cadboll Estate have given permission for work to be undertaken and are sponsors (Andrew Taylor).
- * The Tain and Easter Ross Civic Trust is currently acting as grant-holder and co-ordinator (Richard Easson).
- * The University of York has carried out the evaluation and is carrying out the programme of archaeological research in the area (Martin Carver).
- * Documentary research on the seaboard villages, including Hilton of Cadboll, sponsored by Historic Scotland and carried out by North Highland Archaeology in 1996, has been contributed to the evaluation (Graham Robbins).

Programmes to date

1. The making of the replica

An estimate for the making of a replica stone was received from Barry Grove in July 1997 and sent to Tain and Easter Ross Civic Trust, by whom a commission would be issued. The original stone, in the National Museums of Scotland, is currently off display and will probably remain accessible for a few weeks. There is thus temporarily an opportunity for the carver to gain access to the stone and take measurements etc from it. It would seem desirable to issue Barry Grove with a commission as soon as possible (Annex A).

2. Surveys of the site

- 2.1 A topographical survey of the site by RCAHMS was undertaken in 1997 (Annex B).
- 2.2 A package of topographical and geophysical surveys of the site were undertaken by the University of York in 1997 (Annex C).
- 2.3 A Catalogue of References to Human Burials at Shandwick, Balintore and Hilton was compiled by Graham Robbins. The relevant findings are given in Annex D.
- 2.4 A review of the documentary and toponymic evidence for the origins of Shandwick,

Balintore and Hilton was undertaken by Graham Robbins. The relevant findings are summarised in Annex E.

2.5 A dowsing operation was undertaken in 1996 by D L Bates (Annex F).

3. Evaluation (Figs 2, 3)

3.1 Evidence for the antiquity of the chapel site

The site in question is located at NH 883 791 (RCAHMS 1979, no 210) and is referred to in what follows as 'The Seashore chapel site', to avoid confusion with the sites of other documented chapels and placenames, which may or may not refer to the site under investigation.

The provenance of the stone

The earliest evidence attributed to the seashore chapel site is the Pictish 'Hilton of Cadboll' stone, now in NMS, which is dated on stylistic grounds to about AD 800. The stone has had a turbulent history since it was erected, at an unknown location, as a high status monument of unknown purpose, in the ninth century. It had been taken down before 1676, since its front side which may have once carried a cross, now carries an inscription of that date commemorating Alexander Duff and his three wives. Before 1780, the stone was said to have stood near the ruins of a chapel dedicated to the Virgin Mary, 'under the brow of the hill on which the farmhouse of Cadboll is situated' (Cordiner 1780, 65). By 1811, it was lying near the seashore face down when Cordiner is said to have discovered that there was carving on the underside and had the stone turned over (Allen & Anderson 1903, 61). By 1856 it was lying 'in a shed, the wall of which was believed to have formed part of an ancient chapel' (Stuart 1856 I, 10). By 1903, the stone had been removed to Invergordon Castle, where it stood on a modern base in the grounds at the side of the carriage drive half a mile south of the castle (Allen & Anderson 1903, 61). When Invergordon Castle was demolished in 1928 it was sent to the British Museum, but following protests was transferred to the National Museums of Scotland where it remains (Gordon & Macdonald c 1988, 15).

There are inconsistencies here which make it difficult to relate with confidence the association of the Hilton of Cadboll stone and the seashore chapel site. Alexander Duff was buried at Fearn, and in explanation of the separation of the man and his memorial, Allen

and Anderson suggest (1903, 62n) that, while the stone was made at Hilton, it proved 'too heavy' to carry to Fearn. The stone was however moved without machinery at least twice (in 1676 and after 1811) so it could theoretically have been taken to Fearn; or indeed it could have originated and been reworked at Fearn, used as Duff's grave cover as intended and subsequently been taken to Cadboll. Since the official burial ground of Hilton of Cadboll before 1628 was at St Colman's Tarbat, 6.5 miles away (Robbins, annex E), it is also not impossible that the stone originated, and was reworked, at Portmahomack. There are other reasons for supposing that it might have begun its history in the vicinity of Cadboll Castle (see below).

Cordiner seems to have lived from about 1746 to 1794 (Henderson in the Introduction to Allen & Anderson 1993 edn, 13), so he could not have turned over the stone in 1811. He could have seen the stone in its 'original' position near a chapel dedicated to Mary, before 1794. But this position was not original in any other sense, since the stone had already been reworked in 1676 to carry the inscription to Alexander Duff. Assuming that Cadboll Farm is co-located with Cadboll Castle, the stone was then located 'under the brow of the hill' on which it stands. This is an odd way to describe the site of the seashore chapel, but the dedication suggests that the location is correct. It is this site that Watson (1904, 43-4) accepts as that of 'Our Ladyis Chapell' in 1610; and he records local names associated with this dedication that still survived: Creag na bantighearna (Lady's Rock) Tobar na baintighearna (Lady's Well), Port na baintighearna (Lady's haven), and Bard Mhoire, Mary's meadow or enclosure. Lady Street, leading to the chapel site, also survives today. This seems to constitute the best evidence that the Cadboll stone, wherever it originated, was actually found at the seashore chapel site and had been there since at least 1780.

Survey in 1978 noticed a semi-circular annexe at the west end of the seashore chapel site, which it was assumed was the 'original' site of the stone (RCAHMS 1979, no 224). But this is 'at' rather than 'near' the chapel. Unless the Duff inscription was carved in situ, it can only have been erected there in any case after 1676 and had been dismounted by 1811.

The early settlements at Cadboll

The seashore site cannot have been the original site of Hilton (Hilltown) of Cadboll (Robbins, annex E, 3). By 1478, the names Catboll-fisher, Cadboll-abbot

and Wester Cadboll apparently refer to present Hilton, Balintore and a settlement to the west (ibid, citing OPS, 442–3). In 1561–6 the seashore site was known as the Fishertown of Hilton, and furnished fish to Fearn Abbey, suggesting that the foreshore was specially developed as a fishing village. By 1610 it was known as Bail' a' chnuic, 'cliff town' (Gordon & Macdonald c 1988, 18). The Cadboll Estate Maps of 1813 show a 'Hilltown' located 'behind the eroded cliffline at the back of the raised beach' with 'Fishertown of Hilltown' on the present site of Shore Street (Robbins, annex E, 3).

It thus seems likely that there was once a settlement above the cliffs called Cadboll, which subsequently spawned two others, Hilltown and Fishertown. This first site may have been the Wester Cadboll of 1478, although Robbins points out that in common usage, Shandwick is said to lie to the 'west' (actually south west) of Balintore. The Wester Cadboll of 1478 could therefore be intended for Shandwick.

The name Cadboll is from the Norse and refers to a farmstead (Watson 1903, 40). Its most likely location is the site of the castle, currently the headquarters of the Cadboll estate. The extant remains of a two or three storied tower-house stand at the spot and date to the 16th century. A 17th-century laird's house stands adjacent (RCAHMS 1979, no 252; NH 878 776). Some 650m WNW of Cadboll Castle a cropmark has been recorded representing three sides of a rectangular enclosure measuring at least 40×30 m (RCAHMS 1979, no 194; NH 871 778).

There are therefore five candidates for the place of origin of the Hilton of Cadboll stone: Fearn, Portmahomack, Cadboll, 'Hilltown' of Cadboll and the present Hilton, the chapel site, otherwise Fishertown of Cadboll or Clifftown. The Abbey of Fearn was founded at its present site in c1238, and not known to have been the site of an earlier settlement. Portmahomack, the nearest known Pictish site, was the site of the mother church and official burial ground in the middle ages, and there are clear and intimate artistic connections between the Tarbat and Hilton stones (eg with TR 1, Allen & Anderson 1903, 74). A great many stones were broken up here at the reformation, and it is not inconceivable that one of them should have gone into circulation as a grave cover. However, no antiquarian association of the Hilton stone and Tarbat Old Church has been recorded.

In the Cadboll area, a presumed mother-settlement at Cadboll itself seems the most eligible for a ninth-

century date. The name is Norse, and should date from the Norse interest in Easter Ross between the ninth-11th century. A Norse place-name does not disqualify it as the place of manufacture of the Hilton stone. The Fishertown of Cadboll was in existence by 1478 (as Catboll-Fisher), and a Hilltown of Cadboll by 1813. This latter had presumably merged with the seashore settlement, taking the name with it, by 1840, when the population was enlarged by people cleared from Sutherland and new houses were built (Gordon & Macdonald 1988, 88). If the stone originated at Cadboll, it could have stood in profile above the cliffs looking out to sea as at Shandwick (equally a Norse place-name). At a given moment, in about 1676, it would have been taken down and reworked as a grave cover and transported to Fearn. Subsequently (before 1780), it would have been reclaimed and transported back to Cadboll, where a new site was eventually found for it in 'Fishertown'.

It is therefore possible to construct a hypothesis in which the Hilton of Cadboll stone originally stood at Cadboll on the high ground above the cliffs within a settlement founded in the ninth century or earlier. But this is by no means proven and would not in any case disqualify the chapel site from hosting a replica, since it was once certainly there, however briefly. A chapel dedicated to the Blessed Virgin Mary was very probably a feature of this site from at least the later Middle Ages, when it could have served the population of Catboll-Fisher, who no doubt operated their boats off the small beach immediately adjacent, on behalf of the Abbey of Fearn.

Whether this sea-shore site had a greater antiquity than Fearn Abbey itself, and what kind of settlement it may have been, is completely unknown. On the analogy of the site being unearthed at Portmahomack, the D-shaped protected beach at Hilton would suit both Pictish and Viking exploitation. It would be most interesting to know, with greater confidence than we do now, in what context the Hilton of Cadboll stone, one of the most majestic of the entire Pictish corpus, may have had its origin and function. This may be elucidated by means of an archaeological investigation, now in its preliminary phase.

3.2 Results of surveys: seashore chapel site (Annex A and B)

The area of the seashore chapel site is less than 12.5 acres (5 hectares) defined to the north-west by an arc of cliffs, to the south-east by the sea and to north-

east and south-west by a narrowing of the littoral strip between the cliffs and the sea. A short stretch of beach interrupts the rocky foreshore opposite the chapel site. The site has a sandy subsoil, but there are patches of clay deposit (now boggy) towards the sea.

The features mapped by the surveys are shown in Fig 3.

- 1 A recent quarry for sand. Some stratification was exposed in the face of the quarry, without any indications of earlier settlement.
- 2 An L-shaped bank of stones covered with turf seems to close the north end of the site. It had been cut through by an existing track (3).
- 3 Track still in periodic use.
- 4 Possible earlier track [F2]
- 5 Possible earlier track [F3]
- 6 The chapel a rectangular building aligned E–W. It appears to have had a pit dug in its centre. [S1]
- 7 One or more arcs of walling around the chapel on its west side. This may be the 'semi-circular annexe' observed in 1978 (RCAHMCS 1979) [F5]
- 8 One or more enclosures around the chapel. These are aligned SW–NE. [F6]
- 9 Occupation debris west [F1; Fig 11, Annex C]
- 10 Occupation debris east [F2] of the chapel. These are positioned like spoil heaps, as though some clearance of the chapel site had taken place; an impression reinforced by the detection of a backfilled hole at the centre of the chapel [F4]
- 11 A building [S2] aligned W-E like the chapel.
- 12 Four patches of possible occupation debris associated with the building S2 [F7–10].

3.3 Chance finds and observations

- 1 Watson (1903, 44) recorded that there was a burial ground for unbaptised children near the Lady's Well. Local tradition also suggests that this area (near the chapel) was used for cholera burials in 1832 (Robbins, annex D, 11)
- 2 Human bones have been recovered (1995) from rabbit holes at the eastern end of the outer enclosure, and are now in Inverness Museum (Robbins annex D, 10)
- 3 A dowsing project was carried out by D L Bates in December 1996 at the invitation of Jane Durham (Bates annex F). Direct dowsing on the stone itself gave a date of AD 736. The position

of the stone before its removal to Invergordon is suggested as at the west end of the chapel. A rectangular plinth was said to have been detected at this location, in which the stone would have stood facing west. The missing portion of the stone was said to remain in position in this plinth. The mound west of the chapel was interpreted as the grave of a prominent person dated by dowsing to AD 724. Dowsing dated the walls of the enclosure to AD 736 and the chapel itself to AD 844.

3.4 Interpretation

It seems likely that the earthworks and anomalies so far located on the site belong to the deserted medieval village of Catboll-Fisher. S1 is probably the chapel dedicated to the Virgin Mary, and S2 one of a number of other houses on the same E–W alignment, which no doubt clustered around the chapel.

The medieval settlement is unlikely to have had a burial ground of its own, except, perhaps, an area for the burial of unbaptised infants. The burial ground at Catboll-Fisher is signified by the enclosures around the chapel, and was probably added after the reformation in the 16th century, or after its removal from the parish of Tarbat to that of Fearn in 1628. The enclosures were erected on a NE–SW alignment (ie parallel with the foreshore). The appellation 'Clifftown' suggests that the settlement was still operating in 1610.

The chapel was in ruins by 1780, so the adjacent settlement had by that time probably been abandoned for one lying farther south, designated as Fishertown by 1813. The abandoned site may have been used to bury cholera victims in 1832.

The Hilton of Cadboll stone had reached the chapel site by 1780, and perhaps stood within the arc of walling on the west side of the chapel. These in turn may have formed the foundations of a lean-to shed – that seen by Stuart in or before 1856. Before that it had served as a grave cover dated 1676, intended for a burial at Fearn. It may have originated at Fearn or at the Pictish centre at Portmahomack, but the fact that it ended up at one of the Cadboll sites is *prima facie* evidence that it began there. Its original site would have been a ninth-century settlement or cemetery. This may have been located either on the high ground at Cadboll or beneath the chapel site at Hilton, where the medieval fishing village was to develop.

4. Future programme of action

4.1 Erection of the replica and development of the site

If, as is hoped, the decision is made to commission a replica of the Hilton of Cadboll stone, erect it on the chapel site and provide access to visitors, a programme of archaeological site management will be required, whether or not it is combined with a programme of archaeological research (see below).

The three obvious components of a basic display policy are (1) the erected replica, (2) a car-park and (3) an access path to connect the two.

We have no certain information as to where the stone originally stood, and can only guess where it stood after 1676. Dowsing apart, there is no direct evidence that it ever stood on a plinth at the west end of the chapel at Hilton, or that there is any more of it to be found there. But the west end of the chapel would be an obvious place to have re-erected the stone in the post-medieval period, and the semi-circular enclosure there is an obvious target for investigation.

From the point of view of any 'original' site, the stone could be erected anywhere that was convenient, provided that the impact is first assessed. The layout of a display could therefore be led by planning considerations. From the archaeological viewpoint, the appropriate positioning of the stone and car-park would depend principally on whether there is to be a research programme, and whether archaeological work on the site would precede or follow the erection of the stone. If it is to be erected prior to archaeological investigation, then it would be advisable to erect it near the point of entry and away from the earthworks. If it is to be erected after archaeological investigation, then the location of the stone and car-park can be guided by the results of that investigation. In particular, excavation of the chapel site would reveal a position for the replica that was appropriate and had no deleterious impact.

4.2 Archaeological research programme

Hilton of Cadboll is an attractive subject for archaeological research, with a high potential to contribute to current work.

CONTEXT

Over the past two decades a small group of archaeologists and historians has been engaged in trying to discover the origins of the countries of Europe, particularly those which border the North Sea. A number of different social formations has been defined before and after the seventh century, the period in which most of the changes took place. Tribal kin-based groups give way to land partition in small lordships, which in turn coelesce into kingdoms in which a territory supports a single overall leader through taxation. A people also professes an ideology, which may be pagan or Christian and can exhibit variety within those broad headings. A Christian community can, for example, profess a monastic or an episcopal organisation. It appears that these options are preferred to a different degree in different territories. Territories adopting a similar position are aligned, while differences in alignment, particularly in neighbours, provide a persistent cause of conflict.

These social formations and ideological alignments can be detected by archaeology, because the material culture they generate is different. For example, a folk inhabits a network of small family sized villages, while a system of small lordships has estate centres, like manors. Christian and pagan can be distinguished, but within Christianity, the monastic can be distinguished from the episcopal. Using this kind of detection, a history of this undocumented period is beginning to be written.

The Sutton Hoo project showed that a tribal people went over to a system of lordships in the later sixth century, and in the early seventh formed a kingdom (of East Anglia) but did so in the Pagan idiom aligned with Scandinavia, to counter the threat from Christian Kent and France (Carver 1998). Within 50 years the conflict had been resolved in favour of a Christian East Anglia, but the Scandinavian alliance was reheated momentarily in the Viking era.

In Yorkshire it can be shown that the Christian kingdom of Northumbria, formed in a monastic and then an episcopal organisation, was changed by the Vikings to a 'secular' Christian kingdom, in which lordships appointed their own priests. This important result was deduced entirely from the type and distribution of sculpture, which is found clustered in monastic sites in the seventh-eighth century and is distributed in numerous estates in the ninth (Carver, forthcoming).

The *Tarbat Discovery Programme* set out to examine the early history of the peoples of the Dornoch Firth area in the same way. The types and distribution of settlements, burials and sculpture would be studied to reveal the social and religious transformations of this part of the North Sea region. The site at Portmahomack seemingly occupied from the second

century to the 11th, should provide a control on the process to be observed more generally. The expectation is that it will reveal a sequence of Pagan Pictish lordship, a monastic centre, and a Viking beachmarket, over 800 years, with influence at different times from Irish, English and Scandinavian neighbours (Carver 1995).

The model at present does not favour the formation of any Pictish kingdom. The sculpture, like that of Yorkshire, shows that while there may have been some (rare) monastic centres, such as Rosemarkie and Portmahomack, the principal investments are distributed in many estates, such as Nigg, Shandwick, Edderton – and Cadboll. The lordship model is one that suits the area, at least in the ninth century, and may explain why the Pictish language and art was so easily extinguished in favour of the new (Irish) kingdom of Scotland or in favour of alliance with the Scandinavian cause. The Dornoch Firth, on the border between these two power blocs may be a good place to study their interactions (Carver 1996).

Portmahomack, Cadboll, Nigg, Shandwick, and Rosemarkie are thus players in the same drama. It should be possible one day to write the history of the formative but largely undocumented period fourth-10th century, but badly needed first is some tangible evidence for settlement. The sculpture is expressive, of belief and alignment, but it is all much the same date (late eighth/early ninth century); we have no context for it and little idea of what came before and after its so-called 'Golden Age'. The settlement at Portmahomack will go some way to solving the problem, but the project has a major weakness in that the churchyard cannot be excavated, and this is likely to deny a sight of some of the key structures, particularly the ecclesiastical ones. It is also quite probable that Portmahomack had a special ecclesiastical role on Tarbat Ness. We therefore need a 'lordship' to compare it with.

All these reasons mean that the investigation of Cadboll would be highly relevant to the current research programme. As can be seen from the discussion above, the original site of the Cadboll stone is by no means certain, but its context, if it can be discovered is extremely significant. Was such a stone produced for a local potentate, as opposed to a Royal patron or a monastic atelier? Was this potentate a Pictish lord – or lady – or a Picto-Norse estate owner based on a new foundation? With Portmahomack and Shandwick contemporary and adjacent the local estate at Cadboll can scarcely have

been extensive. This opens a vision of the peoples of ninth century north-east Scotland that resembles Gotland more than its immediate neighbours in Dal Riada, southern Pictland or Northumbria.

Targets (Fig 4)

An archaeological investigation of the Cadboll area would give primacy to the seashore chapel site, but it would need to include intensive survey in a number of other zones, suggested by the documentary research (above) and by topography: the area of Cadboll Castle, possible site of a ninth-century settlement; the area around Drumossie; the area around Hilton of Cadboll house, possible site of the original Hilltown; the area between the Chapel site ('Catboll-Fisher') and the well, probably Mary's Meadow (Fig 4).

Programme for the chapel site

Strip and map the area of the chapel [S1], the enclosure on the west side and the anomalies to the east [S2]. This should show:

- * Whether medieval buildings other than the church had survived.
- * The potential for making a monument of the medieval village.
- * The nature of the enclosure at the west end and whether any of the stone remains from the postmedieval arrangements of display.
- * (By limited intervention) Whether the medieval village overlies another more ancient settlement.
- * (If required) A suitable place to erect the replica of the Cadboll stone.

Programme for survey

Non-invasive surveys (mainly geophysical) would be applied to the areas shown in Fig 4.

Following this, test transects would be excavated across any promising anomalies, to confirm that a settlement has been found, and if possible to date it.

This evaluation work might well lead to the identity of an important early settlement, which would merit detailed investigation. (This would be undertaken in close collaboration with landowners and farmers.)

Mode of operation

All the proposed fieldwork is staged, that is, each stage of the investigation is completed before the next one starts, and it would only start with the full backing of the participants and when adequate funding was in place.

The participants may well wish to manage the project as a company or committee, on which the interests of residents, landowners and scholars were represented. The University of York team is quite happy to operate in this way. Or, if preferred the University team can operate quite independently, and carry the sole responsibility for seeking funds and permission.

Rewards

- * The rewards for knowledge are potentially very great. They will throw new light on the history of Scotland that is multi-cultural and European in its scope.
- * The Chapel site, it could be argued, deserves to be evaluated, studied, conserved and presented in its own right
- * The residents of Cadboll may wish to attract summer pilgrims to their village. The effect of having a replica would be greatly enhanced by archaeological research, development (eg a car-park) and by the presentation of the chapel site.
- * An attraction at Cadboll, combined with an attraction at Portmahomack would increase the tourist circulation around the Tarbat peninsula. Having two attractions would greatly increase the chances of each succeeding.
- * The investigation of the Castle and other adjacent sites would be mainly to understand the context of the Cadboll stone. There would be no obvious pressure to make a conserved or displayed monument on farmland.

5. Conclusion

This paper offers a summary of current understanding of the Cadboll site and the degree to which it may have provided a context for the celebrated Hilton of Cadboll stone.

It concludes that the stone could be replicated and erected in any position at Hilton of Cadboll, but the erection of the stone and the provision for visitors may require some archaeological mitigation.

There are other reasons, connected to both research and tourism, which would make the excavation

of the Chapel site and its presentation to the public desirable.

Research suggests that an archaeological investigation of neighbouring areas could also prove very rewarding for the understanding of the original context of the Hilton of Cadboll stone, and through that to a new vision of the early history of north-east Scotland.

7. Agenda

- (1) This paper is being circulated at the end of May 1998. Comments on its content, including the accuracy and reading of the documentation, and on the proposals being made would be welcome by, say, end of June. I would also be glad to be made aware of any other addressees to whom the document should sent.
- (2) I would like to propose a meeting of addressees at Cadboll during August 1998, from which a plan of campaign might emerge.
- (3) I would be glad of confirmation that, whatever the archaeological programme may be, the replica is to be commissioned.

MARTIN CARVER
23 May 1998

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List of illustrations

Plate I: The sea-shore chapel site from the air (Barri Jones)

Plate II: The Pictish stone from Hilton of Cadboll

Fig 1: Location Map

Fig 2: Map showing the chapel site, modern Hilton and Cadboll Castle.

Fig 3: The Chapel site: Features discovered by remote mapping and topographic survey.

Fig 4: The Cadboll area, showing zones for investigation: Cadboll Castle, cropmark, Drumossie, Hilton of Cadboll house, 'Hiltown', Fishertown of Cadboll, 'Catboll-Fisher', St Mary's Chapel, St Mary's well.

List of annexes

Annex A: Estimate for the making of a replica of the Hilton of Cadboll stone

Annex B: Topographical Survey by RCAHMS

Annex C: Topographical and geophysical surveys by Field Archaeology Specialists Ltd

Annex D: Catalogue of human burials discovered in the vicinity of the seaboard villages (Shandwick, Balintore, Hilton of Cadboll) by Graham Robbins

Annex E: Documentary study of the context for the human burials by Graham Robbins.

Annex F: Dowsing report by D L Bates

Appendix 2

An incised horse's head at Jessie Port, Hilton of Cadboll, Ross and Cromarty

GEORGE and ISABEL HENDERSON

In view of the importance attached by Suzanne Miller to Jessie Port as the likely source of the raw material used by the sculptor of the Hilton of Cadboll cross-slab (see Chapter 7.2.1), the existence of a potentially early example of Pictish sculpture, on bedrock on the foreshore at Jessie Port, deserves consideration (NH87NE0015 Highland Council SMR). A photograph of the carving of a horse's head in the

records kept by the Highland Archaeology Unit in Inverness caught the attention of Heather James. The photograph had been deposited with the Unit in 1984 by John Foster of Fearn. At that time the carving was commented on by the then regional archaeologist, Robert Gourlay. He judged it as probably modern, due to its good state of preservation on the exposed seashore, and, more disputably, because 'its shape



Illustration App 2.1
Carving of a horse's head at Jessie Port, Hilton of Cadboll (© George Henderson)

is not like ancient carvings'. Further enquiries with local residents have taken knowledge of the carving back to the 1920s.¹ Local people appear to believe, like Gourlay, that it is 'modern', but no resident has yet come forward with verifiable claims to its origin. More positively, local residents have lately found and photographed a well cut and shapely scroll on a rock face further along the shore, between Creagan Dubba and Tarrel Bothie.

The carving of the horse's head is on bedrock on an outcrop of sandstone near the south end of the bay known as Jessie Port, about 1km north-east of Hilton, below the cliff and slope dominated by the isolated house, Ros-Mhor. The carved horse's head has many features associated with the Pictish incised animal designs:2 its size, 250mm by 250mm; its careful placing within the flat surface available for carving; and most notably, the economic vigour of the design. The strictly profile head is carved with a single fluent line. The head is held high, at right angles to the neck. The nostril and muzzle, and the bold curve of the lower jaw are accurately delineated, capturing the essential nature of a horse's head. Where the incision is deepest, it has the hollow section of much incised Pictish art. The crisply carved forelock, which lies outside the contour of the head, is paralleled in two of the Burghead bulls³ and, most relevantly, on the Inverurie horse symbol stone,4 the only surviving horse among the early incised animal designs of Pictland. The heavy head of the Inverurie horse compares well with that at Jessie Port, but there are significant differences. The Inverurie horse has a conspicuous eye, and the lobes and scrolls which articulate its head and body are absent from the Jessie Port carving. Its eye is missing, possibly through wear or original light incision. The short upward-pointing ear is not connected to the head or neck by curvilinear linking lines. Such internal curvilinear marking is typical of the Pictish incised animal style, and without it the connection with Pictish art is weakened.

The representation at Jessie Port of the horse's head only, cut off at the base of the neck, may identify the carving as an additional example of the Pictish beasthead symbol, of which eleven are known, three on metalwork, seven on upright stone slabs, and one recorded on the wall of the now destroyed Doo Cave, East Wemyss, Fife.⁵ The head at the bottom right of the reverse of the lost Monifieth plaque (known from an antiquarian drawing)⁶ has decorative scrolls on its forehead, suggesting a ram, while the famous Norrie's Law silver leaf-shaped plaques display dog heads.⁷ The majority of the stone carved beast-heads, notably the

masterly example from Stittenham, Ross-shire,⁸ now in Inverness Museum, appear to represent deer. The example on Glamis no 2⁹ has strikingly the same noble lift of the head as the Jessie Port design. The beasthead symbol at the top of the reverse of the cross-slab, Meigle no 1,¹⁰ has probably rightly been identified as that of a horse.

The majority of the surviving beast-head symbols, in metal and stone, have elaborate scrolls or spirals terminating the design at the base. This feature is absent in the Jessie Port carving. A shallow inverted curve is all that is now visible at its base. Unlike the Pictish animal symbols, which regularly appear in solitary state, the beast-head symbol is usually accompanied by other symbols, and there is now no sign of these at Jessie Port. Yet another unusual feature of the Jessie Port horse's head, in the Pictish context, is its being cut on flat bedrock, although there is a distinguished parallel for carving on bedrock, in the boar symbol on the hill at Dunadd, Argyll, alongside ritual footprints.¹²

The location of the Jessie Port carving worried Robert Gourlay, since he supposed waves and sandblow would have long ago eroded an ancient carving. The flat surface on which the horse's head is cut can be covered by tossed-up sea weed, but itself appears to stand clear of the main force of the high tide. A case might be made for changes having occurred in the shore line over 1400 years, and that the carving might originally have been farther back from the sea, to explain its good preservation.

In design and artistry the Jessie Port horse's head stands up well to critical scrutiny. However, as indicated above, in a number of respects it fails to correspond to the extant examples of the Pictish beast-head symbol.

Notes

- 1 Thanks are due for information and practical assistance to Susan and David Findlay (Fearn), John Foster (Fearn), Dolly Macdonald (Hilton), William MacRae (Portmahomack), Uisdean Ross (Hilton), and Jon Trelfer (Highland Archaeology Unit).
- 2 Henderson & Henderson 2004, 75.
- 3 Nos 3 &5, Allen & Anderson 1903, pt 3, 118-24.
- 4 Allen & Anderson 1903, pt 3,170 and fig 182.
- 5 Allen & Anderson 1903, pt 3, 373 and fig 389.
- 6 Henderson & Henderson 2004, 225, illus 322.
- 7 Henderson & Henderson 2004, 89, illus 112.
- 8 Henderson & Henderson 2004, 59, illus 69.
- 9 Henderson & Henderson 2004, 36, illus 33.
 10 Henderson & Henderson 2004, 71, illus 85.
- 11 For example Rhynie no 5, Henderson & Henderson 2004, 63, illus 75.
- 12 Lane & Campbell 2000, 18-22.

Glossary

- addorsed placed back to back, usually animals aliquot single samples for OSL dating
- Anglian lock where the offside leg of an animal is brought forward over an interlacing strand and the nearside leg is tucked back under it, thus interlacing animal and strands
- animal ornament formal arrangements of nonnaturalistic animal and bird ornament (see also zoomorphic)
- appendage a leg, foot, arm, hand or head bioturbation earth disturbance by wild-life
- bleb ferrous micro-nodules. A small circular swelling in a stone caused by oxidisation. The swelling can fall out, leaving a 'bleb hole'. The presence of blebs ultimately weakens the stone
- boss a domed projection carved in high relief, usually decorated with double or triple spirals but occasionally with key pattern
- chamfered a surface with its square edges bevelled off collar-stone horizontal supporting stone for cross-slab with slot to take a tenon, especially if made with two stones (see also cross-base)
- conchoidal fracture a convex surface; the term can also be used for concave surfaces but the typical conchoidal fracture of a Hilton of Cadboll fragment is convex
- conjunction fragments which fit together exactly at a number of points making it possible for them to be bonded together (see also join)
- cross-base horizontal supporting stone or structure
 with slot to take a tenon (see also collar-stone)
- cross-head the four arms of a cross, forming a symmetrical composition
- cross-slab an approximately rectangular slab having a cross sculpted in relief or incised on one or more faces
- crossing where the arms of a cross intersect
 debitage the waste material resulting from the
 dressing or carving of a stone
 double strand interlace see median-incision

- extension a strand-like elongation of tail, limbs, tongue, lips, ears or crest which interlace for decorative purposes
- fillet a plain strip left upstanding to surround panels of relief carving
- *form* a shape, carved in relief, which cannot be closely identified
- grooving grooving can be used to create areas of false relief between the grooves. It is also used in *median incision* and along the edge of relief of all types to point up the design. Sometimes this outline grooving is done with a punch, the impression of which remains discernible
- hole point the voids between strands in interlace patterns, which indicate grid-layout points. When the interlace raised pattern has worn away these constructional hole points may still be visible
- humped relief shallow relief which is rounded in section. The humps curve down to narrow grooves, leaving no dressed surface between them
- incised lines cut but not elaborately modelled Insular art the art used for the decoration of manuscripts, precious metalwork and sculpture, stylistically common to Britain and Ireland in the early medieval period, cAD 600 to AD 900
- interlace ornament interwoven pattern of plain strands
 (see median incision)
- join this describes a direct physical fit between two fragments. Joined groups of any number of fragments can be created as long as there is a physical fit between each fragment and at least one other fragment in the group, and here called as a keyword a CLUSTER
- key pattern, diagonally set key pattern where the setting out lines cut the border at 45°, as distinct from key pattern that aligns with margins
- lamination the splitting into thin layers along the bedding plane of the stone. The weathering of exposed surfaces can cause the separation of the layers

lappet a horn-like extension on the forehead of an animal

lugs side projections

mandorla (or vessica piscis) a pointed oval frame medallion scroll two plant stems intersecting so as to create medallion-shaped voids

median incision a grooved line following a margin, or dividing a strand of interlace or the tubular body or neck of an animal. Median incision is used to clarify elements in a design, lighten ornament, or to emphasise an edge. It is not to be confused with double strand interlace which has two separate strands going in the same direction but with different 'overs' and 'unders'. In older literature the term 'double-beaded' was used for median-incision

modelled relief relatively high relief, with the upper surface rounded and the sides straight. A flat dressed surface is left on either side of the relief node the point of a plant-stem from which other

growth springs

pecking to pick or dig into a surface with a pointed instrument, especially with repeated short quick movements

projections the stone (lugs) left projecting beyond the trimmed edge of a rectangular slab

spandrel space between a carved curve and a frame spiral ornament based on connected spirals, in various ways, usually derived from 'trumpet ends'

straight-line spirals a method of extending step patterns by arranging the steps in a spiral shape, expressed by angles rather than curves

stugging (Scots) a rougher version of pecking; stabbed with a point held fairly upright to the surface of which normally very little is left

vine-scroll decoratively arranged plant ornament with no formal relationship to the botanical vine but which carries the meaning of the vine in St John's Gospel 15, 1–17. An 'inhabited' vine-scroll shows creatures within the scrolls of foliage feeding on the fruits of the vine

zoomorphic decoration employing animal attributes

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Abbreviations

Cadboll Estate Contents and Estimate of the Estate of Papers 1813 Cadboll belonging to R B Aeneas Mcleod

Esquire made out from a survey by Geo:Brown. Vol I containing the parishes of Fearn, Tain, Eddertown, Kincardine and

Creech. MS in Tain Museum.

Cadboll Estate Particulars and Plans of the Estates of

Papers 1918 Cadboll.

ECMS Allen & Anderson 1903.

ONB Ordnance Survey Object Name Books.
OPS Origines Parochiales Scotiae: the Antiquities

Ecclesiastical and Territorial of the Parishes of Scotland. Innes, C, Anderson, W, Robertson, J, Brichan, J and McNab, D

(eds) 1850-5, vol III. Glasgow.

OS Ordnance Survey.

NLS National Library of Scotland.

NMS National Museums of Scotland (formerly

National Museums of Scotland, Museum of

Scotland).

Stat Acct First Statistical Account of Scotland, Sinclair, J

(ed) 1791–9. Accessed through Edina online 'Statistical Accounts of Scotland', http://

edina.ac.uk/statacc/.

New Stat Acct New Statistical Account of Scotland, 1845.

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Index

Note

- 1. Sub-entries are in alphabetical order, except where chronological order is more logical.
- 2. Page numbers for **chapters** and **glossary** definitions are in **bold**; those for illustrations are in *italic*.

```
Abbotsford (Roxburghshire) 233
                                                                                  Ardchattan Priory (Argyll) 161
Abbotshaven (Ross & Cromarty) 215
                                                                                  Ardjachie (Ross & Cromarty) 178
Aberdeen 218
                                                                                  artefacts
                                                                                    architectural fragment 31, 33, 55-6, 63, 69, 72, 367
  Spalding Club 15
Aberlemno (Angus) cross-slabs 16, 18, 19, 20, 22, 89, 90, 129, 131, 133,
                                                                                    bone toggle 60, 377-8
    147, 148, 149, 150, 160, 170, 174-5, 182, 183, 184, 201, 202
                                                                                    clay pipe 33,62
                                                                                    copper alloy 52, 61, 63, 375-7
Adair, John (map 1683) 68
Adams, R J 327, 333
                                                                                    cross-incised stone 57, 366-7, 366
Adomnán of Iona 141, 272n
                                                                                    glass 33, 60, 62, 63, 379, 381
Agassac (France) 184
                                                                                    iron and ironworking 31, 35, 41, 43, 49-50, 52, 57, 59, 61, 63, 71, 72,
agricultural improvement 232
                                                                                       369-73, 376, 377
Ahenny (County Tipperary) 21
                                                                                    medieval\ pottery\ 29,31,40,41,49,52,53,57,59,61,62,63,69,71,
Aitken, M J 345, 352
                                                                                       373-5, 357, 375
Alba, kings of 212
                                                                                     post-medieval pottery 31, 33, 35, 61, 62, 63, 71, 375
Alexander II, king of Scots 212
                                                                                    relief cross 35, 61, 365-6, 366
Alexander, J J G 193
                                                                                    stone 49, 57, 60, 61, 63, 378-9, 378
aliquot 354, 401
                                                                                  artefact and environmental studies 285-384
Allen, J Romilly
                                                                                    analysis of fragments 285-9
  as art-historian 15-16, 21, 22, 23, 133, 160, 177, 185
                                                                                    database-driven methodologies for reconstruction 318-22
                                                                                    epigraphy of inscription for Duff memorial 322-6
  on Cordiner 116, 392
  cross-slab vine-scroll 17-18, 19, 116, 121-2, 123, 279n
                                                                                    toolmarks 292, 295-300, 295-306, 303, 304
  Early Christian Monuments of Scotland 14, 16, 147, 231, 233, 234, 235, 246,
                                                                                     see also petrology; soil analysis
                                                                                  art-historical context of Hilton of Cadboll cross-slab 127-204
    276n, 393
  rubbings of slab details 16, 119, 120
                                                                                    literature (up to 1998) 13-25
                                                                                    description and early theories 13-15
  on spiral panel 175
                                                                                    early descriptions and chronologies 18-24
Alness (Ross & Cromarty) 221
Alston, D 274n, 275n, 276n, 277n
                                                                                    early visitors 15-18
                                                                                    'obelisk' at Hilton 13-15
Amay nunnery (France) 187
                                                                                  Asby Winderwath Common (Cumbria) bronze plaque 176, 177
American Gardens at Invergordon Gardens, cross-slab in 205, 206, 228,
    233, 234, 235, 242, 246, 248, 267, 268
                                                                                  Ash, M 236, 278n, 281n
Amiens see Corbie Psalter
                                                                                  assessment and project design 391-8
Ancient Monuments Act (1882) 210, 234, 239, 242
                                                                                  Atholl, Duke of 243, 244, 245, 248, 250-1, 280n, 282n, 384
                                                                                  Aufderheide, AC 363
  Bill (1870s) 250
Ancient Monuments Board, Scottish 239, 242, 249, 250
                                                                                  Augustine, Saint 142
Anderson, Joseph 15-17, 22, 247
  on Cordiner 116, 392
                                                                                  Bachul Mor 213
                                                                                  Bailey, Richard 23, 138, 157, 160, 161, 199, 200
  on vine-scroll 17-18, 19, 279n
  Early Christian Monuments of Scotland 16, 181, 231, 246, 276n, 393
                                                                                  Bain, George 281n
  Rhind Lectures 16, 17, 246, 249
                                                                                  Bakka, Egil: on Norwegian grave-finds 22-3
                                                                                  Balintore (Ross & Cromarty) 2, 9, 75, 206, 236, 251, 393
Anglo-Saxon art 16
  see Gandersheim Casket
                                                                                    population and fishing statistics 237-8
Anglo-Saxon coins 161
                                                                                  Balnagown family, Ross of 220, 226
Angus 127, 135, 140, 174
                                                                                  Balnakeil (Sutherland) 323
                                                                                  Barberini (Rome) Gospels 159, 196
  Rossie Priory 148, 171, 175
                                                                                  Bardvour/Bàrd Mhoire (Our Lady's Park/Field/Mary's Meadow) 13, 225,
  see also Aberlemno; Cossans; Kirriemuir; St Vigeans
Anson, P F 237, 278n
                                                                                       392, 394
                                                                                  Barochan Cross (Renfrewshire) 68
Antiquaries see Society of Antiquaries
Antonine Wall 179, 185
                                                                                  Barr, A 282n
Apostles' Stone see Portmahomack cross-slab
                                                                                  Bass W 362
                                                                                  Bates, D L (dowser) 11n, 392, 394
archaeobotany 49, 51, 52, 59, 63, 64, 357-9
```

Bayne, Duncan 222	Buikstra, J 362
Beaulieu Priory (Inverness) 229	Bullock, P 327
Beckley (Oxon) sword pommel 144, 146, 202	Burghead (Moray)
Bede of Jarrow 141, 193	bull carvings 400
bell shrine 213	shrine panel fragment 178–9, 179, 183
Bending, S 232	Byzantine art 191
Bennett, Peter 383	
Bernician School of Jarrow 191	Cadboll/Catboll 236, 396
Bewcastle Cross 19, 23, 199	-abbot 236
biography of Hilton cross-slab 8, 205-84, 385, 388	Cadbollmount: St Mary's Chapel 2, 215
early medieval 'birth' of 206-13	Castle 2, 209, 215, 222, 233, 393
from 9th to 12th century 209–13	Estate 391
church in Pictland 207–8	Farm 392
creation of monument 210–12	-fisher (Fisher town of Hilltown) 215, 236, 393
re-erection in 12th century 213	Wester 236, 393
Tarbat peninsula 208–9	see also Hilton of Cadboll
later medieval 213–15	Cadboll, Cordiner at 224, 227, 228–30, 229
active reverence 213–14	Caithness 135, 175, 236
ecclesiastical and settlement context 214-15	Caldwell, J 376
defacement and re-use in 16th and 17th centuries 217-23, 267	Calendar of Fearn 223
storm in 1674 27, 71, 217–18, 388	Callander, Graham 243, 244, 247, 248
'remarkable ruin' in modern era 223–32	Campbell-Kease, J 85, 86, 87, 274n, 322, 325
appropriation and displacement 232-8	Canna cross 67, 68
as 'tangible expression of national soul' 238-51, 267	Cardonnel, Adam de 228, 276n
marginalisation and regeneration 251-7	Carmichael, Lord 245, 248, 251
symbolic construction of community 257-66	Carver, Martin 5-6, 11n, 31, 201, 209, 215, 254, 255, 270n, 271n, 388, 390
see also modern era	assessment and project design 391-8
boar symbol at Dunadd (Argyll) 400	cataloguing process 28–9, 73, 75–126
Bogle, William 219	aims and processes 75–6
Book of Armagh 17	entries 76–80, 84–7
book cover, 5th-century ivory 140	terminology 75
Book of Deer 213	Catboll see Cadboll/Catboll
Book of Durrow 15, 17, 136, 175	Cathach (Irish Psalter) 176
Book of Kells 15, 17, 18, 21, 23, 127, 138, 139, 143, 151, 175, 192	Celtic Library of North 250
Chi-Rho 141	Cenél Loairn dynasty 212, 213
Christ portrait 176	Cenél nGabráin 272
Christi autem initial 138	Chalmer, Patrick 231
decorated Luke 24 text 195	chapel see Hilton Chapel
'Hell scene' 170, 173	Cheape, H 375
inhabited vine-scroll 20, 167, 168, 193, 195, 196, 200, 202-3	Cheapside Cross (London) 218
lettering 138	Chrodoara (Oda), Saint 187
Virgin and Child with angels 138	chronology and stratigraphy 40-63
Braco (Perthshire) 222	Phase 1 (Pictish) 20, 40–9 , 64–8, 66, 67
Bradbourne cross (Derbyshire) 206, 218	Phase 2 (mid-12th century to 13th century) 40, 41, 48, 49-55, 50, 51,
Bradley, R. 270n	54
Brandon (Suffolk) pin 163	Phase 3 (13th-15th centuries) 40, 41, 54-7 , <i>54</i> , 55, <i>56</i> , <i>57</i> , 59
Breedon-on-the-Hill (Leicestershire) Church 22, 158, 170, 191	Phase 4 (late medieval/post-medieval) 40, 41, 58–63 , <i>58</i> , <i>59</i> , <i>62</i>
inhabited scroll 194, 196–7, 200, 203	Phase 5 (modern) 40, 41, 63 see modern
Brend, Amanda: fragment analysis 28, 285–9	Clach a Charridh see Shandwick
Brewer, J 232	Clarke, David V 10, 260, 283n
Bridei son of Mailcon, king of tribes of Tay 207	on project 1–11
Bridgeness slab 179	Clearances, Highland 238, 267, 269
Bridgland, N 11n, 391	Clement,VII, Pope 215
British Museum, cross-slab in 9, 114, 205, 206, 238, 239, 243, 244-5, 247,	Clonmacnois (County Offaly) 17
248, 250, 392	Clunie (Perthshire) 104
brooches 188–9	Clyne (Sutherland) 17
Brooks, C M 375	Codex Aureus 16, 17, 202
Brora (Sutherland) 229	collar-stones 44, 46, 45, 47, 401
Brøndsted, J 18, 22	Collingwood, W G 19
Brothwell, D 363	Columba 213, 272
Browne, Rev 384	common land enclosed 232, 236-7
Brunswick see Gandersheim Casket	community, symbolic construction of 257-66
Buchan, 11th Earl of 228	Constantine the Great 200, 385

Cooke, S 258, 259	Durham, Jane 6, 9, 11n, 253, 254, 282n
Coppergate helmet (York) 159, 164, 200	Durrow Cross (Ireland) 151, 188
Corbie Psalter (Amiens) <i>166</i> , 167, 168	Book of Durrow 15, 17, 136, 175
Cordiner, Rev Charles	Duthac, Saint 212, 220
Anderson on 116, 392	
on cross-slab 5, 85, 125–6, 225, 235, 246, 272n, 275n	Earle, Sir Lionel 240-1, 242, 244, 245, 248, 279n
drawings 116, 224, 231, 276n	Eassie (Angus) 174
on location of Cadboll 224, 227, 228–30, 229	Easson, Richard 254, 391
Cossans (Angus) cross-slab 135, 202, 213	East Wemyss (Fife) 400
Courty, M A 327	Easter Ross 13, 15, 19, 23, 24, 201, 221, 387
Cox, Adrian: non-sculptured finds 375–9	fishing 236
Cramp, Rosemary 23, 191, 200	quarry 127, 133, 141, 177–8
Crawford, O G S 18–19, 22, 23	see also Cadboll
Crieff (Perthshire) 18, 148, 161, 200	Eaton, David 274n
Croft on Tees (Yorkshire) Church of St Peter 23, 194, 197–9, 198, 202–3	ecofacts and artefact and environmental studies 357-63
Cromarty 2, 222	archaeobotany 357–9
Cronyn, J M 138	faunal remains 359–62
Crooke, E 281n	human remains 362–5
cross-slab, Hilton of Cadboll, see under Hilton of Cadboll cross-slab	Edderton (Ross & Cromarty) cross-slab 87, 136–7, 137, 141, 143, 145,
cross-slabs, role in Pictland 208	147, 148, 175, 181, 182, 201, 225, 385, 396
Cumbria: Asby Winderwath bronze plaque 176, 177	Edwards, Nancy 23
Curadán (Curetán, later Moluag), bishop (later Saint) 207, 209	Elgin Cathedral (Moray) 135, 215, 219, 323
Curle, C L	emigration 236
as Cecil Mowbray 18, 158, 376	enclosure of common land 232, 236–7
on chronology of Early Christian Monuments of Scotland 19-20, 21,	England
22, 131	and art-historical context 194, 196–7, 197–8, 198, 199, 200, 202
Cuthbert, Saint, coffin of 136, 137-8, 147	Bradbourne cross (Derbyshire) 206, 218
Cutmore, C 274n	Leicestershire see Breedon-on-the-hill
Cynethryth (wife of Offa of Mercia) 187, 187	see also Lincolnshire; Yorkshire
	epigraphy of Hilton of Cadboll inscription 85, 86–7, 216, 322–6
database-driven methodologies for reconstruction 318-22	archaic form of numeral 6 324–5, <i>325</i> capital K from left side of shield 323, <i>323</i>
dating see radiocarbon; luminescence	capital R, forms of 324, 324
David, J C E 296	capital Y formed of two strokes 324, 325
David iconography 21, 22, 168, 183, 201	inscribed lettering on banner in shield 322, 322
Davidson, John 221, 326	ligature VF 325, 326
deer 'heads' on St Andrews Sarcophagus 158, 162, 167, 168	marks between words resembling point separators 322, 323
Denoon, Andrew 209	roman capitals 323–5, 324
Dewar, Donald 258–9	veracular character 325
Diamond, J 283n	Epona (goddess) 184, 185, 186, 189
Dickson, J and C 359	Esher, Viscount 244, 248, 250, 279n, 280n, 383
Dilworth, M 274n	Everson, Paul 164
Dominicans 220	excavations at Hilton of Cadboll chapel 27-74
Doo Cave (East Wemyss, Fife) 400	burials 29, 31, 40, 41, 56, 57–8, 62–3, 69, 70, 71, 74, 388, 390
Dornoch (Sutherland) 323	chapel 29-31, 30, 35, 55-6, 63, 69, 72, 73
Firth and Dornoch Sands 2, 395–6	chronology and phasing of site 32-3
'Drosten stone' (St Vigeans, Angus) 16	cross-slab, lower portion 50-1, 64-7, 74
Douglas, James 230	enclosure bank 29, 41, 49, 57
'Dragon Stone', Portmahomack 155	features summarised 30
Driscoll, ST 270n	GUARD 8, 9, 10, 35
Duff family 125, 222, 223	hard standing around setting 2 67
Duff, Alexander: and Cadboll slab 27, 71, 72–3, 75, 85–7, 126, 228, 232	Kirkdale Archaeology 31–2, 33–5
as memorial (to himself and three wives) 1, 85, 86, 217–18, 221–3, 267, 268, 269, 274n, 275n, 388, 392	location of carved fragments 28, 29, 33, 35, 52, 57, 59, 60–1, 62, 63, 68, 69, 70–1, 73, 388
inscription and coat of arms 216, 217, 221, 322-6, 322-3	methodology 37-40, 38, 39, 385, 388
Duff, Donald 222	midden 63, 64, 68, 73
Duller, GAT 346	Pictish chapel 64, 67, 68, 388
Dunadd (Argyll) boar symbol 400	pit 59, 60, 70
Duncan, John 326	re-use of carved fragment 62
Duncan, M M 346	sandstone surface around setting 52, 55
Dunnet (Caithness) 323	settings for cross-slab 29, 31, 35, 36–8, 41, 42, 44–55, 64–7, 68, 390
Dunfallandy (Perthshire) 20, 142, 148	sequence reconstruction for cross-slab 64–7, 66, 387–8
Dunrobin Castle (Sutherland) 16, 178, 235	shed 29, 33, 41, 61–2, 70, 71, 73
Dupplin cross (Perthshire) 67-8, 135, 148, 182, 194, 200	stone structure 29, 64

Farr, Carol 157	Gandersheim Casket (Brunswick) (continued)
faunal remains 41, 359–62	four elements 168
amphibian 359, 360-1	spiral motif 160, 160-1
bird 63, 359, 360–1	Garden of Eden 171, 172, 173
cat 63, 359, 360-1	Gask House (Perthshire) and slab 148, 175, 235
cattle 41, 49, 52, 57, 60, 61, 63, 71, 359, 360-1	Gerald of Wales 214
dog 57, 359, 360–1	Gibb, A
fish 41, 49, 63, 359, 360–1	drawings for John Stuart 18, 227, 231, 276n, 277n
horse 49, 60, 61, 63, 71, 358, 359, 360–1	lithograph of cross-slab 15, 16
pig 60, 359, 360–1	Gilchrist, R. 274n
sheep/goat 49, 52, 57, 60, 61, 63, 71, 236, 359, 360–1	Gillies, William 383
vole 63, 359, 360–1	Glamis cross-slabs (Angus) 20, 127, 400
Fawcett, Richard 74, 367	Glencalvie 238
Fearn Abbey and Hill (Ross & Cromarty) 2, 208, 214, 215, 217, 220, 221,	Glenferness (Moray) 17
222, 393	cross-slab front 175, 176
burial at see memorial under Duff	Glenn,V 272n
Calendar of Fearn 223	Golgotha Crosses 139, 141, 142, 147, 151, 201, 385
Rev John Urquhart of 224–5	Golspie (Sutherland) 17
Fernandez, J 284n	cross-slab 219-20, 274
Finch, J 274n	Gondek, Meggen
Findhorn (Moray) 229	catalogue, digital 28, 80, 114
Findlater, Alex Maxwell 222, 274n	fragment analysis 285–9
Findlay, S and D 400	Goodman, A H 363
Fisher, Ian 137, 181, 270n, 367	Gordon, A 224, 237, 238, 271n, 273n, 278n, 392, 393
Fishertown of Hilltown/Hilton/Catboll-Fisher (Ross & Cromarty) 215,	Gordon, Robert 219, 222
236, 393, 394	Gosden, C 205, 206
fishing, controlled 236	Gospel-books 135, 142, 202
Fitzpatrick, E 327	Barberini 159, 196
Fladmark, J M 283n	Lindisfarne 15, 17, 160, 202
Fletton 161, 170	St Petersburg 159, 160, 162
Focillon, Henri 18	Trier 139
Fojut, Noel 10	see also Book of Kells, Book of Durrow
folk narrative and myths 231	Gough, Richard 228, 230
Folk, R 20	Gourlay, Robert 399, 400
Forres (Moray): Sueno's Stone 134, 229	Govan (Glasgow) 219, 220, 274
Fortriu 207	Graham, A 276n
Fortrose (Ross & Cromarty) 214	Grandval Bible 171
Foster, John 399, 400	(London, British Library) Genesis frontispiece 172
Foster, Sally M 10, 27	Grant, A 270n
project 1–11	Grant, Sandy 213
recovering biography of Hilton cross-slab 205-51	Grauer, A 363
Fowler, Lady Alice 384	Greenwell, W 136
Fowlis Wester (Perthshire) cross-slab 145, 147, 148, 151, 171, 180	Gregory, James 217
fragments from Hilton of Cadboll cross-slab	griffin and significance of 184–5, 196
analysis methodology 285–9	Grigor, I 282n
distribution analysis 306–14	Grose, Francis 228, 276n
fracture process 309, 315–18	Grove, Barry 8, 72, 211, 391
reconstruction 318–22	reconstruction project 254, 285
fragments not from Hilton of Cadboll cross-slab 367-8	GUARD excavation (2001) 35, 36, 27–74
France 179, 184, 200	Guilford, C 327
see also Corbie Psalter	Guthrie Bell Shrine 213
Fraser, James 270n, 273n	
frontispiece, Cordiner (1780) 229	hachure survey of upstanding remains 4
	Haddington (East Lothian): Roman capitals 324
	Hall, Allan
Gaelic 13, 273	carved surface colouration 73
names recorded by Petley 225–6	fragment analysis 285–9
Gair, Alexander and wife 86	fragment sorting 28
Gandersheim Casket (Brunswick) 157, 159, 162, 164, 173, 202	Hall, Derek: on pottery 373–5
animals 23, 163, 167–8, 387	Hamilakis,Y 206
biped 163	Hamilton, Patrick 274n
winged creatures 163, 194, 197, 199, 200	Hanley, Robin 11n
back detail of 7-spiral roundel 160	harbours, lack of 238

Haverfield, F J 136	Hilton of Cadboll cross-slab (continued)
Hawkes, Jane 162, 271n	Face E 79, 125
Hawkshaw marble head 260	catalogue entry 124–6
Hay Fleming, S 87	fragments, analysis and environmental studies 289-326, 306-9,
Heald, Andy 10	307–8, 310, 312, 313
Hedda Shrine (Peterborough) 162	fragmentation 309–18
Hell depicted	ayout of front and back 129–32
in Book of Kells 170, 173	lithic source outcrop 291–3
on Meigle cross-slab 170–1	lower portion in situ 50–5, 59
on Rothbury Cross 161, 162, 168, 170	original location 31
Helm, MW 271n	projections 31, 44, 76, 110, 124, 125, 127, 129, 145, 200, 402
Helmsdale 229, 243	red staining on 73, 293
Henderson, George 260, 270n, 284n, 366, 367	replica of 211, 253, 253–7
on incised horse's head (Jessie Port) 399-400	style of carving 132–3
Henderson, Isabel 10, 24, 260, 270n, 271n, 273n, 284n, 392	tenon 44–5, 46
on art-historical context 13-25, 27, 35, 127-204	toolmarks 110, 114, 132, 292, 295–300, 295–306, 303, 304, 309,
on cataloguing 28, 52, 73, 75–126	317
on fragment analysis 285–9, 365–7	see also petrology
on incised horse's head (Jessie Port) 399-400	see also under art-historical context; art-historical literature;
Picts, The 22, 158	cataloguing; excavations at Hilton of Cadboll; Hilton Chapel;
Henry, Françoise 18, 19, 127, 141, 160, 167, 185	Insular art; project; biography
Early Christian Art of Scotland 20, 131	Hilton of Cadboll village 237–8
Sculpture irlandaise 18	cross-slab 2, 3, 12, 226, 236, 251
heraldry of Hilton of Cadboll cross-slab 86, 216, 217–23	on Ordnance Survey, first edition 6
heritage politics 8–10	Hilton chapel 2, 214–15, 221
Herzfeld, M 284n	features, University of York summary 7
Herzog Anton Ulrich Museum (Brunswick) see Gandersheim	hachure survey of upstanding remains 4
Casket	location 3
Hibbert, Charlotte 231	magnetometry and soil survey 7
Highland Council 391	OS map 1st edition, extract 6
Highlands 236, 237	see also excavations at
Hill, Peter 27	Historic Hilton Trust 9, 10, 256
on toolmarks 295–306	Historic Scotland 7, 8, 9, 10, 35, 37, 255–6, 391
'Hilltown' of Cadbol see Cadboll/Catboll	holy well 209
Hilton of Cadboll cross-slab, illustrated <i>in pocket</i> dating on art-historical	Hopf, M 357
evidence 202–3	Horie, CV 138
Face A 78, 83, 134, 165	horse
catalogue entry 80–109	head, incised 399–400 , <i>399</i>
cross-shaft 143	and rider depicted 19, 21, 181, 181–5, 183–4, 187–9
figure with embroidered tunic 84–5, 96–7, 200	see under faunal remains
height of slab 110–11	Houses of Parliament 243
message of original 173–4 reconstructions, partial 73, 78, 83,	Hudson, BT 270n
174	Hulne Priory (Northumberland) 194
schematic section through 318 shape of cross-head 87–8,	human figures, carved 76
144–51	human remains 29, 31, 40, 41, 43, 49, 55, 56, 60, 61, 62–3, 64, 69, 70, 71,
	358, 362–5
stepped cross-base 133–41, 200, 385	age and sex 362
Face B 78, 83	diseases and trauma 363
catalogue entry 110–11	stature 362–3
reconstructions, partial 83	Hunter, Fraser 10
Face C 79, 83, 113, 128, 165	Hunter, J 272n
animals: Allen's rubbings 115–21, 120	Hunterston Brooch (Ayrshire) 168
catalogue entry 111–23	Hutton, JT 352
cross-head within spiral panel 176–7, 175, 200, 385	
graffiti 116 identity of female rider 184–9	iconography, Christian 22, 133, 168, 170-4, 181, 183, 191, 201-2, 385-7,
inscription, letters from 322–6	218, 220, 266, 385
numbered vine-scroll 116–21, 118	Improvers 232, 236
penannular brooch 184, 188–9, 201	incised linear stone cross 366
reconstructions, partial 79, 83, 113	Innes family 222
upper edge/lower portion photomontage 39	Insular art (c AD 600 to AD 900) motifs 87, 113, 125, 127, 157, 177, 202–3
Face D 79, 83, 113	401
catalogue entry 123–4	animal 81–2, 84, 85, 87, 88, 94–6, 106–7, 133, 143–4, 143–6, 151–68,
reconstructions, partial 79, 83, 113	<i>152</i> , 194–200, 157–68, 387, 401

nsular art (continued)	Keiser, B P 160
bosses 81, 90–2, 142–3, 148–9, <i>153</i> , <i>157</i> , <i>161</i> , 401	Kells (Ireland) 188, 212
figurative 84, 85, 87, 88, 96–7, 108–9, 117, 125, 133, 168–73, 169,	see also Book of Kells
200	Kenyon, Sir Frederick 240, 242, 244, 245, 247, 248, 382
horse and rider 19, 21, 122-3, 178-89, 181, 202	Kildalton Cross (Islay) 129, 161
hunting scene 19, 21, 22, 23-4, 122-3, 147, 178-89, 202	Kilnave Cross (Islay) 68
trumpeters 180, 183	Kilree Cross (County Kilkenny) 185
interlace 87, 88, 92–3, 102–3, 149–50, 177, 312, 401, 402	Kincardine (Sutherland) 191, 201, 222
key pattern 81, 82, 87, 88–90, 91, 98–9, 144, 149, 401	King's Sons folk narrative 226, 230, 267
pelta pattern 176	Kinneddar (Moray) 179, 188
plant 87, 88, 93-4, 104-5	Kintradwell (Sutherland) 178
spiral 21, 81, 87, 88, 90–2, 100–1, 114–15, 117, 123, 133, 141–2, 151,	Kirk, J 220–1
<i>154</i> , 160–1, 174–6, 402	Kirkdale Archaeology excavations
Tree of Life 194	1998 7–8, 31, 33, 285
tree-scroll 191, 198	2001 8, 33, 34, 35
vine-scroll 17–18, 19, 21, 24, 94, 111–16, 117–22, 133, 167, 168,	Kirriemuir (Angus) cross-slab 135, 144, 179, 179–80
189–200, 202–3, 190–198, 279n, 387, 402	Kitzinger, Ernst 18, 21, 137–8
nvergordon Castle and gardens 2, 15-18, 27, 228, 232-3, 239	Knocknagael (Inverness) symbol stone 129
Hilton cross-slab in see American Gardens	Knox, John 222
nverness 2, 129, 207, 229, 323	Kostoglou, Maria: ironworking 369-73
nverurie (Aberdeenshire) horse symbol stone 400	Krogman, W 362
ona (Argyll) 18, 20, 21, 22, 141, 207	
St John's Cross 127, 161, 200	Lady's Well (Tobar na baintighearna) 209, 392, 394
St Martin's Cross 127, 139, 212	Laing, L and J 302
St Matthew's Cross 139	Largo (Fife) 151
reland 19, 208, 214	Larsen, N P 363
Ahenny cross 21	Last Judgement ivory 173
Book of Armagh 17	Lastingham (Yorkshire) 17
Cathach (Irish Psalter) 176	Latheron (Caithness) 323
Clonmacnois 17, 23	Lazarus and Dives parable 171
Kilree Cross 185	Leningrad Bede 23, 193
Moore Cross 185	Lepper, K 346
Muiredach's Cross 141, 188	Leslay, Elizabeth 274n
Tullylease 17, 132	Lilleby (Norway) mount 22–3
see also Book of Kells; Durrow Cross	Lindisfarne Gospels 15, 17, 160, 202
scan, MY 362	linear cross incised on unshaped stone 366, 366–7
slay	Lismore (Argyll) 213
Kildalton Cross 129, 161	London
Kilnave Cross 68	Cheapside Cross 218
	see also British Museum
ames, Edward 187	Louden, John Claudius 277n
ames, Heather F 8, 10, 35, 271n, 389, 399	Lubbock, Sir John 234, 250
archaeological investigations 27–74	luminescence (OSL) dating 29, 31, 40, 41, 43, 49, 52, 53, 61, 68, 71, 73, 74,
conclusions 385–90	339–57, 340–4, 385, 390
fragment analysis 285–9	Luther, Martin 218
arrow, Bernician School of 191	
astrzębski, P A 15, 277n	Macadam, Rev Alexander 224
edburgh shrine (Roxburghshire) 23	Macadam, Stuart 363
effrey, Stuart	Macangus family 238
cataloguing 80	MacAskill, N 375
fragment analysis 61, 285–9, 306–9	McCarthy, M R 375
location analysis 28–9	Macdonald, D 232
erome, Saint 141, 201	MacDonald, A 270n
essie Port 2, 28, 385	Macdonald, J 237, 238, 271n, 273n, 278n, 392, 393
horse's head, incised 399–400 , <i>399</i>	Macdonald (née Hilton), Dolly 400
scroll, incised 400	MacDonald, W R 87
ewell, Richard 191, 194	McInnes, CT 274n
oass, Rev J M 16, 277n, 384	Mack, A 306
ones of Larbert 239	MacKay families 238
ones, Siân	MacKay, Robert 219, 274n
community study 10	MacKenzie, Sir George 206, 217, 221, 273n, 388
newspaper articles summarised 379–84	McKenzie, Jo: soil micromorphology 326-39
recovering biography of Hilton cross-slab 205-51	Mackenzie, W S 327

MacLean, Douglas 168, 271n	Monymusk Reliquary 17
McLean, F 258, 259	Moone Cross (County Kildare) 185
McLean, Neil 28, 80	Moray 241
photographs 97-109, 322-6	bishops of 215
Macleod of Cadboll, Laird 224, 227, 278n, 388	Burghead shrine panel fragment 178-9, 179, 183
Macleod, Robert Bruce Aeneas 205, 232-8 passim, 277n	Firth 175
newspapers report controversy 382–4	Forres 134, 229
fishing villagers and 236–8	Moreland, J 206, 273n
slab in Invergordon Castle gardens 205, 232, 233, 234, 235–6, 267	Morison, Lord Advocate Robert 241, 243
Macleod, Roderick Willoughby	Morton, Douglas
slab gifted to British Museum 9, 114	catalogue, digital 28, 77, 80
slab moved to London 205	cross-slab fragmentation 309–18
protests follow removal 205, 242–50, 254, 265–8, 277n–80n, 282, 288	database-driven methodology and reconstruction 318-22
slab returned to Scotland 281n–4n	fragment analysis 28, 29, 285–9 not from cross-slab 367–9
Macpherson, Ian, MP 241, 243	Mowbray, Cecil (C L Curle) 18, 158, 376
MacRae, William 400	Muir, Colin 389
MacTaggart, Farquhar, Earl of Ross 212	Muir, T S 231
Malcolm III, king of Scots 212	Muiredach's Cross (Monasterboice, Ireland) 141, 188
Manchester, K 362	Munro of Foulis, Robert 220
Mann, Ludovic M'L 382	Munro, Hector 222
maps 2–4, 6, 7	Munro, Robert, MP 239–45 passim, 249, 279n, 281n, 381–2
marginalisation and regeneration of Hilton cross-slab 251–7	Murdoch, Robin 379
Marianism/Virgin Mary 2, 5, 7, 8, 9, 215, 385	Murray, A S 345
	Murray, Lt-Colonel Arthur 243
church dedications 196–7, 209, 213, 214, 224, 233, 272 depicted 185, 185–6, 187	Murray, Dave 33
and Gaelic 13, 273	Murray, Iona: on luminescence dating 339–57
	Murray of Genies, Patrick 221
Mary's Meadow see Bardvour	museums 194, 200
Saint Mary and Saint Hardulph frieze 196, 197	England 9, 114, 194, 205, 206
see also Hilton Chapel	see also British Museum
Marshall, Y 205, 206	Herzog Anton Ulrich see Gandersheim Casket
Martin, T 363	Inverness 400
Martineau, Sir William 239	Meffan Institute (Forfar) 24
Mary,Virgin see Marianism	National Museum of Antiquities 20, 242, 243, 245, 246, 247, 248, 258,
mason's mark 367, 367	267, 268
Maxwell, Sir John Stirling 249, 250, 280n	National Museum of Scotland (NMS) 1, 9, 18–24, 77, 80, 205, 206,
Meehan, Bernard 167, 168	238-9, 243, 246, 258-62, 265, 268
Meffan Museum (Forfar) 24	Myrone, M 228
Meigle (Perthshire) cross-slab 17, 20, 129, 133, 145, 148, 151, 156, 173,	myths 231
174, 180–5, <i>184</i> , 213, 219	
Hell depicted 170–1	Nadel-Klein, J 284n
No 1 (reverse) 180, 184, 400	names for slab in art-historical literature 13
No 2 (front) 143, 150, 170–1, 200, 202	Napier Crofting Commission (1883) 238
Mejdahl, V 352	national and local tensions about removal of Hilton of Cadboll cross-slab
Mercian art 22, 157–68, 194, 202–3	257–66
Mhuor (Our Lady's Chapel) 225	'national soul', Hilton of Cadboll cross-slab as tangible expression of
Middlemass, T 162, 197, 198	238–51
Milan Cathedral 139, 140	nationalistic behaviour 247–8
Miller, Hugh 13–14, 217, 230, 231–2	Nechtan mac Dargarto, king of Picts 207, 208
Scenes and Legends 13–14, 226–7, 253, 262, 267, 276n, 282n	Nenadic, S 276n
on slab-cross 280n, 281n	newspaper articles in 1921 243–6, 379–84
on vine-scroll border 246	Nigg cross-slab and animals on 2, 13, 20, 130, 157, 161–2, 207, 208–11,
Miller, Hugh, Jr 271n	213, 214, 219, 221, 224, 225, 226, 227, 230, 396
Miller, Jennifer: on archaeobotany 357–9	art-historical context 131, 132, 133, 135, 141, 143, 144, 147, 148, 155-6,
Miller, Suzanne see petrology of slab	161–2, 164, 170, 175, 177, 178, 191, 194, 200, 201, 202
modern era and cross-slab 40, 41, 63, 71, 72, 223-66	art-historical literature (up to 1998) 13, 14, 15, 17, 18, 19, 20, 22
appropriation and displacement 232–8	cross-head 156, 219
protests against removal 238–51	cruciform stone 366
reaction of local villagers 251-7	non-sculptured finds, reports on 378, 378-9
symbolic construction of local communities 257-66	bone 376, 377–8
Moluag (Curádan), Saint 209	metal 375–7, 376
monastery, Pictish 208	pottery 373–5
Moncrieff, R Scott 242, 243, 245, 247	stone 378, 378–9
Monifieth (Angus) plaque 400	Norrie's Law (Fife) dog heads 400

Norsemen 212, 393	project, Hilton of Cadboll (continued)
Northern Arts Club 243	heritage politics 8–10
Northumbrian art 16, 18, 19, 23, 138, 141, 191, 207, 395	location maps and photograph 2-4, 6, 7
6.1.11.11.11.11.40.45	recent archaeological interest 5-8
'obelisk' at Hilton 13–15	protest petitions for Hilton of Cadboll stone to be returned 240-1
see also Hilton of Cadboll	Protestantism, emergence of 218, 220
Oda (Chrodoara), Saint 187	
O'Dwyer, P 272n	quartz pebble 52
Offa of Mercia, wife of 187	quartz periote 32
Ó Carragáin, T 270n	
Old Scots language 322	Radford, CAR 20, 22
Olley, J M 346	radiocarbon dating 40, 41, 43, 46, 49, 57, 60, 62, 64, 67, 69, 357, 358
Optically Stimulated Luminescence (OSL) see luminescence dating	Ramsay, Susan: on archaeobotany 357–9
oral tradition 230, 277	Read, Sir Hercules 239, 245, 247, 248, 279n, 282n
Ormside Bowl (England) 23, 194, 195	Reay (Caithness) 323, 324
ornament see Insular art motifs	cross-slab 219, 274
Ossian 229	recumbent gravestones 68, 202
Paolozzi, Sir Eduardo 1, 260, 261, 284n	re-erection of Hilton cross-slab in 12th century 213
Paor, Liam de 160, 272n	Reformation 218
Paterson, Hilary 286	regeneration of Hilton cross-slab 251-7
Paterson, William 256	Repton, Humphrey 235
Patterson, Jim 254, 391	Repton (Derbyshire) 187
Peltz, L 228	reverence for Hilton of Cadboll cross-slab 213-14
Pennant, Thomas 224, 228, 276n	Revill, B 282n
Penny of Cynethryth (wife of Offa of Mercia) 187	Rhind Lectures by Joseph Anderson 17–18
	Richards, E 278n
Perthshire Clunie 104	riders, women 19, 21, 183–5, 187–9
	Ritchie, Anna 270n, 271n, 274n, 277n
Dunfallandy 20, 142, 148	Ritchie, Graham 53, 391
Dupplin cross 135, 148, 182, 194, 200	Robbins, Graham 391–2, 393, 394
Gask House and slab 148, 175, 235	Roberts, C 272n, 362
Society of Natural Science 240, 243	Roberts, Julie: on human remains 362–5
see also Crieff, Fowlis Wester; Meigle	Rodriguez, C 363
Petley, Charles Carter 230–1, 246, 262, 272n, 273n	Roe, Helen 160
drawing (1811–12) 116, 125, 225, 225–7, 226	Rogart (Sutherland) brooch 17
Gaelic names recorded by 225–6	romanticism of ruins 232
Petley, Ellen 230, 275n	Rome and Romans 184, 187, 191, 260
petrology of slab 28, 289–94, 290, 291, 399	Antonine Wall 179, 185
analysis 290	Barberini Gospels 159, 196
geological characteristics 290–1	Bridgeness slab 179
methodology 289–90	Temple of Antoninus and Faustina (Rome) 194
outcrop geology 291, 291	Rosebery, Earl of 243
provenance 291–3	Rosemarkie (Ross & Cromarty) cross-slabs 19, 136–7, 209, 213, 214, 366
source rock 291 Pioticle Phase 20, 40, 0, 64, 8, 66, 67, 207, 208, 212	385,396
Pictish Phase 20, 40–9 , 64–8, <i>66</i> , <i>67</i> , 207, 208, 212	art-historical context 139, 141, 147, 175, 177, 178, 182, 189, 201
early medieval 'birth' of church 207–8 Jessie Port horse's head possibly 399–400	'Golgotha' incised 136
- ·	tree-scroll 191
plan 42	Ross, A M 278n
symbolism 121–2, 175, 176–8, 177, 178, 210–11, 400 see also Portmahomack	Ross, Nicholas 220, 221
Pitt-Rivers, A F 235	Ross, Rev Hugh 227
place-names 270	Ross, Uisdean 400
plants remains (archaeobotany) 357–9	Ross, William 14
Plunkett, Steven 158–9, 160, 161, 197	Ross of Balnagown family 220, 226
politics, heritage 8–10	Ross and Cromarty see Edderton; Nigg cross-slab; Portmahomack;
Portmahomack (Tarbat, Ross & Cromarty) cross-slab fragments 1, 2, 15,	Rosemarkie; Stittenham; Tarbat
24, 155, 207–14, 366, 388	Ross & Cromarty Enterprise 8, 10
	Ross of Glencalvie family 238
art-historical context 132, 133, 141, 147, 148, 151, 156, 157, 168, 194, 200, 201	Ross/Ross-shire 221, 236, 243
	bishops of 214
inhabited vine-scroll border 177–8, 190, 190–2	Rossie Priory (Angus) 148, 171, 175
see also Tarbat	Rossie Priory (Angus) 148, 1/1, 1/3 Rothbury Cross (Northumberland) 18, 159
Prescott, J R 352 project, Hilton of Cadboll 1–11 , <i>12</i>	cross-shaft base 'Hell' fragment 161, <i>162</i> , 168, 170
chapel site and early history 5	Rowlands, H 282n
chaper site and early mistory 3	1\cdots\tall\tall\tall\tall\tall\tall\tall\ta

Royal Commission on Ancient and Historical Monuments (RCAHMS)	Sinclair family (continued)
7, 9, 20, 391	Sir James and Lady 222, 278n
Ruskin, John 266	Sir John 228
Ruthwell Cross (Dumfries) 185, 185	Skinnet (Caithness) 135, 175
bird with fish tail 199	Smellie, William 246, 276n
declared idolatrous and defaced 218-19, 222	Smith, Catherine 377
Ryan, M 194	on faunal remains 359–62
	Society of Antiquaries of London 248
St Andrews Sarcophagus (Fife)	Society of Antiquaries of Scotland 15, 234, 238–40, 242–3, 244, 245, 248,
art-historical context 129, 131, 132, 148, 150, 156, 164, 181, 186, 187,	384
188, 211, 213, 218–19, 259, 387	founded (1780) 228, 246
connection with Hilton of Cadboll 133, 137, 141, 143	soil analysis 44, 326–57
corner-slabs and animals 20, 159, 160, 161, 173, 200, 201, 202	Sommerville, A 345
'deer-heads' and 'lions'-manes' 158, 162, 167, 168	source rock petrology 291
literature (up to 1998) 18, 19, 20, 21, 22, 24	South Kyme (Lincolnshire): relief-sculptured panel fragments 21, 161, 162
St Columba's Cathach 214	164, 200
St Cuthbert's Coffin 136, 137–8, 147	Spalding Club of Aberdeen 15
St John's Cross (Iona) 127, 161, 200	Spencer, J 346
St Leonard's Place (York, formerly St Peter's) cross-shaft 19, 23, 197	Stace, C 357
St Madoes cross-slab (Perthshire) 148, 151	Steeple Bumpstead (Essex) 161
St Martin's Church (Thurso, Caithness) 233	Stevenson, Robert 132, 133, 151, 168, 176, 185, 188, 281n
St Martin's Cross (Iona) 127, 139, 212	on Pictish Art 20–3
St Mary and St Hardulph Church see Breedon-on-the-Hill	Stewart, Bishop Robert 220
St Mary's see Hilton Chapel	Stittenham (Ross-shire) dog's head 400
St Matthew's Cross (Iona) 139	Stocker, David 164
St Moluag 213	Stoops, G 327
St Ninian's Isle Treasure (Shetland) 22, 143, 144, 146, 157, 159, 163, 200,	Stuart, E 379
202,	Stuart, John 230, 277n, 392, 394
St Peter (Yorkshire) see Croft on Tees	Gibb's drawing for 227
St Petersburg (Russia)	Sculptured Stones of Scotland 15, 16, 33, 71, 176, 227, 231, 232
Bede 23, 193	Sueno's Stone (Forres) 134, 229
Gospels 159, 160, 162	Sutherland 222, 236
St Regulus (Cromarty) 222	Duke and Duchess of 233
StVigeans (Angus) 16, 17, 135, 151, 177, 200, 219	family 238
Sanderson, David: on luminescence dating 339-57	Sweet, R 228
Schweingruber, F H 357	symbolism/symbolic
Scotland personified 249–50	construction of community, Hilton cross-slab as 257-66
Scott, Rev Archibald B 243, 384	panel, art-historical context of 176-8
Scott, Ian G 10, 27, 126, 165, 367	Pictish 121-2, 175, 176-8, 177, 178, 210-11, 266, 400
art-historical context 154, 156, 161, 175, 177, 188, 192	
fragment analysis 285–9	Tain (Ross & Cromarty) 2, 212, 220, 222, 236
reconstruction process 28, 35, 73, 77n, 80	Tarbat (Ross & Cromarty) 18, 19, 23, 208-9, 214, 221, 222, 235, 236, 242,
Scott, Sir Walter 233, 249	393
Scottish Ancient Monuments Board 239, 242, 249	art-historical context 132, 133, 141, 192-3, 201, 202, 393
Scrymgeour chief as Hereditary Bannerman 222	Hilton of Cadboll within parish of 214
sculptor's tool-kit 132, 303–4	Viking hoard 212
Sculptured Stones, Committee on 234	see also Portmahomack
seaboard area 262–5	Tarlow, S 134, 274n
Seaboard Initiative 256	Tayler, Alistair and Henrietta: Book of the Duffs 86, 87, 223
see also Hilton; Nigg; Shandwick	Taylor, S 270n, 272n
Seright, Susan 136	textile patterning in sculpture 133
Shandwick: population and fishing 237–8	Theodosius II, Eastern Roman Emperor 139
Shandwick cross-slab 2, 13, 14, 19, 21, 67, 68, 90, 153, 154, 207, 209, 210,	Thomson, George 27
212, 213, 224, 225, 226, 227, 229, 230, 236, 251, 385, 396	inscription epigraphy 85, 86, 87, 222, 275n, 322-6
art-historical context 132, 133, 141, 148, 151, 156, 175, 176-7, 200,	Thurso (Caithness) 175, 233
201	Tobar na baintighearna (Lady's Well) 209, 392
Shapiro, Meyer 193	Tongue (Sutherland) 323
Sharman, Paul 31, 33	toolmarks 38, 43, 110, 114, 132, 292, 295–300, 295–306, 303, 304, 309,
Shetland see St Ninian's Isle	317, 368, 369
Simpson, W Douglas 243, 326	tourism and travel literature, expansion of 228-9, 256
Sinclair family 215, 223	Treasure Trove 9
George 222, 275n	Trench-Jellicoe, Ross 188, 190
Henry, bishop of Ross 221, 274n	Trier Gospel Book 139

Triscott, John 31, 33 Trotter, M 362 trumpeters motif 183, 201 Tullylease (County Cork) 17, 132 Turner, John 52 Turner, S 270n

Ubelaker, D 362 Ulbster (Caithness) cross-slab 233 Urquhart families 86 Urquhart, Alexander 22, 274n Urquhart, Christian 222, 223, 274n Urquhart, Helen 222, 274n Urquhart, Rev John of Fearn 224-5 Urquhart, Thomas 222, 274n Utrecht Psalter 168

Vespasian Psalter 22, 159, 183, 202 Virgin Mary see Marianism

Wainwright, FT 20 Watson, G P H 281n Watson, W J 13, 209, 273n Watt, Seosamh 275n Watt, Stephen 52 wax casts 230 Webster, Leslie 157, 160, 161, 163, 164, 167, 168 Wester Cadboll/Catboll 236, 393

Wester Denoon (Angus) 24 Wester Ross 212 Westwood, J O 15 Whitfield, Niamh 188 Whithorn Priory (Wigtownshire) 219-20 Whyte, David 16, 119 Wilson, David M 22, 23, 163-4 Wilson, Daniel 247, 249 winged creatures 193, 194, 196-7 Gandersheim Casket 163, 194, 197, 199, 200 Wintle, A G 345 Witham (Lincolnshire) pins 162, 163 Withers, CW J 276n, 284n women riders 19, 21, 183-5, 187-9 Wood, J 282n Woodrae (Angus) cross-slab 151, 218, 233, 235 Working Men's Natural History Society 243

Yorkshire 17, 396

see also animal ornament

Church of St Peter at Croft on Tees 23, 194, 197-9, 198, 202-3 Coppergate helmet 159, 164, 200 Ormside Bowl in Museum 194 St Leonard's cross-shaft 19, 23, 197 Young, J 232 Zimmerman, E L 352 Zohary, D 357 zoomorphic decoration 402