SECOND EDITION

THE IRON AGE IN NORTHERN BRITAIN

BRITONS AND ROMANS, NATIVES
AND SETTLERS



DENNIS W. HARDING



THE IRON AGE IN NORTHERN BRITAIN

The Iron Age in Northern Britain examines the archaeological evidence for earlier Iron Age communities from the southern Pennines to the Northern and Western Isles and the impact of Roman expansion on local populations, through to the emergence of historically recorded communities in the post-Roman period. The text has been comprehensively revised and expanded to include new discoveries and to take account of advanced techniques, with many new and updated illustrations. The volume presents a comprehensive picture of the 'long Iron Age', allowing readers to appreciate how perceptions of Iron Age societies have changed significantly in recent years.

New material in this second edition also addresses the key issues of social reconstruction, gender, and identity, as well as assessing the impact of developer-funded archaeology on the discipline. Drawing on recent excavation and research and interpreting evidence from key studies across Scotland and northern England, *The Iron Age in Northern Britain* continues to be an accessible and authoritative study of later prehistory in the region.

Dennis W. Harding is Abercromby Professor Emeritus at the University of Edinburgh.



THE IRON AGE IN NORTHERN BRITAIN

Britons and Romans, Natives and Settlers

Dennis W. Harding



First published 2004 by Maney Publishing

This second edition published 2017 by Routledge

2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge

711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2004, 2017 Dennis W. Harding

The right of Dennis W. Harding to be identified as author of this work has been asserted by him/her in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data A catalog record for this book has been requested

ISBN: 978-1-138-12631-2 (hbk) ISBN: 978-1-138-12630-5 (pbk) ISBN: 978-1-315-64693-0 (ebk)

Typeset in Bembo by Apex CoVantage, LLC

CONTENTS

List of figures

List of colour plates Preface		xi :ii
PART I The legacy of the past		1
1 Introduction: the archaeological framew	rork	3
PART II The earlier Iron Age	2	3
2 Brigantia and northern England	2	25
3 The Borders and southern Scotland	7	'4
4 Central and eastern Scotland	10	19
5 Argyll and Atlantic Scotland	14	.5
PART III The Roman Iron Age and its impact	19	3
6 Romanization to the northern frontier	19	5
7 Romanization between and beyond the	frontiers 22	5

vii

vi Contents

PART IV The later Iron Age	
8 The Borders and southern Scotland	253
9 Central and eastern Scotland	281
10 Argyll and Atlantic Scotland	304
PART V Review and conclusion	339
11 Settlement and society: continuity and change	341
Abbreviations Bibliography	360 362
Index	393

FIGURES

2.1	Location map of sites in northern England and the Borders	26
2.2	Metalwork and pottery from Castle Hill, Scarborough, Yorkshire	29
2.3	Palisaded settlements of the Yorkshire Wolds	30
2.4	Pottery and other artefacts from Staple Howe, Yorkshire	31
2.5	Paddock Hill, Thwing, Yorkshire, and its landscape	33
2.6	Map of eastern Yorkshire barrow cemeteries and burials	35
2.7	Scorborough, Yorkshire, barrow cemetery	36
2.8	Wetwang Slack, Yorkshire, Chariot Burials 1–3	37
2.9	Decorated scabbards from Yorkshire warrior burials	38
2.10	Pottery from eastern Yorkshire	40
2.11	Sutton Common, Yorkshire, plan of structural layout in earlier and later phases	43
2.12	Round-houses with two entrances and/or central four-post settings	44
2.13	Site M Micklefield, west Yorkshire	46
2.14	Ledston, west Yorkshire, air-photograph of enclosures and pits	47
2.15	Moss Carr, west Yorkshire, enclosure plans	48
2.16	Ring-groove and posthole round-houses in north-east England	53
2.17	Palisaded enclosures in northern England and southern Scotland	55
2.18	Settlements of the Northumberland coastal plain	59
2.19	Mam Tor, Derbyshire, air-photograph and interior	61
2.20	Ingleborough, Yorkshire, hillfort from the west	63
2.21	Grassington, Yorkshire, air-photograph of field-system	64
2.22	Round-houses in north-west England	66
2.23	Carrock Fell, Cumbria, air-photograph and hillfort	69
2.24	Crosby Garrett, Westmorland, plan of native settlements	70
2.25	Ewe Close, Cumbria, air-photograph from the north-east	71
3.1	Location map of earlier Iron Age sites in Scotland	75
3.2	Hownam Rings, Roxburghshire, plan	76
3.3	Enclosed villages of south-east Scotland and the Borders	76
3.4	Gibb's Hill, Dumfriesshire, air-photograph and outline plan	78

viii Figures

3.5	Blackbrough Hill, Roxburghshire, air-photograph	79
3.6	Woden Law, Roxburghshire, air-photographs	81
3.7	Chesters, Spott, East Lothian, air-photograph	83
3.8	Ayton, Berwickshire, multivallate cliff-edge enclosures, air-photograph	85
3.9	Hillforts with chevaux-de-frise	87
3.10	Hownam Law, Roxburghshire, air-photograph	88
3.11	Greenbrough, Roxburghshire, air-photograph	90
3.12	High Knowes A, Alnham, Northumberland, air-photograph	91
3.13	Ring-ditch houses: plans	92
3.14	Milton Loch, Kirkcudbrightshire, crannog plan	95
3.15	Tamshiel Rig, Roxburghshire: plan	98
3.16	Settlements and land boundaries around Drem, East Lothian	99
3.17	Castlesteads, Midlothian	100
3.18	Woden Law East, Roxburghshire, air-photograph of palisaded enclosure	
	with cord-rig	102
3.19	Hut Knowe, Roxburghshire: plan with cord-rig fields	104
4.1	Abernethy, Perthshire, hillfort rampart	111
4.2	Oblong forts in eastern Scotland: plans	114
4.3	Finavon, Angus, hillfort rampart sections	115
4.4	Dunnideer, Aberdeenshire, from the east	116
4.5	Brown Caterthun, Angus: plan	118
4.6	Small multivallate forts in central and eastern Scotland	120
4.7	Round-houses in central Scotland and beyond	122
4.8	Culhawk, Angus, ring-ditch house plan	126
4.9	Unenclosed crop-mark settlements with souterrains in Perthshire	128
4.10	Stone round-houses in north-east Perthshire	130
4.11	Ring-works of Perthshire	131
4.12	Ederline Pier, Loch Awe, Argyll	134
4.13	Paired crannogs of Loch Tay and Loch Lomond	135
4.14	Kintore, Aberdeenshire: post-ring and ring-ditch round-houses	138
4.15	Culduthel, Inverness, ring-ditch and porched houses	140
4.16	Elevation drawing of split-roof round-house, based on Culduthel	
	ring-ditch House 4	141
5.1	Carloway, Lewis, complex Atlantic round-house	147
5.2	Mousa, Shetland, wall-head, parapet and intra-mural gallery	148
5.3	Atlantic round-houses with internal post-rings	149
5.4	Dun Troddan, Glenelg, Inverness-shire, showing stonework of	
	intra-mural gallery	151
5.5	Complex Atlantic round-houses with triangular entrance lintels	152
5.6	Complex Atlantic round-house 'villages' in Orkney	154
5.7	Brochs with outworks in the west	155
5.8	Duns with outworks in the west	156
5.9	Island dun in Loch an Duna, Bragar, Lewis: air-photograph	157
5.10	Island duns of North Uist	158
5.11	Island duns in Loch an Duin, Shader, Lewis: air-photograph	159
5.12	Bu and Howe, Orkney: comparative layout with entrances aligned	160

		Figures ix
5.13	Bronze Age and Iron Age cellular structures in Shetland	162
5.14	Wells at Mine Howe and Gurness, Orkney	164
5.15	Beirgh, Riof, Lewis: pottery from post-complex Atlantic round-house,	
	pre-cellular phases	168
5.16	Dun Bharabhat, Cnip, Lewis: pottery	169
5.17	Dun Mor, Vaul, Tiree: pottery from early contexts	170
5.18	Dun houses in Argyll	173
5.19	Dun enclosures and small forts in Argyll	176
5.20	Dunagoil, Bute, general view and vitrified wall of citadel	179
5.21	Dunagoil, Bute: plan	181
5.22	Dunagoil, Bute: pottery and other artefacts	182
5.23	Atlantic round-houses in cliff-edge enclosures	187
5.24	Blockhouses in Shetland	189
5.25	Clickhimin, Shetland, views of blockhouse	190
5.26	Burgi Geos, Shetland, air-photograph and sketch plan	192
6.1	Distribution of forts, towns and villas in northern England	202
6.2	Unit villas in northern England: plans	204
6.3	Holme House, Piercebridge, Yorkshire: plan	205
6.4	Iron Age and Romano-British round-houses with four-post settings	207
6.5	Wattle Syke, Yorkshire, late Roman-period settlement	211
6.6	Whitley Castle, Alston, Cumbria, Roman fort, air-photograph	215
6.7	Old Carlisle, Cumbria, Roman fort and vicus	218
6.8	Distributions of metalwork types	220
6.9	Stichill, Roxburghshire, collar	222
6.10	Romano-British brooches	223
7.1	Greaves Ash, Northumberland, native settlement: air-photograph	228
7.2	Castle O'er, Dumfriesshire, hillfort: air-photograph	230
7.3	Bailliehill, Dumfriesshire, hillfort: air-photograph	230
7.4	Burnswark, Dumfriesshire: air-photograph	234
7.5	Edin's Hall, Berwickshire, broch and native settlement: air-photograph	236
7.6	Scottish cast bronze armlets	242
7.7	Distribution of massive armlets, snake armlets, knobbed armlets and	
	Donside terrets	243
7.8	Metalwork from Northern Britain and Ireland	246
7.9	Distribution of souterrains in Northern Britain	249
8.1	Location map of later Iron Age sites in Scotland	254
8.2	Hillforts with later Iron Age defences	255
8.3	Nuclear and related forts: plans	259
8.4	Munro's 1882 plans of Buiston and Lochlee crannogs	261
8.5	Distribution of E-ware and Continental glass in Britain and Ireland	265
8.6	The Latinus stone, Whithorn, Wigtownshire	267
8.7	Distribution of long cist cemeteries in Scotland	269
8.8	Halls and houses of the Anglian period	272
8.9	Lockerbie Academy Anglian hall	275
8.10	Grubenhäuser: comparative plans	276
8.11	Distribution of Anglian place-names and Pit-names	279

x Figures

9.1	Excavated cemetery with square-ditched barrows, Redcastle, Angus	283
9.2	Dundurn, Perthshire, nuclear fort, air-photograph	288
9.3	Carvings of bulls from Burghead, Morayshire	290
9.4	Souterrain settlements in Angus	292
9.5	Distribution of symbol stones and silver chains	296
9.6	Aberlemno, Angus, churchyard symbol stone, reverse side	298
9.7	The Norrie's Law, Fife, silver hoard	300
10.1	Wheelhouses: plans	305
10.2	Jarlshof, Shetland, wheelhouses	307
10.3	Jarlshof, Shetland, broch and post-broch settlement: plan	311
10.4	Beirgh, Riof, Lewis, secondary structures	313
10.5	Complex Atlantic round-houses with secondary round-houses: plans	315
10.6	Post-broch secondary structures	316
10.7	Cellular 'shamrock' structures: plans	319
10.8	Ventral or figure-of-eight houses: plans	320
10.9	Beirgh, Lewis: later Iron Age pottery	322
10.10	Rectangular building plans in the Atlantic west	325
10.11	Ardifuar, Argyll, secondary round-house within dun	325
10.12	Dunadd, Argyll, from the east	327
10.13	Iona monastic settlement, air-photograph	329
10.14	Forse, Caithness, complex Atlantic round-house and later settlement	331
10.15	Old Scatness, Shetland	335

COLOUR PLATES

- 1 A (upper), Stanwick, north Yorkshire, view from east over Henah Hill; B (lower), Burnswark, Dumfriesshire, from the south
- 2 A (upper), Eildon Hills, Roxburghshire from Scott's View; B (lower), Traprain Law, East Lothian, from the north
- 3 High Knowes, Alnham, Northumberland, enclosures A and B
- 4 A (upper), Hayhope Knowe, Roxburghshire; B (lower), Hut Knowe, Hownam, Roxburghshire
- 5 A (upper), Torrs, Kirkcudbrightshire, pony-cap; B (lower), reconstruction of the Deskford, Banffshire, *carnyx*
- 6 Blair Drummond, Stirlingshire, hoard
- 7 A (upper), Tap o' Noth, Aberdeenshire; B (lower), Dun Beag, Skye
- 8 A (upper), Gurness, Orkney; B (lower), Dun Lagaidh, Wester Ross
- 9 Tofts field, Piercebridge, Co. Durham
- 10 A (left), South Cave, Yorkshire, sword scabbard; B (right), Aesica, brooch
- 11 A (upper), Mote of Mark, Kirkcudbrightshire; B (lower), Trusty's Hill, Anwoth, Kirkcudbrightshire
- 12 A (upper), Cnip, west Lewis, Wheelhouse 1; B (lower), Cellular Structure 4
- 13 A (upper), Old Scatness, Shetland, Structure 14; B (lower), Structure 11
- 14 A (upper), Mousa, Shetland, from west; B (lower), interior showing scarcements and secondary structures
- 15 A (upper), Beirgh, Cnip, west Lewis, primary cellular phase, timber post in posthole with hurdling; B (lower), decorated clay hearth
- 16 A (upper), Old Scatness, Shetland, Structure 7; B (lower), Structure 5

PREFACE

The Iron Age in Northern Britain was first published in 2004. A new edition is warranted by three key factors:

- A good deal of new information has been discovered in the past ten years, much of it the
 product of developer-funded archaeology, which has not just increased the size of the database, but the scale of investigation has significantly changed our perception of Iron Age
 settlement.
- Techniques of analysis have advanced, most obviously in public perception in the field of DNA characterization of discrete population groupings that might equate to a greater or lesser degree with communities identified in historical sources or episodes. At the same time, more conventional techniques such as radiocarbon dating have been advanced by the use of Bayesian statistics with important consequences for our understanding of the earlier Iron Age.
- Theoretical approaches have changed, so that new themes such as identity and gender issues need to be addressed, while others no longer would be regarded as so important.

With funding for field research having virtually dried up in Britain, or too limited to cope with professional standards of excavation and post-excavation analysis, new data derives predominantly from developer-funded projects. One inadvertent consequence of this is that discoveries are completely arbitrary and therefore can serve to rectify the imbalance created by archaeologically determined research strategies. The impact of salvage operations along the route of the A1 in west Yorkshire is a prime example, counterbalancing the long-standing emphasis on the burial traditions of eastern Yorkshire. There have been generational shifts in regional emphasis in field research too, often formerly associated with particular practitioners, like Mrs Piggott in southern Scotland and the Borders in the 1940s and '50s or George Jobey in Northumberland in the '60s and '70s. During the 1980s and '90s, the Universities of Edinburgh and Sheffield both had major programmes in the Western Isles, partly designed to balance the long-standing tradition of fieldwork in the Northern Isles. More recently, interest has been revived in eastern and north-eastern Scotland and in south-western Scotland.

North-west England remains a region where later prehistoric settlement has received scant attention in recent years and where further work will surely be richly rewarded.

It was decided to leave the main title unchanged, but the sub-title, *Celts and Romans, Natives and Invaders* was altered to avoid raising unnecessary issues of interpretation, formerly regarded as axiomatic but now widely challenged, in the title. Britons certainly spoke a Celtic language, but their ethnic relationship to continental Celts, wherever located, alluded to by historical sources is undemonstrated, and the older conventional view has been a source of contention among prehistorians in recent years. Likewise, though both Roman and later Anglian colonization might reasonably be described as invasions, again the terminology is redolent of an earlier generation of archaeological interpretation and is now best avoided.

The basic structure of the book, however, namely that it dealt with the 'long Iron Age', involving survey and analysis of evidence for Iron Age communities before, during and after the phase of Roman occupation, remains fundamental, and has been retained. The impact of the Roman occupation in the frontier zone and beyond, though fascinating, was minimal in vast areas of the north and west of Scotland, where site sequences show activity continuing through to the period of Norse incursions. Geographically too, there was little justification for a division before the Roman conquest along the line of Hadrian's Wall, so that the earlier sections of the book included northern England from the Trent to the Tyne. South of the Trent, it might be more justifiable to terminate a study of the Iron Age with the Roman conquest, though even here evidence of cultural survivals would warrant a consideration of the native legacy into the Roman occupation.

Among the changes that have gained strength since 2004 is the role of 'community archaeology', and in universities an increasing divergence between the traditional scholarly approach to archaeology, now generally confined to Schools of History or Classics, and a more community-related approach that embraces leisure activities, tourism, social programmes and historical re-enactment, more often located in the new universities and colleges. It would be unfortunate if this led to a divorce between the two, since both should be publically accountable for their funding and the discipline of archaeology as a whole will suffer if either fails to maintain the highest professional and academic standards. Before the advent of professional archaeological consultants and field units, excavation and survey was commonly dependent on volunteers from Adult Education or Workers Education Association (WEA) evening classes, occasionally supplemented by schools, army 'volunteers' or even inmates from penal institutions. Not always the easiest of work-forces to manage, there were nevertheless notable achievements, like those of the late Professor George Jobey in Northumberland, that were totally dependent upon amateur support. It would be easy to imagine community archaeology being vulnerable to accusations of 'dumbing down', but on the academic front, with research councils and trusts increasing favouring collaborative projects between institutions, there is a real danger that substantial grants could be dissipated on projects, the utter banality of which is encapsulated in their jargon-ridden and vacuous titles.

The writer has often regarded the bibliography as the most useful asset of any book, distinguishing a serious academic contribution from potboilers that use the 'further reading' format. In preparing bibliographies in recent years, this author has been aware of some discrepancies between the date given on the fly-leaf and the actual date at which a book appeared, so that, for example, a volume claiming to have been published in 2013 actually was not available until late 2014. With technical archaeological reports, it is understandable that there may be delays in production, but it is unclear whether the failure to update the claimed date was through

oversight or perhaps through a reluctance to acknowledge delays in contractual targets. Meanwhile, at least one leading academic publisher has adopted the practice of dating any work published in the last quarter of the year to the following year. Such discrepancies may appear to be trivial, except that the consequence are that a reviewer may suppose that an author whose work was dated 2016 might reasonably have included reference to something supposedly published three years earlier, where in reality the later work may well have gone to press before the earlier had appeared. In archaeology, the problem is compounded by the fact that reviews, if they appear at all, commonly do not appear until two or even three years after publication, thereby vitiating the purpose of the exercise, assuming that the purpose is to promote the book rather than expensively lining the shelves of indolent academics.

As always, the writer has benefitted from discussions and advice from a variety of academic and professional colleagues and friends in redrafting this new edition and would particularly wish to thank the two reviewers of the proposal, Colin Haselgrove and Jon Henderson, for their generous support and constructive comments. I particularly appreciate their signing their reports, rather than adopting the pernicious contemporary practice of anonymous peer review. I have benefitted from discussion in advance of publication with Brian Smith on aspects of Shetland archaeology. I am obliged to Ed Dennison of Beverley, Yorkshire, for copies of scarce reports. To Stephen and Yvonne Prescott, I am indebted for kindly arranging access to the Scorborough barrow cemetery. Special thanks are due to those individuals whose help has been invaluable in the supply of illustrations, especially Ian Armit (University of Bradford), Chris Cox (Air Photo Services Ltd), Graham Deacon (Historic England), Steve Dockrill (University of Bradford), Alun Martin (University of Cambridge), Andrew Parkin (Great North Museum: Hancock), Margaret Wilson (National Museums of Scotland) and David Marchant (East Riding of Yorkshire Museums Service). Once again, the staff of North Berwick Public Library has facilitated photocopying and scanning of illustrations. Finally, I am grateful to Matthew Gibbons and colleagues at Routledge for undertaking and realizing this second edition, and I offer my blessing and good wishes to any successors who in due course attempt the task of producing a third.

> Dennis W. Harding Gullane, East Lothian, August 2016

PART I The legacy of the past



INTRODUCTION

The archaeological framework

The chronological framework

Any regional or chronological synthesis should begin by defining its chronological and spatial parameters. Those parameters need not be regarded as having significance beyond limitations of convenience, though one might prefer wherever possible to adopt meaningful boundaries or chronological horizons to ones that are purely arbitrary. Furthermore, chronological thresholds that might be applicable to one region of Northern Britain will not necessarily or automatically be apposite for other regions, compounding the problems of devising a workable system of classification and terminology.

For Southern Britain, the situation, superficially at any rate, is not so acute: at least there, the Roman conquest serves as *terminus ante quem* for studies of the Iron Age. It could be argued, of course, that the native response to conquest was integral to an understanding of Iron Age communities, and that Britain under Roman occupation should be regarded as an important sequel to an understanding of pre-Roman Iron Age society. But as a threshold of convenience, AD 43 has at least some historical validity. There is no comparable historical threshold for the Iron Age of Northern Britain. The Romans may have established a permanent frontier across the Tyne-Solway isthmus in the late first and early second centuries, but their occupation of southern Scotland was intermittent, amounting to little more than eighty years in all. Beyond the Forth-Clyde line, Roman influence was still more limited, and in Atlantic Scotland, it was virtually non-existent.

For much of the Atlantic north and west, there is no historically defined break in the sequence of Iron Age settlement from the second half of the first millennium BC until the Norse settlements of the later first millennium AD. Important changes can certainly be observed in the settlement sequence, notably from the 'monumental' phase of architecture, represented by brochs or 'complex Atlantic round-houses', into the non-monumental period of building represented by 'cellular' and related structures. But there is no clear archaeological evidence to associate this progression with any radical change in population or culture. For these regions, therefore, it makes sense archaeologically to consider the 'long' Iron Age, in which 'earlier' represents a span of time that in Southern Britain would cover the whole of the pre-Roman Iron Age and in which 'later' is applied to the first millennium AD from around its second quarter. Some authorities have preferred to adopt the threefold system of early, middle and late Iron Ages, in

4 The legacy of the past

which the 'middle' component for many years constrained the occupation of brochs to a limited span of two or three centuries around the turn of the millennium. Partly because of that artificial constraint on the dating of Atlantic round-houses and their antecedents, the simple division between 'earlier' and 'later' is here preferred. There is, however, at present no universally accepted scheme of classification, and chronology remains flexible. In any event, with the now-routine application of radiometric dating, and a shift away from the older cultural-historical paradigm, complex classifications are no longer a priority of archaeological synthesis. On these grounds alone, the simplest and most flexible system is probably to be preferred.

In the eastern lowlands of Scotland, a simple earlier-later division of the Iron Age will serve, so long as we recognize that not all changes in field monument or artefact types need have been synchronous and that these changes may still have taken place within an essential framework of continuity. Field monuments such as souterrains, popularly regarded in their classic stone-built form as 'Pictish', in fact are largely abandoned in eastern Scotland by the third century, though elsewhere in Scotland and Atlantic Europe they may have a longer currency. Continuity of settlement, despite disruptions, was almost certainly a keystone of the archaeology of southern Scotland and the Borders too. In the post-Roman centuries, these regions were not immune from external influences or even intrusive settlement, but unlike the later Norse settlements, these are not so readily distinguishable, in terms of distinctive settlements and burials or diagnostic material types, from the native communities with which they interacted. Claims may be made for recognizing innovative settlement types among the Anglian settlers of south-eastern Scotland, but in the west, it is generally recognized that the historically recorded Gaelic settlement of Dalriadic Scots is very hard to equate with any innovative class of archaeological evidence, structural or material. In southern Scotland as in northern England, the Roman period may afford a more obvious interface between 'earlier' and 'later' Iron Ages, but in terms of native settlement, continuity of traditions is still apparent if not dominant.

A starting date for the Iron Age around the seventh or sixth centuries BC is just as arbitrary as any historically derived horizon and could lead to an interminable and ultimately fruitless debate regarding the beginnings of iron technology and when it impacted significantly upon communities in later prehistory. The origins of iron technology in Europe can certainly be traced back to the second millennium BC, with significant occurrences of iron artefacts in the Urnfield culture of the later Bronze Age in Central and Western Europe. For Britain, and more especially for Northern Britain, the incidence of iron artefacts or evidence of ironworking was extremely limited but in the past twenty years has burgeoned from settlement excavation, especially in Scotland. As a label of convenience, the point at which Northern British prehistory becomes 'Iron Age' in any meaningful sense hardly matters. But as an indication of the level of control that Iron Age communities could exercise over resources, some locally available but others necessitating longer-distance communications and access to supplies, the presence or absence of metalworking and its products may be an important measure of power or wealth. Students of the Iron Age in Northern Britain habitually refer to the presence on settlement sites of copper or bronzeworking as an index of social status, only very occasionally discussing the role of metalworking or metalworkers within the social hierarchy. Knowledge of iron technology was probably current in Northern Britain from around the mid-first millennium BC or slightly earlier, as in Southern Britain. At Hunterston in Ayrshire at least, its introduction appears to follow in short sequence on from Late Bronze Age metalworking. So the term 'Iron Age' here is shorthand for a period of a thousand years and more, from at least the mid-first millennium BC to the later first millennium AD.

The structure of the following chapters, therefore, is based essentially on a broad division between the earlier Iron Age and later Iron Age, the comparative adjectives being used simply to underscore the essential continuity of settlement. Between the two, the Roman interlude should not be the determining factor in classification, important though its impact may have been upon those limited regions of Northern Britain upon which it registered. In most treatments of the 'long' Iron Age, an astonishing methodological volte face is performed by archaeologists as they move from the earlier Iron Age to the later Iron Age. Having treated the former in anonymous, sub-Childean cultural terms, they turn without explanation to discuss the later Iron Age communities of Scotland and northern England as Picts, Angles, Britons and Scots in the context of named kings, named sites and dated events, all derived from documentary sources, as if the archaeology had suddenly been relegated to a supporting role in amplifying recorded history. It is not my purpose in challenging this long-established and enduring practice to deny the value of documentary sources, nor indeed of linguistic, numismatic, onomastic or epigraphic sources, in reaching a better understanding of early societies. I do, however, object to the tacit assumption that documentary sources are in some way more reliable than archaeological evidence, particularly where the two might be in apparent conflict, and to the implication that history as a discipline is more rigorous in its methodology than is archaeology. In attempting to articulate its theoretical principles beyond the 'common sense' paradigm, archaeology may have engulfed itself in a morass of jargon and some pretentious and vacuous theory, but its basic principles for evaluating artefacts in context have been long established and are as fundamental as those used by historians in evaluating their documents. One of the attractions of archaeology is its inter-disciplinary character, and the relevance of related disciplines, including history, in the social, economic and cognitive reconstruction of past communities should be an asset rather than a liability. But these sources too must be subjected to the methodological scrutiny of the discipline concerned and not simply used as a basis for unsupported assertion, as too often are ethnographic or theoretical models derived from other disciplines when used by archaeologists.

The geographical context

If our chronological parameters necessarily must remain flexible, what about our geographical limits? Since the Act of Union, Northern Britain has been a euphemism for Scotland, but in the present context, that political border makes no archaeological sense, and plainly our remit must also include parts of northern England, at least for the pre-Roman period. Crucially relevant is the territory assigned in documentary records to the Brigantes, whether or not this proves archaeologically to be a meaningful entity. Archaeological distributions show a divide between coin-using societies in southern England and their non-coin-using neighbours to the north and might support a provisional boundary somewhere along the Trent, looping around the southern Pennines towards the Wirral peninsula. It would be absurd to exclude Yorkshire, Durham and Northumberland on the one hand, or Lancashire and Cumbria, however intractable the Iron Age in these regions has hitherto proved, on the other, from any treatment of Northern Britain in the Iron Age. For the period of the Roman occupation, and more especially for any consideration of the question of 'Romanization', these regions will also be crucial. For the post-Roman period, on the other hand, it is necessary to impose some limitations, and it is not here proposed to extend into a consideration, for example, of Anglian northern England, except in so far as it intrudes into the native 'British' areas of southern Scotland.

6 The legacy of the past

In view of the importance of the Irish Sea as a means of communication with other regions of Atlantic Europe, it follows that our study should include the Isle of Man, too frequently neglected in studies of the British Iron Age. A major programme of excavation was achieved during the Second World War by Gerhard Bersu, the excavator of Little Woodbury in the late 1930s and of Traprain Law among other Scottish Iron Age sites in the immediately post-war years, whilst he was interned there as an alien. But the Isle of Man has not featured prominently in British Iron Age studies in more recent years.

North of Hadrian's Wall Piggott (Piggott, S., 1966) extended Hawkes' (1959, 1961) scheme of provinces and regions to include Tyne-Forth, Solway-Clyde, North-Eastern and Atlantic Provinces, a model that has proved remarkably resilient. Its most obvious limitation was its apparent presumption that major rivers and estuaries formed cultural boundaries, rather than serving potentially to unite the communities on opposite shores. Whilst this might be challenged in the cases of the Tyne, Forth, Solway and Clyde, it must be acknowledged that the communities who could see each other's shores across the Moray Firth show archaeologically very little evidence of inter-communication. A second limitation of Piggott's scheme was that it effectively ignored Perthshire and the significant distribution of crannogs and land-based duns of the central Highlands. The unity or diversity of Atlantic Scotland as a cultural province will also need to be examined.

In fact, we should hardly expect any static scheme of geographical provinces to serve as a means of articulating the dynamic processes of cultural progression over a millennium or more. Necessity demands some division of the material for convenience of discussion, but the option preferred here is drawn from the basic geological and physiographical divisions of Scotland, which, unlike northern England, create broadly diagonal zones across the landmass. The geological zones of the Midland Valley and the Southern Uplands themselves evidently include subtle regional variables which will locally have affected settlement patterns, whilst climatic variables between east and west introduce further factors that will have impinged upon settlement. Over time, too, patterns of human settlement will have been subject to dynamic change for a variety of reasons, not least those imposed by human rather than environmental constraints. Nevertheless, these broad divisions may be preferred in the presentation and evaluation of the archaeological data for want of other, more compelling regional groupings.

The nature of the archaeological evidence

Archaeological evidence can be divided into three broad categories. *Artefacts* are represented by material remains such as pottery, personal ornaments, weapons or tools. *Sites*, including fortifications, domestic buildings or tombs, might also be regarded as artefacts on a larger, non-portable scale. A third category, *ecofacts*, includes environmental evidence of, or relevant to, human occupation. The Iron Age in Northern Britain could be characterized as site-dominated, that is to say that the classification and interpretation of the evidence has been largely based upon field monuments – hillforts, homesteads, brochs, long cist cemeteries or whatever – rather than by artefact assemblages. Accordingly, prehistorians have written about the 'Castle Complex', the 'Hownam Culture' or the 'Arras Culture' but never of a cultural grouping designated by a material type. The point is not simply semantic because the choice of definitive trait also determines the significant thresholds for interpretation. What is taken to matter in Atlantic Scotland, for example, is when monumentality in broch construction gives way to non-monumental cellular building, not when a given style of pottery or metal type is

replaced by another, which may not be a coterminous event at all. Environmental archaeology has likewise always been subordinated to a supporting role. No-one has yet proposed a classification of the Northern British Iron Age based on the 'spelt wheat zone' as opposed to the 'barley zone', though this distinction might be argued as having as great a significance as have differences in structural types.

The relative abundance of settlement sites, however, tends to obscure the fact that those that survive archaeologically may represent only part of the original settlement spectrum. Monumental stone forts and brochs have an obvious durability, as have any settlements with upstanding earthwork enclosures. Even where these have been obliterated by generations of agriculture, earthworks may be traced through air-photography. Yet archaeologically arbitrary development such as road construction continues to expose sites, the ephemeral nature of which has left no trace on the surface or from the air. Discussions of the social hierarchy of brochs, duns and wheelhouses in Atlantic Scotland, or presumptions of a 'trend towards enclosure' in the lowlands and Borders, may be based upon only a very partial selection of evidence that happens to have survived. Factors affecting survival may be many, not least the building materials used and the method of construction, but the dice of survival is obviously loaded against sites that have no enclosing works, or which may have been occupied seasonally or temporarily, or with buildings lacking substantial or earth-fast foundations.

Similar strictures could be applied to funerary sites. Archaeologists, vexed by the absence of formal cemeteries for much of the Iron Age in Northern Britain, resort to explanations that would leave no archaeological trace, such as cremation and scattering, as a possible dominant rite. But where there is an identifiable rite, such as the square-ditched barrow cemeteries of eastern Yorkshire, this is assumed to be the norm rather than just one selective mode of disposal. Chariot burials are regarded as high-status tombs, while burials that have minimal grave-goods are tacitly assumed to be of lesser status. Given their numbers, they plainly come closer to a 'norm' than most Iron Age burials. But they might still represent a selective section of society, and other rites of disposal like fragmentation and integration into settlement contexts (Harding, 2015) might have been the regular practice for a significant part of the population. In earlier prehistory, long barrows and chambered tombs are widely accepted as a standard means of burial, notwithstanding the fact that the total known numbers could not accommodate more than a fraction of the total population of the Neolithic. If it is accepted that they were a very particular form of élite burial within a wider spectrum of practices then it follows that the norm has still to be identified archaeologically. As ritual and ceremonial monuments, it is possible that disposal of the dead was not even their primary purpose, but just one of the associated rites.

Artefacts too are subject to differential survival, depending upon what they are made of and the matrix and circumstances in which they were deposited. The contrast between the material assemblages from the land-based and underwater excavations of the island dun and its associated structures at Loch Bharabhat in west Lewis (Harding and Dixon, 2000) was striking and instructive. Pottery survived from both land and underwater contexts in broadly equal measure, but it was only in the anaerobic conditions underwater that organic artefacts and materials survived, including a range of domestic utensils that seldom survive on dry-land sites. Perishable materials such as wood, leather or textiles were evidently used as containers and for other purposes, doubtless throughout the Northern British Iron Age. From dry-land contexts at Dun Bharabhat, no bone survived, so that stone artefacts and pottery were virtually the only indicators of domestic culture. In fact, the range and quality of ceramics in the Iron

8 The legacy of the past

Age of Atlantic Scotland, by contrast to most other regions of Northern Britain and Ireland, which are virtually aceramic, is remarkable. In other parts of the Old World, aceramic cultures are hardly known in societies as advanced as those of the Iron Age, so that the contrast in Northern Britain demands some explanation.

In contrasting the Iron Age material assemblages of the British Isles (and of Ireland) with those of continental Europe, we should remember that the better-preserved and more distinctive continental assemblages are derived in significant part from *cemeteries* rather than from settlement sites. Not only are the prospects of survival of intact artefacts in graves far greater than in domestic contexts, but it is also possible that grave-goods were in other respects special or different from those in domestic circulation. The apparent poverty of material assemblages from Britain, including Northern Britain, in contrast to those of continental Europe may therefore reflect the contrasting contexts of deposition rather than cultural isolation from the presumed 'mainstream' of continental Europe.

Archaeologists by convention order their sites and artefacts into classes or types as the first step in the process of interpretation. There is nothing fundamentally wrong with this procedure, since it enables the evidence to be examined, like with like, and spatial distributions to be compared and contrasted. The problem arises in the subjective assessment of likeness and determining which traits are important in making meaningful comparisons. At the level of defining cultural assemblages, attempts have been made in the past to distinguish between descriptive types, those basic structural or artefactual types that are characteristic of the assemblage under examination, but which may equally be common to several or many different assemblages, and diagnostic types, that is, those that are exclusive to a particular assemblage, and therefore uniquely proclaim its context and date. The latter may appear to be more useful than the former, in that they are strictly definitive, but the problem arises as to what it is that we imagine we have defined. The cultural model developed by Gordon Childe quite expressly assumed that archaeological distributions, defined by recurrent structural or artefactual types, should be coterminous with prehistoric ethnic groups or historically recognized populations. In reality, however, population dynamics and interaction with neighbouring groups over time generally obscure any simplistic patterning, even if the cultural model were tenable in principle. It is then perhaps surprising that, for Northern Britain, archaeologists can still express concern at the absence of distinctive structural or artefactual types within the assumed territory of historically inferred settlement of Dál Riata from the fifth century AD or thereabouts. In Alcock's much-quoted phrase, they apparently came without luggage, so that there is no diagnostic Dál Riata distribution. This is hardly surprising, of course, considering that they seem to have no diagnostic luggage in their homeland of origin, which is not to say that there were no significant social or political groupings in Northern Ireland from which the alleged settlers derived. It might, on the other hand, suggest that the settlement of Dál Riata was not so much a demographic movement as the establishment of a ruling political élite or indeed that the historical record was a metaphor for the culmination of a process of cross-channel interaction that had been in progress over many generations. Or it might simply mean that any exclusive correlation of structural and material types with ethnic groups, other than in circumstances of protracted isolation from neighbouring groups, was an unreal expectation of an outdated cultural-historical model. So to answer our earlier question, diagnostic types may be definitive of time and place, but beyond that, their significance is a matter of further assessment.

Within Northern Britain there are certainly some regional distributions that can be distinguished archaeologically, though it is doubtful whether any would have lived up to Childe's

requirement of recurrent associations. The so-called Arras culture of eastern Yorkshire has a well-defined distribution, but even here, it is the burial rites that dominate, with associated material types regularly represented that are not exclusive to the region. Brochs, or Atlantic round-houses, are certainly distinctive of the Atlantic north and west, but the ceramic assemblages of the Northern and Western Isles reflect independent local fashions, so that cultural unity across the Atlantic province would be hard to sustain. With the aid of later place-names, it might be possible to identify a Pictish territory in eastern Scotland, but its correlation with archaeological types and distributions is far from straightforward.

In addition to diagnostic and descriptive artefacts, a third category of exotic types was identified (Clarke, 1971), the value of which as cultural or chronological indicators has perhaps been over-rated in the past. Samian pottery or E-ware of the sixth century AD are exotic, in that they are not indigenous products but foreign imports and may assist in dating the context in which they are found because their own chronology is more reliably established. In a different sense, prestige items, especially unique artefacts, may be regarded as exotic, but their value archaeologically may be limited in that, despite their intrinsic interest, they are hardly typical of an assemblage at large. Unfortunately, exotic items of either kind may have been treasured and curated over many generations, and the 'heirloom factor' is still much debated, especially where individual finds rather than widespread distributions are concerned.

Landscape and environment

Though the conventional approach to classification has encouraged archaeologists to focus on site morphology, the importance of landscape context has been endemic to the discipline since the pioneer fieldwork of O.G.S. Crawford and others in the earlier twentieth century, in Northern Britain no less than elsewhere (Bevan, 1997). It is self-evident that the landscape environment will condition the potential and capacity for human settlement, while human settlement inevitably will have a reciprocal impact on the landscape. In recent years, however, archaeologists have become more concerned with how prehistoric communities may have perceived the landscape and interacted with it, on the not unreasonable assumption that they were neither insensitive to nor disinterested in it. Though for the most part such understandings may be beyond the capacity of archaeology to illuminate, there can be little doubt, for example from the location of sites, that Iron Age communities were well aware of natural landmarks or older monuments in the landscape that may well have been a focus of veneration or respect.

Prehistoric settlement was also sensitive to environmental change. Fundamental to early settlement in in Northern Britain were geomorphological changes in the Late Glacial and Early Holocene, and in particular the effects of isostatic uplift and eustatic sea-level rise between c. 9000-6000 BP. It is generally assumed that these processes would have slowed down by the Neolithic and would have stabilized by the Iron Age. Even so, there is evidence of continuing effects of some consequence in various parts of Northern Britain, from the Humber estuary or the Mersey (Tooley, 1974) to the Northern and Western Isles (Ritchie, W., 1985). In the Western Isles, sea-level rise since the Neolithic has been estimated as being up to 5 metres, with major consequences for the western coastal settlements of the southern islands. Elsewhere, marine incursion may have continued to erode the coastline as late as the Norse period. Within the Calanais area of north-west Lewis, for example, sub-peat field boundaries that may still have been in use in the first millennium BC extend today into the waters of Loch Ceann Hulavig, suggesting that a later prehistoric agricultural landscape may have been flooded by

marine incursion as late as the Iron Age. For the Northern and Western Isles, therefore, establishing the extent of the landmass available for settlement and evaluating continuing changes in coastal geomorphology are essential pre-requisites to an informed understanding of Iron Age settlement patterns.

A major factor affecting the land available for settlement in Northern Britain is the spread of blanket peat, the extension of which is induced by a wetter environment, but which cannot be correlated simply with climatic deterioration, still less with a single horizon of climatic deterioration. The spread of peat in Northern Britain took place in different regions and localities at different rates and, for a variety of different environmental factors, from early post-glacial times (Tipping, 2008). In later prehistory in parts of northern and western Scotland, areas formerly under cultivation were evidently abandoned as a result of soils becoming waterlogged, encouraging peat growth as late as the first millennium BC or into the first millennium AD. The Neolithic fields at Scord of Brewster on Shetland (Whittle et al., 1986) were subsequently engulfed by peat growth, perhaps as a result of local pedological and hydrological factors, triggered by cultivation practices or by their abandonment. By the first millennium BC, wider climatic changes eventually induced the concentration of later settlement within the coastal regions of Shetland. In the Western Isles, peat expansion in some areas was evidently quite late, resulting in a similar coastal distribution of Iron Age settlement. At Borve, north Lewis, the broch is now isolated in a peatland landscape, its foundations and presumably any associated agricultural landscape buried in more than a metre of peat growth since the Iron Age.

Ambient temperature and length of ripening season would also have been significant factors in the viability of cultivation in antiquity. Though there may have been a warmer episode in the mid-first millennium BC, there were no markedly colder spells after the Middle Bronze Age (Tipping, 2015). Length of growing season may not have been a serious constraint in north-eastern England (van der Veen, 1992), but in the Western Isles, it must have brought cereal cultivation much closer to the borders of marginality. The abandonment of Bronze Age agricultural landscapes in upland Perthshire, and perhaps even of cord-rig cultivation in the Border hills, has been taken as evidence of a climatic deterioration towards the end of the Bronze Age. Though this deterioration has been challenged, and is no longer associated with volcanic activity, Tipping (2015: 103) has re-asserted the case for 'abrupt climatic change . . . within the period 1200 to 800 cal BC' with increased precipitation and quite a widespread pattern of fluvial change in Northern Britain. The quality of soils themselves, and the extent to which Iron Age communities were actively engaged in manuring and soil improvement, are plainly important considerations. Modern assessments of soil quality, relative to arable production or rough pasture, have limited applicability to conditions in the Iron Age, in which different subsistence requirements and a lower level of agricultural technology may have made viable areas of land that would not be amenable to modern farming. The survival of Medieval and earlier agricultural landscapes, in parts of northern England and northern and western Scotland that are now rated as suitable only for rough grazing, is adequate testimony to this point. Viewed conversely, there is abundant evidence for abandonment of upland agriculture in the later Medieval and early modern periods (Parry, 1985), and there is every reason to suppose that earlier episodes of climatic change will have equally impacted on agriculture in marginal zones.

Among the more dominant environmental issues of relevance to the Iron Age in Northern Britain are the twin questions of forest or woodland clearance and its concomitant

intensification, or more accurately the 'extensification', of agriculture. Various episodes of forest clearance and regeneration have been identified for different periods since the Neolithic in Northern Britain. The Western Isles are generally regarded as a treeless landscape, apart from limited areas of coppice, from an early date, though pine stumps still visible in the peatlands stand testimony to former forests. The range of dispersal of tree pollen in the prevailing southwesterlies of the Western Isles makes palynological absence an uncertain criterion, and it is quite probable that timber resources were carefully managed, for example, in smaller, sheltered locations along the east coast of Lewis and Harris. On the other hand, the clear evidence for re-use of North American or Scandinavian driftwood (Church, 2002) indicates that no source of supply could be neglected.

South-west Scotland and north-western England on the other hand may have been substantially forested throughout the Iron Age, though modern research suggests that extensive forest clearance and extensification of agriculture in northern England preceded the Roman occupation (van der Veen, 1992). Though doubtless the Roman frontier armies would have placed additional demands upon the native population for grain supplies, therefore, we should not automatically link this historic context with any observed increase in agricultural production. There may be some evidence for woodland clearance in the vicinity of the Antonine Wall in the Roman period, but this was evidently a process that had begun in the pre-Roman Iron Age (Tipping, 1997; Dumayne-Peaty, 1998). A major phase of woodland clearance in Scotland after 500 BC is now widely accepted on a scale that implies a significant shift in communities' attitudes to their environment to one of 'dominion rather than symbiosis' (Tipping, 2015: 111) and is likewise linked to the production of agricultural surplus.

Van der Veen's research highlighted some of the methodological problems in the study of cereal pollen, plant macro-fossils and plant species as indicators of agricultural regimes. There may still be problems in the identification of cultivated and wild cereals, especially in small quantities, and work on samples from well-preserved environments in the Western Isles suggested that there were still issues of taxonomy to be resolved. More especially, however, questions relating to site taphonomy needed to be addressed for purposes of inter-site comparisons, whether a given site community was cereal producing or simply a consumer of grain produced elsewhere. What survived from most archaeological sites was commonly fireside waste, which may be indicative only of secondary preparation of foodstuffs. Cereal analyses nevertheless indicated a significant contrast between Iron Age practice in northern England and Scotland. Spelt wheat, which largely replaced emmer in Southern Britain from the late Bronze Age, was evidently introduced into north-eastern England during the pre-Roman Iron Age. Scotland, especially in the Atlantic north and west, remained a barley monoculture throughout the Iron Age. Whether the reasons for this contrast were environmental or cultural is an issue that will need to be addressed as research progresses.

Faunal analysis in previous generations was too often limited to a simple list of species present, perhaps with relative percentages, though these were not always reliably determined by an agreed methodology. This has been characterized as the 'so they ate sheep, then' approach, since that was about the extent of the contribution to an understanding of the faunal economy. As with the study of cereals and plant macro-fossils, environmental archaeologists were too frequently expected to salvage insights retrospectively from arbitrarily recovered assemblages, rather than having an input into excavation strategy from the outset. One of the major problems in reconstructing the Iron Age economic base in Northern Britain is assessing the relative importance of agriculture and pastoralism. Both may be evidenced in site assemblages, and

without succumbing to Piggott's 'Celtic cowboys' model, we may still incline towards a belief in the predominance of pastoralism. How communities managed their stock or distributed the products, however, remains largely unclear, though occasionally it may be possible to see hints of differential distribution of collective resources. In west Lewis, excavation has permitted economic reconstruction on a local scale (Ceron-Carrasco et al., 2005), revealing some apparent anomalies. The high percentage of red deer at Beirgh and Cnip, for instance, matched in Great Bernera at Bostadh, contrasted with the dominance of cattle at Dun Vulan in the south. In fact, it seemed possible that the Lewis communities collectively managed wild herds to a greater degree than had hitherto been imagined. What was abundantly clear was that the local Iron Age population was well provided for by a range of different resource options, some of which were hardly exploited at all. The absence of shell-fish and the predominance of inshore species among the fish-bones of sites in the Western Isles suggested that there was no need to venture into boats for deeper water fishing, which even until relatively recent times was abundantly accessible to small boats. Contrary to the image of marginal subsistence, enhanced by the depression of Highland and Island communities under a harsher regime of land-ownership in the later historic past, the archaeological evidence for the Iron Age in Atlantic Scotland indicated a sound economic basis with a diversity of potential resources.

Taphonomy and retrieval

Taphonomy, or the study of the nature of archaeological deposition and its interpretation, is crucial to any meaningful reconstruction of past societies. Whether technological, economic, social or cognitive, unless interpretation is based upon a rigorous evaluation of the evidence and its context, it can never be more than creative fiction, an exercise in theoretical reconstruction divorced from the archaeological database. This is not to suppose that there is such a thing as objective archaeological 'fact' that is not in some measure prejudiced by the research strategy or subjective observation of the archaeologist. However accurately observed or recorded, *what* we observe or choose to record will inevitably be selective from the infinite data-resource, according to the questions that we bring to the investigation. Each generation of archaeologists has its own agenda of questions, and there need be no *a priori* assumption that a more recent agenda invalidates or supersedes an earlier one, though it might be expected to refine or qualify earlier agendas.

A simplistic popular misconception is that archaeology, notably through excavation, provides an insight into everyday life of past societies, an archaeological 'window on the Iron Age' to parallel that opened up by documentary history. In practice, there can be very few instances in which excavation affords such a window on everyday life in the past: a settlement engulfed by volcanic eruption or a shipwreck in deep water might be examples. Otherwise, what survives for the archaeologist to uncover is at best only what ancient communities chose to leave behind when a site was abandoned, and even that residual assemblage will have been diminished by the effects of environmental erosion and material deterioration. To assume that whatever material assemblage is found within the confines of a building reflects the cultural assemblage of the occupants, and that it may be used to infer the activities in which they were engaged, without reference to the circumstances of deposit and survival, risks serious misrepresentation of the evidence.

Stratigraphy is plainly fundamental in ensuring that a sequence of occupational episodes is accurately distinguished, but taphonomy is equally crucial in determining whether deposits

may reasonably be regarded as associated, re-deposited or residual, whether representative of primary or secondary episodes of activity. Such principles may be regarded as so elementary as to be unworthy of repetition, though study of even modern, professional excavation reports might suggest the contrary. A suite of radiocarbon dates is worthless without reliable contexts and associations provided by stratigraphic excavation. Unfortunately, on many upland sites in Northern Britain, surviving stratigraphy is minimal, as indeed may be the material assemblage. As we shall see, dating of early Iron Age settlements in northern England in particular has long been inhibited by the lack of associated artefacts and by, for example, an over-dependence on a scrap of samian from a secondary context. By contrast, some settlements in the Northern and Western Isles display long site sequences, in the case of Beirgh, west Lewis or Old Scatness, Shetland, spanning as much as a thousand years. In some instances, it may be clear that early excavators failed to distinguish between primary and secondary occupation, in terms of both structural and artefactual remains. In other instances, the secondary phases of occupation may have been so slightly built by comparison to monumental Atlantic round-houses that their ephemeral walls were easily confused with collapsed debris from the primary structures.

Where site sequences have been recognized, this is almost invariably through structural changes, either in the enclosing palisades and earthworks of hillforts or in the superimposed remains of successive house foundations. In the case of enclosed settlements, it is then too often assumed that the sequence of enclosure must correlate with the occupational sequence within, overlooking the possibility of intervals of occupation in which the enclosure works were not maintained. Similarly, there is a natural inclination for archaeologists to assume that changes in material culture will accord with major changes in the structural sequence of a settlement. At Beirgh, for example, there are four major building horizons: broch, round-house, cellular buildings and finally a figure-of-eight structure. During this sequence, there are also significant changes in pottery styles and possibly in other artefact types. But there need be no presumption that these changes were coterminous with the structural changes, nor indeed that the site sequence is best described and interpreted in terms of the structural sequence, rather than in terms of the artefactual sequence.

Even assuming a site's stratigraphy to be reasonably clear, which is seldom the case on Iron Age settlements, identifying the nature of individual deposits can be contentious. A thick deposit of organic material containing potsherds and abundant animal bone may be classified as an occupational deposit, but this hardly explains its presence within a domestic building. Are we really to imagine that the occupants wallowed ankle-deep in malodorous domestic refuse, or is it not more likely that this represents accumulated midden material introduced when the building was still upstanding, but as a roofless ruin? Does the presence of crucible and mould fragments indicate metalworking within the houses during their occupation, risking fire or inhalation of toxic fumes, or is it not more likely, at Birnie or Culduthel in Moray, for instance, that such industrial activity took place in the shelter of roofless ruins after their abandonment? If so, what was the nature of these deposits, and are they reliably associated with any specific structural or chronological horizon? What actually constitutes a floor level in domestic settlements? Areas of paving, or the foundations of a hearth, may indicate the level of a floor surface, but these are not invariably present and not necessarily uniform in composition or extent. In some cases, it may be unclear whether internal pits or ditches represent sunken floors or storage below suspended floors.

Attempts have been made to interpret activity areas within settlement structures on the basis of artefact distributions, focusing attention directly on the issue of taphonomy (LaMotta

14 The legacy of the past

and Schiffer, 1999). Distributional concentrations in pottery sherds and other artefacts have been interpreted as evidence of functional divisions between working areas and sleeping or storage areas of house interiors, but everything depends upon the context of the artefacts, since the distribution may reflect survival patterns rather than patterns of activity. Residual material, incorporated into the core of wall-fillings, constructional post-packing or in floor foundations, may not reliably reflect the actual occupation and use of the building. Deposition during the occupation of a building, whether through deliberate deposit, casual discard or unretrieved loss, will be affected by periodic cleaning, which may well remove primary material from a building that enjoyed a long occupation. Where the occupational surface is founded on or near to bedrock, as in the case in many upland sites, primary deposits are likely to have been obliterated by generations of secondary occupation. The life-cycle of a building need not end with the termination of its primary function. 'Post-abandonment' use could take a variety of forms, most obviously for ancillary activities or simply as dumps, which may result in significant perturbation of earlier deposits. Research at Cladh Hallan in South Uist, using advanced techniques of sampling with a view to demonstrating the differential use of space in buildings along the lines put forward by Fitzpatrick (1994) for southern Britain, demonstrated the crucial importance of distinguishing between occupational and post-abandonment deposits. The conclusion of one study (Young, M., 2002) was that artefactual distribution had very little direct correlation with the functional use of space, which was more likely to leave traces in terms of micro-refuse or more especially in physical and chemical signatures in the soil. A similar conclusion regarding micro-refuse seems to be implied by the evidence from Old Scatness, Shetland, where a lack of correlation between the date of construction of buildings and the deposits filling them suggested thorough clearing of material at the end of the building's use.

Northern Britain in ancient Europe

Childe's The Prehistory of Scotland (1935a) was the first major synthesis of the Scottish evidence since Anderson's (1881, 1883) half a century earlier, and it began a resurgence in the 'European' view of Scottish prehistory which had been espoused by Daniel Wilson, Robert Munro and John Abercromby. Following Childe in the Abercromby chair at Edinburgh University, Piggott certainly saw this as the beginning of a new enlightenment after a prolonged Dark Age of introspective isolation, 'in which Scottish prehistory was regarded as something sui generis, inaccessible and strange, couched in a secret language of broch and wag, weem and dun, and not to be regarded as part of the wider British scene' (Piggott, S., 1966: 2). For Piggott, of course, the charge of parochialism was implicit in the idea that Scottish prehistory could in any aspect be sui generis. Nowadays, such a notion would not excite condemnation. With the decline in diffusionism as a universal explanation of culture change, independent development is regularly seen as a likely process governing settlement patterns and cultural fashions. This is not to regard Scottish prehistory as isolated or insulated from developments elsewhere, merely to avoid the assumption that innovation could only be triggered as a result of external impulses, such impulses invariably in the earlier twentieth century being seen as transmitted from regions further south, with a continental 'mainstream' beyond.

Diffusionism as an explanation of culture change frequently carried with it the corollary of time-lag, allowing several generations or even centuries for ideas to be transmitted from core to periphery. Robert Stevenson (1966: 24) thus regarded the Torrs pony-cap as a 150-year-old heirloom from eastern England, whereas its design's fold-over symmetry, as opposed to the

rotational symmetry of the contemporary eastern English school, might argue for an Irish connection with Loughnashade (Harding, 2002). The concept of time-lag was implicit in Fox's Highland/Lowland geographical model, summarized in his well-known dictum that, in the lowlands of Britain, south and east of the Jurassic Ridge, new cultures were imposed, whereas in the Highlands new cultures were absorbed (Fox, 1932/38: 34).

In the diffusionist model, it was axiomatic that Mediterranean and Middle Eastern societies represented the cradle of civilization, compared to which north-west Europe in general and Northern Britain in particular were peripheral and culturally retarded. European prehistory was seen essentially in terms of the sequence of Urnfield Bronze Age through Hallstatt to La Tène Iron Age, itself underpinned by contacts with the Mediterranean world. The central European bias was further reinforced by the dependence for establishing a chronological framework on contact with the more securely dated cultures of the Mediterranean world, with which at second or third hand, and with due allowance for time-lag, the Iron Age of northwestern Europe and Britain might be linked through citing 'parallels' in material culture. With the advent of absolute dating techniques, and no longer dependent upon typological crossdating, the relationship between Atlantic Europe and Central or Northern Europe on the one hand and the Mediterranean on the other could be reviewed afresh, without any presumption of priority in the nature of those inter-relationships.

For Northern Britain, external communication by sea was as important as contact overland, and in particular, the western seaways seem likely to have served as a major artery of contact between Scotland, Ireland, western Britain and Brittany, with longer-distance networks beyond that. Pytheas the Greek (Hawkes, 1977; Cunliffe, 2001) was surely not the only adventurer who sailed these western waters, and we may expect that sea-borne communication, whether by short, coastal networks or longer ocean-going expeditions, must have been the norm over much or prehistory and into the early historic centuries. Prevailing weather conditions doubtless made such ventures seasonal, and climatic deterioration or volcanic traumas may have curtailed such activities for prolonged periods. Recognizing such communications archaeologically has always proved controversial. Comparisons between brochs and duns of Atlantic Scotland and the stone-built cashels of south-western Ireland are superficially attractive, just as, in a much earlier period, the practice of communal burial in megalithic tombs prompts obvious comparisons between Brittany, Ireland, Scotland and western Britain. Yet in both cases, detailed analysis suggests quite independent regional development. On the other hand, fragments of E-ware or continental glass from sites in south-west Scotland and Ireland in the sixth century AD are actual imports, testifying to direct or secondary contacts along the western seaways. Whether these contacts resulted in actual migration, or the annexation of one region by the ruling élites of another, is hard to argue on archaeological evidence alone. But the archaeological evidence might cause us to qualify received assumptions, based upon historical documents, whose cryptic records might easily compress into a single symbolic episode a more complex process that in reality was accomplished over a longer period of time.

Archaeology and history

For an older generation of archaeologists, trained in history or classics, archaeology was naturally regarded as an extension of the discipline of history into the preliterate ancient past. For R. G. Collingwood archaeology was certainly the handmaiden of history, and Christopher Hawkes (1948) equally believed that archaeology was a branch of history, though neither would have implied that the discipline was any less rigorous for lacking an independent theoretical framework. This perspective was in part a consequence of the lack of an independent archaeological chronology. Whilst technology had afforded a reasonable basis for inferring the relative dating of artefacts, structured around the 'Three Age' system of Stone, Bronze and Iron, before the widespread application of radiocarbon dating, historical records, however inadequate, or cross-reference to historically dated sequences, provided the only available absolute framework.

Archaeology is sometimes described as *text-aided* or *text-free*, depending upon whether the period under review is one for which documentary sources are available. The terms are slightly ambiguous, the one implying that the presence of documentary sources is an asset, the other perhaps suggesting that the archaeologist, liberated from the constraints of historical evidence, is free to indulge his own theoretical perspectives. Archaeological evidence and historical sources are complementary but should each be evaluated according to the criteria of their respective disciplines. Certainly, it is not the business of archaeology to prove history or to endorse popular myth or propaganda masquerading as history, whether classical or early Medieval.

There could be no clearer demonstration of the subordination of archaeology to recorded history than Wheeler's (1954) identification of the Stanwick fortifications in north Yorkshire as the site of Venutius' resistance against Rome, based upon Tacitus' account of events in the third quarter of the first century AD. Archaeological evidence for the dating of the presumed structural sequence was tenuous at best, but it was the dating and explanation of Site H, the supposed southern entrance of Phase 3, that is solely dependent upon the historical connection. Discovering that there was no causeway between ditch terminals, which is the invariable hallmark of an Iron Age entrance, nor any trace of structures in timber or stone flanking the entrance passage, the excavator concluded improbably that the work of construction was halted by a sudden emergency and the causeway dug away in a makeshift attempt at securing the defences. But what could have been this emergency? Given the total absence of dateable artefacts from any part of the Phase 3 enclosure, the entire interpretation hinged upon matching a structural anomaly of doubtful archaeological authenticity with the historical record. Following Tacitus, Wheeler chose the campaign of AD 71-74 initiated by the governor Petillius Cerialis against Venutius and the Brigantes as the crucial crisis, and advanced his interpretation, not as a tentative hypothesis, but as self-evident fact.

The inference from all this is scarcely in doubt. . . . We can almost see the tribesmen toiling vainly at their gate, almost hear the Ninth Legion tramping up from its new fortress at York to one of its rare victories.

(Wheeler, 1954: 15-6, 23)

More recent excavators have suggested a quite different interpretation of the site, that it was occupied by a pro-Roman faction engaged in amicable trade in Roman products with their southern neighbours. In fact, this interpretation is not incompatible with the documentary sources, from which a case has long been recognized for regarding the Brigantes as a client state (Hanson and Campbell, 1986), with Stanwick as the headquarters of its queen Cartimandua.

The quest for Venutius, or for Vespasian's legions at Maiden Castle, was symptomatic of the historical approach to archaeology, of which more exotic or fanciful examples were Schliemann's search for Agamemnon at Mycenae, Woolley's discovery of the Flood of Genesis

at Ur, the erroneous equation of the Neolithic walls of Jericho with Joshua's Iron Age trumpeters, or the quest for Arthur's Camelot at Cadbury Castle, Somerset. There is, of course, nothing inherently unacademic in equating archaeological sites with historically named places, assuming that the evidence stands up to rigorous scrutiny. Many Roman locations in Britain are very well authenticated, for example, but the identifications of native sites from Ptolemy's Geography or early historic sites from Bede are very much less secure, including some that are now part of received wisdom. The fact is that the archaeological agenda has moved on: locating the site of Mons Graupius will tell us very little about the political, social, economic or cognitive systems of the protagonists in that historical event. There is, of course, every reason for adopting an inter-disciplinary approach in which the evidence of archaeology, documentary history, epigraphy and numismatics can all contribute to a better understanding of past societies and events. But the evidence of each should be independently evaluated by the criteria of that discipline before any attempt at correlation can be legitimately undertaken.

The archaeology of Northern Britain in the first millennium AD has been substantially text-led, with the archaeological agenda often determined by the implicit historical imperative (Alcock, 2003). Archaeologists nevertheless have been well aware for many years of the problems implicit in the use of historical sources and have consciously striven to use the archaeological evidence to drive an agenda that has focused more expressly upon issues such as the development of social structures and the processes of early state formation (Driscoll, 1988b, 1991).

Northern Britain and the Celtic question

Publicity linked to the 1991 Venice exhibition 'I Celti', and more particularly the idea that the Celts were the 'first Europeans', prompted a reaction against the older conventional view of the Celts, on the grounds that there was no sound evidence for a pan-European ethnic population of Celts and still less that any inhabitants of Britain had been Celts (Chapman, 1992; Collis, 1997, 2003; James, 1999). It is true that the Irish, Scottish Gaelic, Welsh and Breton languages were not designated as 'Celtic' until the early eighteenth century and that there is therefore no implicit correlation between the linguistic usage of that term and its use by classical sources to describe an ancient ethnic group. But this does not mean that the linguistic usage is the only valid use of the term. When Hecataeus and Herodotus in the sixth and fifth centuries BC wrote about the Celts, and Ephorus in the fourth century listed them together with Scythians, Indians and Ethiopians as one of the barbarian neighbours of the Greeks, they may have been somewhat vague or even schematic in their geography, but they plainly were describing recognizable population groups. None of the classical sources could be regarded as trained ethnographic observers, and several like Diodorus, Strabo and Caesar drew extensively on the Posidonian tradition for what at times amounts to little more than formulaic descriptions of barbarians. Caesar at any rate was familiar with both Gaul and Southern Britain, though his ethnographic observations are unlikely to have been seriously researched beyond the purposes of his military and political campaigns.

Critics of the 'Celtic model' point out that no classical writer ever referred to Britain as Celtic: both Strabo and Caesar, for example, refer to Britain and its inhabitants as Britons. For Caesar, Celtica was one, possibly the largest, of his threefold divisions of Gaul, whilst in Strabo's Geography Celtica lay parallel to the island of Britain across the Channel. This tells us little about the ethnic status of Britain, which is not the central topic of discussion, though a parenthetic digression in Caesar's diaries (de bello Gallico: V, 12–14) stresses the similarity of the south-eastern British tribes and their Gaulish neighbours. Part of the difficulty lies in the meaning of the terms Keltoi/Celti, and indeed of Galatae and Galli, all of which appear to have been used as supra-tribal names and even to have been interchangeable. So, for example, Polybius, writing in the second century about the battle of Telemon, refers to the Boii, Insubres and Taurisci as Celts, suggesting that there may have been a hierarchy of names, the choice of which might well depend upon the context in which a given population was being described.

The correlation between linguistic or ethnic definitions and archaeological distributions is a vexed issue. The fact that the term 'Celtic' is also used to describe an art style that should more accurately be called 'La Tène' has compounded the confusion but is otherwise a distraction from the main issue. The equation of Celts with La Tène archaeological material is plainly an over-simplification. La Tène assemblages are found widely through north-Alpine central and western Europe, coincident in part with the distribution of Celtic languages in antiquity, as inferred from place-names and personal names. But La Tène material culture is extremely diluted in the quantity and number of definitive types in southern Britain by comparison with continental Europe and, for large parts of Northern Britain, is virtually non-existent. In Ireland, the 'La Tène' assemblage (Raftery, 1984) is almost exclusively of insular manufacture, including some types that are not represented in continental Europe. Furthermore, the La Tène distribution in Ireland has a bias towards the northern two-thirds of the country, suggesting that there must have been a non-La Tène Iron Age counterpart in the south and west.

The fact is that any attempt to equate one particular set of archaeological material with the Greek historians' ethnic Celts is probably misguided. Whilst coherent ethnic groups may have distinctive elements of material culture, the exclusive correlation of people with material distributions, as was implicit in Childe's concept of culture, in which pots were effectively a proxy for people, is plainly fallacious. And in any event the Greeks' Celts were almost certainly a more heterogeneous phenomenon than the Venice exhibition implied. Any progress in identifying constituent groups is only likely to come from archaeo-genetic analysis on a substantial scale of La Tène cemeteries in north-Alpine Europe, preferably within a closely defined chronological framework, given the reputed mobility of the peoples involved.

As to the issue of correlating archaeological and linguistic evidence for European Celts, the debate may be conveniently summarized. If the distribution of La Tène archaeological types corresponds broadly to the distribution of toponyms that linguists identify as Celtic, and if there is no evidence either of subsequent population change or linguistic superstrata, then the inference that the users of that material assemblage were Celtic speakers would accord with the most economical explanation of the available data (Harding and Gillies, 2005). This scenario would certainly match the situation in Gaul and Britain on the eve of the conquest. Sims-Williams (2006) demonstrated that linguistically Celtic place-names were concentrated in Britain, non-Mediterranean Gaul and north-west Spain (mainly represented by -briga names). He further examined no less than 125,000 personal names from the Onomasticum Provinciarum Europae Latinarum, dating to the first three centuries AD but excluding regions beyond the empire such as Scotland and Ireland, to demonstrate a broad spread across Europe from Celtiberia to Noricum (2012: Figure 2.2). He thus concluded that the 'Celtic heartland' was represented by the place-names, with personal names reflecting the Celtic diaspora.

How far back into prehistory this equation could be pressed is plainly more contentious. Hecataeus' record of Celts in western Europe effectively pre-dates the La Tène phenomenon, whilst Celtic speakers are attested in northern Italy in the area of the Golasecca culture in the

early sixth century. Significantly later in Celtiberia, they are certainly not represented archaeologically by a material assemblage in any significant degree influenced by La Tène. In fact, there is no sound basis for equating Celtic languages with any single archaeological tradition, although the later Bronze Age Urnfield distribution is broadly coincident geographically. As Sims-Williams argued, however, there are still fewer grounds for equating Celtic languages with a single genetic group, as languages are transmitted horizontally as well as vertically.

In the light of this debate, the case for a western origin and subsequent diffusion of Celtic languages (Cunliffe and Koch, 2010; Koch and Cunliffe, 2013), more specifically locating their genesis in the south-west of the Hispanic peninsula, may appear to buck the tide of evidence. Central to the case is Koch's belief that Tartessian was a Celtic language, a viewpoint that has received limited support from some linguists and outright rejection from others. Archaeologists can be little more than bystanders in this debate, offering Beaker and Bronze Age or even Neolithic contexts (Renfrew, 1987) that anecdotally could support the diffusion of language without any sound basis for inferring correlation.

Gender issues

An important development in recent years has been an increased interest in gender issues in prehistory, as distinct from the identification of biological sex. An individual's sex may be biologically determined, but gender, it is argued, is a social construct (Sofaer and Sørensen, 2012). Even sex is no longer seen as simplistically bipolar, but involving instead a spectrum of attributes dependent upon chromosomes and DNA, so that an individual with definite male organs may have a gracile bone structure whereas another with female attributes might have sturdier than average bones. In consequence, in osteological analyses, even supposing that preservation of skeletal remains is ideal, specialists may resort to a scale of assessment including 'possible' and 'probable' identifications. In some cases, as in the assessment of Yorkshire cemeteries (Stead, 1991), the remains showed 'contra' indications, that is, male and female attributes on the same skeleton. The determination of sex is especially crucial in those limited instances where cemeteries have been located. Since cemeteries are not a regular and recurrent element in the British Iron Age, it is obviously important to establish whether selectivity was on the basis of sex, or indeed age, social group or any other recognizable criterion.

Gender is often inferred archaeologically from associated artefacts, again most obviously when associated as grave-goods. Conventional assumptions, that swords accompany male graves and ornaments or jewellery indicate female burials, have rightly been challenged on the grounds that they reflect more modern expectations or prejudices regarding the role of women in particular that may be wholly anachronistic in the context of Iron Age society. Furthermore, the rationale that artefacts reflect gender may be wrong in principle: artefacts may instead have been instrumental in the creation of gender. In the British Iron Age, opportunities for testing hypotheses relating to artefact types and gender are hampered by the limited number of burials, by the even more limited number with significant associations and by the often poor state of skeletal preservation to determine reliably the sex of the deceased. In general, swords are seemingly found in male graves, and mirrors in female graves, for example, but the instance of the Bryher burial in the Scilly Isles (Johns, 2003), in which both accompanied a skeleton of undetermined sex, is a salutary lesson that sex and gender are not the same concept. In Northern Britain, a striking example of contrasting associations is the chariot burial group at Wetwang Slack, Yorkshire, where two sword and spear burials flank a mirror burial as if in attendance. A

fundamental issue, of course, is the role of grave-goods, whether they were possessions of the deceased, and hence conceivably a reflection of his or her persona in life, or whether they were tributes from relatives, debts repaid from dependents, or simply requirements of the funerary ritual, and as such only indirectly indicative of the status of the deceased (Harding, 2015).

Social structure and hierarchy

The older conventional view of Iron Age society as strictly hierarchical has been subject to deconstruction in recent years by those who prefer to see the Iron Age populated by essentially egalitarian farming communities, with a more hierarchical structure, as reflected in classical sources, becoming dominant, in southern and south-eastern Britain at least, only in the immediately pre-Roman period. That conventional view was essentially based upon Caesar's summary account, in which a chief or king presided over a pyramidal structure, with subordinate ranks of nobles or *equites* above freemen, with a sub-stratum that was tantamount to serfdom. This caricature of what would undoubtedly have been a more complex arrangement of dependency was embellished by emphasis on feasting and drinking, aggressiveness and pride in martial prowess, characteristics that were also central to later Irish epic tales. The 'Celtic paradigm' thus became entrenched in perceptions of Iron Age society, when the reality, reflected in the typical farming settlements of the British Iron Age, must have been much more mundane. This of course is not to say that that the myth was not perpetuated in song and dance at festivals among communities for whom single combat over the champion's portion was only ever a tableau of ancestral traditions.

In the century before the conquest, there can be no doubt that south-eastern Britain was occupied by communities that were known to classical writers by tribal names and ruled by chiefs or kings who proclaimed their dynasties on their coinage. Archaeologically, it is clear that the élite of these communities could command great wealth and resources. Whilst it is true that the great majority of evidence for the earlier Iron Age, with notable exceptions like the middle Iron Age communities of eastern Yorkshire, is not indicative of a highly structured social hierarchy, it is hard to believe that such a powerful élite structure could have emerged by the first century BC without much older roots in the social fabric. Karl (2006) has articulated a complex social structure that surely was well established in the early Iron Age in continental Europe. The fact that such a hierarchy is not prominent in the archaeological record in Britain is in part a product of prevailing conventions for disposal of the dead, which for the most part did not involve lavishly furnished tombs or hierarchically structured cemeteries. But wealth may well have been measured, not in material assets but in terms of land-holding and numbers of livestock. Neighbouring households or kin groups may have occupied identical houses, but with one in dependency or client relationship to a social superior, with obligations or debts that would be undetectable archaeologically in a society that did not subscribe to a modern consumer-based value-system.

Identity, personal and communal

Archaeologists in recent years have focused on the concept of identity, which may be defined in several different ways. At one level, an individual's identity is determined by physical attributes, as measured by the bio-archaeologist or geneticist. For most individuals, nevertheless, identity is a social construct: we belong to a kin group, associate with others who speak a

common language and subscribe to social mores that we inherit and pass on in modified form to the next generation. As individuals, we are who we believe ourselves to be, but part of that individuality is shared with and derived from the community in which we live.

The study of personhood (Fowler, 2004) is plainly closely related to perceptions of identity. Personhood may appear to be a rather ill-defined concept but evidently embodying physical, mental and spiritual attributes, the cumulative nature of which may be expressed through social practices in life and in death. In attempting to define personhood archaeologically, interpretation of funerary practices and the way in which the dead are disposed of is plainly crucial. Personhood at different times in divergent ethnographic contexts may involve the concepts of the individual, unique and constant, or of dividuality, in which the persona may assume composite identities, including human, animal or inanimate elements, which may not be constant but variable. Archaeologists have in the past assumed by default that Iron Age society was based upon the ethos of individuality, as inferred from documentary sources recording events leading up to and following the Roman conquest of Gaul and Britain. But the study of Iron Age burials, in which animal burials or animal remains are not infrequently a deliberate component, together with the animal and bird imagery that is an integral component of Iron Age art, may suggest a degree of spiritual symbiosis between human persons and the natural environment.

Personal identity may be expressed in various ways, most of which are unlikely to be detectable archaeologically. One way of expressing identity that might be detectable under favourable conditions is through dress, which might signal personal qualities or group characteristics, especially on special occasions like weddings, festivals or funerals. The fabrics themselves will seldom survive, other than in exceptional environments like some Bronze Age burials in Scandinavia or the Iron Age tombs in the permafrost of Siberia. But temperate European graves of the Hallstatt and La Tène Iron Age not infrequently include dress fastenings or ornaments, the combinations and locations of which may well have been determined, for example, by the deceased's marital status or standing within the community. In Britain, the limited number of surviving burials in most regions unfortunately inhibits this line of research, and where cemeteries are known the evidence can be equivocal. In the cremation burials of the Welwyn series in south-eastern England in the late pre-Roman Iron Age, the grave-goods are almost exclusively items associated with feasting and drinking, and include very little that might be regarded as personal. The impression therefore is that the grave, if not the funeral, was a celebration of community rather than individual identity.

Group identity evidently might make a greater impact on the archaeological record, either through portable artefacts or through buildings. Ornamental styles on pottery sometimes have a markedly regional distribution, as in the case of 'Glastonbury ware' in south-west Britain or, in the present context, perhaps, the arcaded style of Clettraval ware from the Western Isles. These of course could simply be the signature style of the atelier, but it is more likely that it reflects local tradition, in much the same way that textiles in more recent times reflected the local identities of fishing communities in Atlantic Scotland and Ireland. In fact, such local styles may well have been proclaimed especially in domestic crafts like weaving, thatching and basketry, and even on special occasions in body painting, hardly any of which will impact on the archaeological record. Expressions of group identity, of course, need not simply reflect local traditions. It has been suggested that some brooch types with traditional La Tène motifs were favoured over Romanized products in Northern Britain and even that dragonesque brooches in Britain may have been adopted to signal chauvinistic identity.

22 The legacy of the past

Monumental architecture could likewise signal group identity or even distinguish subgroups within a larger community. The most prominent examples in the earlier Iron Age in northern England, southern and eastern Scotland would be hillforts, especially those that were for collective assembly of larger communities, rather than those that were simply enclosed villages. Some were evidently located as widely visible statements in the landscape, so that their destruction and partial vitrification must have been equally intended as a potent demonstration of the suppression and humiliation of community identity.

In the later Iron Age, a unique expression of regional identity would be the symbol stones of eastern Scotland and beyond, the function of which continues to generate debate, though it seems clear that, whatever their specific context, funerary, commemorative or reinforcing territorial boundaries, they would have been recognized as signals of community identity. Buildings like the broch towers of the Atlantic north and west might have been a means of signalling status rather than identity, but the complexity of round-house construction, both in stone and in timber, in the earlier Iron Age suggests that round-house design and construction, fundamentally different from the Central and Northern European rectangular house tradition, may have embodied a range of symbolic components that reflected social and cognitive distinctions as well as purely functional factors.

This of course is a field in which the prevailing pre-occupations of the present era can easily be imposed anachronistically upon the past, and whilst cognitive archaeology is now a recognized field of study, we should avoid assertions regarding what Iron Age communities 'believed', unsubstantiated by any reasonable inference from the evidence. There is nothing unacademic in being wrong, only in offering an opinion as if it were an established fact.

PART II The earlier Iron Age



BRIGANTIA AND NORTHERN ENGLAND

The older conventional view of northern England in the Iron Age was largely determined by historical sources dating from the Roman occupation. According to Tacitus, the Brigantes were reputed to be the most populous group in the entire province (*Agricola*: 17), his use of the term *civitas* here and elsewhere (*Annals*: XII, 40) implying a coherent political entity or state. Ptolemy, writing in the second century AD (*Geography*: 2.3.10), explicitly reported that Brigantia extended from sea to sea. Wheeler (1954) certainly accepted the Brigantes as the dominant tribe in northern England with a paramount king or queen. Richmond (1954: 62) envisaged a more complex 'coalition of isolated groups in an uneasy balance, united by the marriage connexions of the great families'. Later commentators (Hartley and Fitts, 1988), recognizing the geographical and environmental diversity of this vast territory, favoured the notion of a confederation of tribes, with the Brigantes pre-eminent, but any association of tribal units is likely to have been based upon a client relationship and a complex system of inter-dependency, rather than mutually negotiated collaboration, as is implied in confederacy.

An alternative view (Rivet and Smith, 1979: 279) is that the term *Brigantes*, based on the Celtic *brig*, 'high', and *briga*, 'hill', was no more than a descriptive name for 'highlanders', a name of convenience used by the Roman authorities and never a tribal name used by the indigenous population. Its incorporation into the name of the cantonal centre at *Isurium Brigantium* (Aldborough; see Figure 2.1) may still have been essentially a Roman imposition. Dedications along and beyond the northern frontier to the goddess Brigantia may refer to the tribal deity of the Brigantes (Ross, 1970: 151–2, 160–1), but as Catherine Ross (2011: 43) pointed out, these are dedications to a native deity adopted by the Roman military and, therefore, cannot be taken as evidence for the territorial extent of any pre-Roman polity. Ptolemy's reference to a *portus Setantiorum* in the west and the *sinus portuosus Gabrantovicum* in the east have been taken to indicate tribal sub-septs of the Brigantes, though the Gabrantovici ('horse-riding warriors') sounds like another descriptive name rather than a native identity. Other *pagi* might be inferred, such as the Carvetii of the north-west, whose centre at Carlisle acquired *civitas* status in the third century. The case for a unified or confederated Brigantian state, dominated by a ruling paramount dynasty, therefore, is far from secure.

As regards archaeological evidence, until recent years, the reputedly most populous group in Britain has proved frustratingly elusive. The problem, of course, is not a paucity of sites, but a

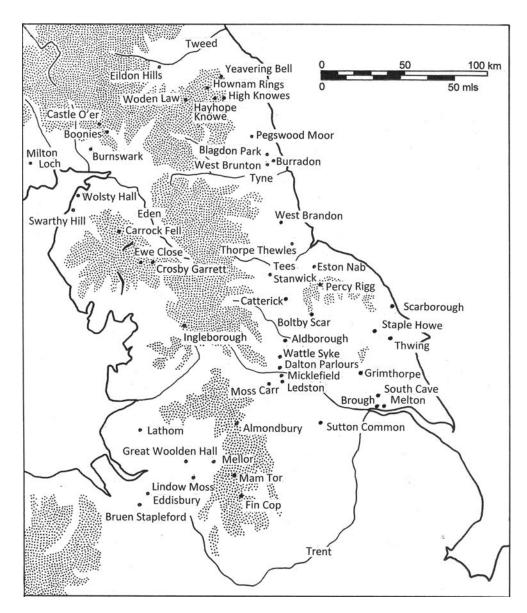


FIGURE 2.1 Location map of sites in northern England and the Borders *Source*: Drawing by D. W. Harding.

paucity of adequately dated sites. Prior to the routine application of radiocarbon dating, dependence upon material associations for dating was bound to prove inadequate in contexts that are largely aceramic, as in the earlier Iron Age of much of northern England. In fact, as Challis showed some years ago (Challis and Harding, 1975) and others have confirmed since (Willis, 1999), northern England is by no means totally aceramic, though much of the domestic pottery appears to be of relatively late date. Earlier Iron Age communities were presumably aceramic by choice, using containers made from perishable materials such as wooden vessels, leather bottles, wicker baskets or textile bags. Conventionally, this was seen as the hallmark of mobile pastoralists or at least of communities for which transhumance was an important tradition, but this need not be an invariable conclusion. Ireland and the Isle of Man, like Wales, northern England and much of lowland Scotland, is largely aceramic, and in Northern Britain, it is the Hebrides and to a lesser degree the Northern Isles that stand out as the exceptions. As Raftery (1995b) noted for Ireland, preceding periods had ceramics, both domestic and funerary, so that the abandonment of pottery by the mid-first millennium BC, if that was the case, was conscious and deliberate, perhaps signifying some radical change in food preparation and consumption. It has been suggested that poorly fired and friable fabrics might not survive, especially if exposed to ploughing, but in this case, we might still expect some contexts, such as pits or ditches, to yield occasional insights into the original extent of the ceramic assemblage. The only realistic conclusion is that Iron Age communities in these regions were indeed largely aceramic, and by choice.

One important respect in which communities of northern England differed from their southern neighbours was in making no use of coinage. The northern tribes can hardly have been unaware of this development, since Corieltauvian coins and hoards are found in the border zone north of the Trent (Hunter, 1997: Illus. 5). Surprisingly, the number of Gaulish coins equals those minted in Britain, perhaps suggesting direct contact with the Continent rather than secondary redistribution from the south of England. The minting of coinage and a monetary economy implies a centralized authority and a degree of political development which may not have been compatible with a dispersed pattern of settlement and an economy in which pastoralism was undoubtedly a significant if not dominant element.

Important though pastoralism undoubtedly was, we can now be confident that Piggott's model of a predominantly pastoralist economy was an over-simplification (Piggott, 1958a) and that there were extensive areas of the northern coastal plains and valley lowlands where cereal cultivation would have been an important component of the economy. It has taken a good deal of research (eg. van der Veen, 1992) to dispel the image of the footloose Celtic cowboy ranging over rough pasture as a semi-nomadic pastoralist. The apparent absence of storage-pits in the north of Britain was immaterial, since above-ground storage would have been more practical. In fact, where pit clusters have been recognized, as at Ledston in south-west Yorkshire (Roberts, 2005), or excavated, as at Micklefield (Brown et al., 2007) nearby, it is by no means demonstrated that these were for communal grain storage. Likewise, the apparent absence of fieldsystems and other evidence of an organized agricultural landscape was much exaggerated, in northern England as in southern Scotland, through the difficulties of assigning extant remains to their correct chronological horizon. Pace Frere (1967: 55, 1998: 42; Haselgrove, 1984: 15), there is no good reason to believe that Caesar's allusion to the peoples of the interior as not growing corn but living on milk and meat (de bello Gallico: V, 14) was an accurate reflection of 'Brigantian' economy. In the first place, it is a formulaic denigration of barbarians (cp. Webster, 1999), applied equally to the Germans (dbG: IV, 1 and again VI, 22) and later in similar terms by Cassius Dio (Epitome: 76, 12, 1-5) to the Caledones and Maeatae. In the second place, there is no reason to suppose that Caesar had any informed knowledge of, or serious interest in, an 'interior' part of Britain quite so far north.

Nevertheless, Fox's highland/lowland division of Britain along the Jurassic Ridge, with the economic rider of Piggott's Woodbury-Stanwick economic model, has proved remarkably resilient (Cunliffe, 1991: 213, 2005: 237). A more subtle geographical contrast was that drawn by Haselgrove (1999: 257) within northern England about the central axis of the Pennines, a division that was almost anticipated by Hawkes' (1959) Eastern and Pennine provinces. To the west, there was a far greater proportion of upland, the climate would have been wetter, and in consequence, pastoralism probably did dominate over arable cultivation. To the east, a mixed agricultural economy would certainly have been practical and has been amply demonstrated in the lowlands from the Vale of York to the Tyne. These two provinces were also exposed to quite different external contacts, on the east from south-eastern England and across the North Sea coastline from the Continent, to the west from the Irish Sea and the western seaways. The role of these two natural routes of access was undoubtedly instrumental in forming the complex character of Iron Age communities and their material culture in Northern Britain. The importance of the western seaways has often been stressed, though archaeologically it is difficult to demonstrate a coherent community of culture in the Irish Sea zone or beyond (Henderson, 2007a). The eastern route of access, and the southern North Sea crossing from the mouth of the Rhine, may well have resulted in more direct impulses into north-eastern England in the Iron Age.

The late Bronze Age-Earliest Iron Age transition

Working within an older diffusionist paradigm, Colin Burgess (1974: 213) had seen the coastal-riverine distribution of Hallstatt C weaponry and high-status metalwork of Hallstatt C–D type up the eastern coast of England and into Scotland as 'a classic raiding pattern', rather than the product of trade or exchange. The find of 1861 from Ebberston of a bronze sword of Gündlingen type with human bones, together with fragmentary bronzes from the barrow at Aldro (Challis and Harding, 1975: 42–3, Figure 20), would likewise have been seen as evidence of Hallstatt colonization from the Continent. Whilst we should not exclude the possibility of mutual interaction across the southern North Sea (Haselgrove, 1984), the relative paucity of metalwork of continental Hallstatt type from British Iron Age settlements, and the absence of a regular burial rite of continental Hallstatt type, underlines the essential insularity of the earliest Iron Age in Britain.

Given the limited evidence of earlier Iron Age assemblages in northern England, the older finds from Scarborough and Staple Howe are exceptional. Pottery from Castle Hill, Scarborough (Smith, R. A., 1927; Wheeler, 1931), was unfortunately not closely associated with either the late Bronze Age bronzes (Figure 2.2, 1–6) nor with the bronze bracelet with ribbed mouldings of continental Hallstatt type (Figure 2.2, 14) that was found nearby. A pit uncovered in the course of excavations at Scarborough Castle in 1978, however, did include odd sherds with finger-tip ornament, together with plain wares, in association with a bronze sword of Ewart Park type (Pacitto, 2004). In fact, both pottery and metalwork would not be inconsistent with communication and traffic between the communities bordering the southern North Sea basin around the seventh century BC. The total sum of Hallstatt metalwork of continental derivation in Britain, however, is minimal compared to the range and quantity of types represented in cemeteries or even settlements of central Europe and is certainly not amenable in Britain to the recognition of successive sub-phases of Hallstatt C and D.

The Staple Howe settlement (Brewster, 1963), a palisaded enclosure, which underwent structural modifications on at least two occasions (Figure 2.2, 3), could have spanned a period between the eighth and sixth centuries BC. The bronzes (Figure 2.4, 1–3) were not closely

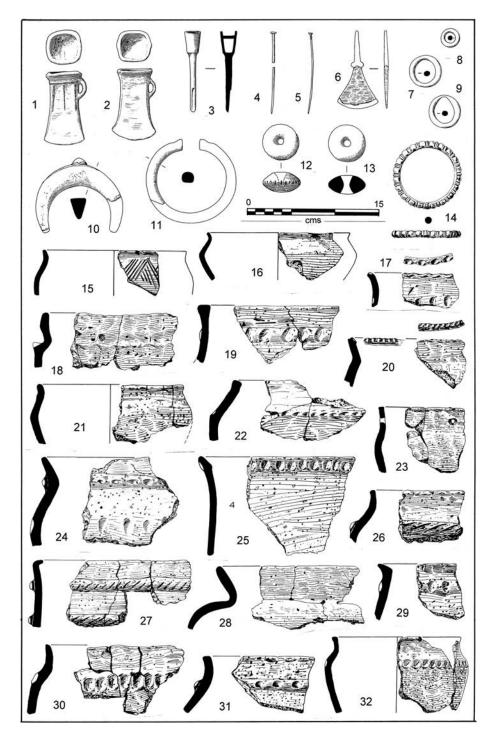


FIGURE 2.2 Metalwork and pottery from Castle Hill, Scarborough, Yorkshire, 1–2, bronze socketed axes; 3, bronze socketed gouge; 4–5 bronze pins; 6, bronze tanged chisel, or leatherworker's knife; 7–9, bronze rings; 10–11, jet and shale ornaments; 12–13, pottery spindle-whorls; 14, bronze bracelet; 15–32, pottery

Source: Drawings 1–13 by D. W. Harding, adapted from Wheeler (1931); drawings 14–32 by A. J. Challis, reproduced by kind permission.

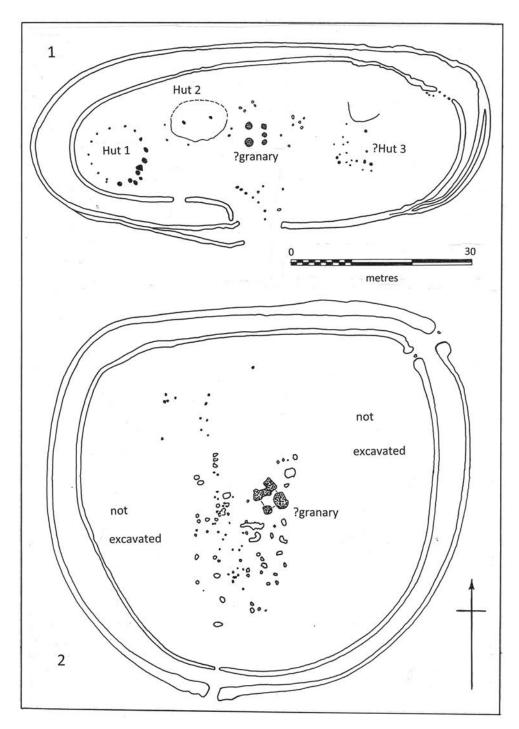


FIGURE 2.3 Palisaded settlements of the Yorkshire Wolds, 1, Staple Howe; 2, Devil's Hill, Heslerton *Source*: Drawings by D. W. Harding, adapted from Brewster (1963) and Stephens (1986).

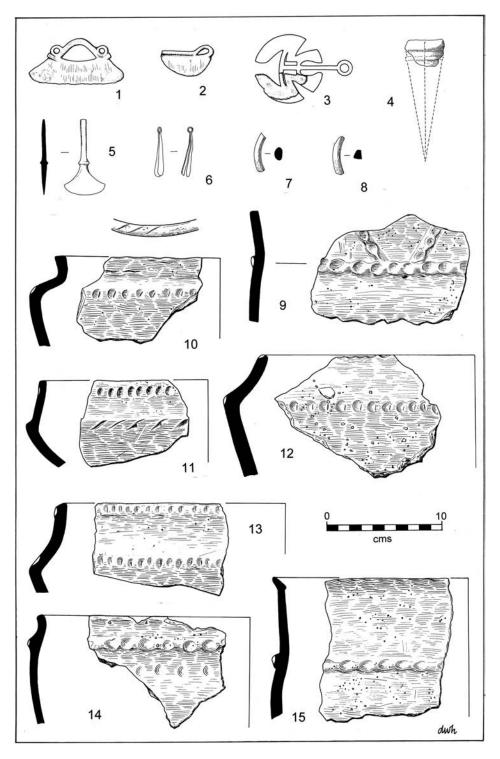


FIGURE 2.4 Pottery and other artefacts from Staple Howe, Yorkshire, 1–3, bronze razors; 4, bronze socketed axe; 5, bronze chisel or leatherworker's knife; 6, bronze tweezers; 7–8, jet or shale bracelets; 9–15, pottery

Source: Drawings by D. W. Harding, 1–8 adapted from Brewster (1963).

tied to the structural sequence, nor to the site's single radiocarbon date (2400 +/- 150 cal BC: BM-63, for grain from an internal quarry hollow). The double-looped bronze razor is certainly a central European Hallstatt type, while the single-looped razor has analogies in the Nordic series of the later Bronze Age. The third, fragmentary razor was reconstructed as resembling an insular Late Bronze Age form. The leatherworker's knife is an Atlantic Late Bronze Age type, and the scrap of socketed axe likewise may indicate a transitional date. The bronze tweezers could well be part of a Late Bronze Age domestic assemblage, though the type is not strictly diagnostic, and is certainly found in continental Hallstatt Iron Age contexts. Jet bracelets likewise are not diagnostic but could date from the Late Bronze Age. The assemblage could include survivals, but the combination of late Bronze Age types with innovative Hallstatt forms is not uncharacteristic of hoards of this transitional phase, like Llyn Fawr in Glamorgan (Fox and Hyde, 1939) or Horsehope, Peeblesshire (Piggott, S., 1953b).

Devil's Hill, West Heslerton (Figure 2.2, 3; Brewster, 1981; Stephens, 1986), just over a mile to the east of Staple Howe, was similarly located on a knoll on the northern escarpment of the Wolds. It was defined by a double palisade, the outer in places almost of ditch proportions, together with two entrances. Dating was dependent on significant quantities of coarse pottery with finger-tip ornament along rims and shoulders of jars, some with applied cordons with finger-tip impressions. By contrast was the broadly contemporary open settlement between East and West Heslerton, which evidently was part of a long sequence of settlement from prehistoric to early historic times (Powlesland *et al.*, 1986).

The location of the Staple Howe and Devil's Hill palisaded settlements on outlying spurs at the interface between the upland Wolds and the lowlands of the Vale of Pickering is suggestive of strategic control of both agricultural environments. Significantly, neither have central large round-houses; at Devil's Hill, no houses were recognized among the scatter of postholes, and at Staple Howe, the 'huts' are decidedly ephemeral. Both, however, had central five-posters, interpreted as communal granaries. It is possible that they were for shifting or periodic occupation (Wandersiedlungen), in which the focus of settlement shifted every generation by a few hundred metres on the Danish model (Gerritsen, 1998). It is generally assumed that, in later prehistory, the Wolds would have been used primarily for pastoralism, with arable agriculture concentrating in the lowlands to the west. Already from the later Bronze Age, the landscape was dominated by linear dyke-systems, sometimes double or multiple, and pit-alignments, dividing up the land for agricultural purposes and perhaps also to indicate ownership and identity. Trackways too, defined by bank and ditch, extend along the dry valleys between networks of smaller fields. This systematic division of the landscape implies the existence of an authority capable of organizing resources of manpower to create and implement this structure.

In field monuments, there is not much evidence for social hierarchy. Though Grimthorpe (Stead, 1968), with its timber-framed rampart, may have been in occupation in the early first millennium BC, hillforts in the conventional sense are not a major element in the archaeological landscape of the Wolds. The fortified enclosure at Thwing (Figure 2.2, 5; Manby, 1980), unique in the symmetrical complexity of its layout though showing striking similarities to the basic plan of the Mucking South Rings, Essex (Evans *et al.*, 2016), may indeed belong to a special class of ring-works that combined both secular and ritual functions (Manby, 2007). Its earlier inner enclosure with double-opposed entrances, defined by a ditch with external bank, was superseded by a larger enclosure with double opposed entrances that maintained the south-east and north-west orientation of its predecessor. Its outer ring-work comprised a double setting of posts supporting a chalk rampart with front revetment and external ditch, through which

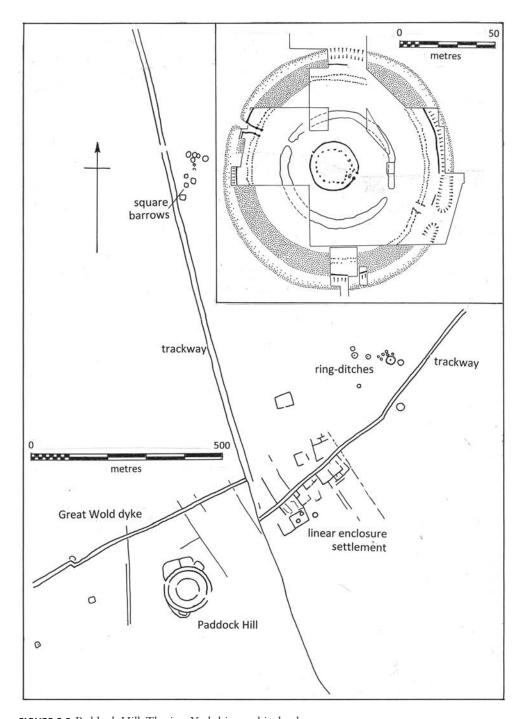


FIGURE 2.5 Paddock Hill, Thwing, Yorkshire, and its landscape

Source: Drawing by D. W. Harding, adapted from Manby (1985) and Stoertz (1997).

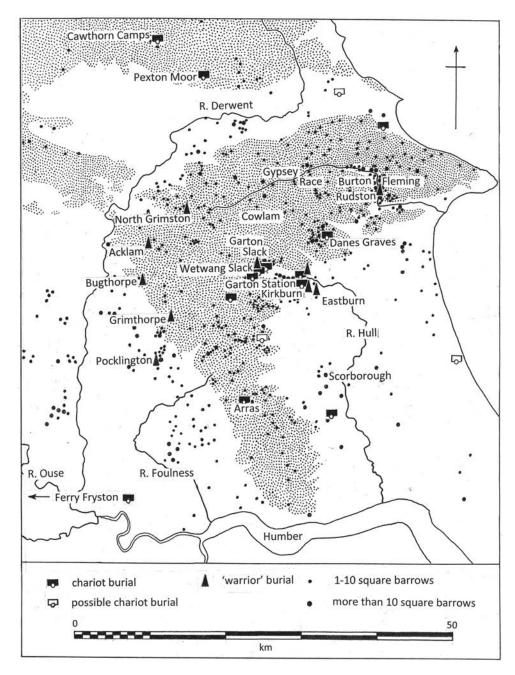
the entrance passages were timber-revetted in the manner of early hillforts. The central layout was then re-designed to create a circular building, still with two opposed entrances on the original alignment, and consisting of an inner post-ring around 17.5 metres in diameter and an outer ring-groove 26 metres in diameter. The overall diameter of the Thwing building thus surely precludes its being roofed in the manner of a normal domestic structure, reinforcing the site's claim to special status. The associated assemblages nevertheless appear to be entirely domestic in character. But the lesson is clear, that models of settlement based upon Wessex or southern England generally are not necessarily applicable to other parts of Britain.

Among recent excavations that have yielded evidence of activity in the late Bronze Age-earliest Iron Age the site at Melton on the north bank of the Humber west of Hull (Fenton-Thomas, 2011) is unique in having a small burial ground of mainly crouched or flexed inhumations alongside a linear ditched boundary. Radiocarbon dates suggested that these spanned the eighth to sixth centuries BC, while pottery from associated features including four-posters indicated contemporary occupation. Particularly distinctive were two lid-seated vessels (Didsbury and Vince, 2011: Figure 137, 6 and 7) that may be comparable to a lid-seated 'cauldron' identified at Hanging Cliff, Kilham (Rigby, 2004: Figure 76, 8).

Cemeteries and settlements of eastern Yorkshire

The 'Arras' series of eastern Yorkshire (Figure 2.2, 6), named after a cemetery near Market Weighton in the southern Wolds excavated early in the nineteenth century, is characterized by the use of barrows within enclosure ditches, often, though by no means exclusively, of square plan, making them easily identifiable from air-survey, and of more elaborately furnished graves containing two-wheeled carts or chariots. Few survive as extant earthworks, with the Scorborough cemetery a notable exception (Figure 2.7). Graves accompanied by weapons, notably sword, spear and shield, and formerly identified as a distinctive series of 'warrior' burials (Stead, 1965, 1979, 1991), are now seen as integral to the La Tène funerary traditions of eastern Yorkshire. All of these elements are also known in the early La Tène cemeteries of the Champagne region of north-eastern France, and in the absence of a regular and recurrent burial type for much of the British Iron Age, it was hardly surprising that archaeologists have looked to continental influence to explain the distinctive Yorkshire series. Whatever their genesis, the eastern Yorkshire cemeteries and settlements constitute one of the most complete regional assemblages in the British Iron Age (Giles, 2012).

The square-ditched barrow cemeteries vary considerably in numbers of graves from just a few dozen to more than four hundred in the case of Wetwang Slack, the largest Iron Age cemetery known in Britain. Air-photography has shown the density of cemeteries across the Wolds, sites sometimes being no more than a couple of kilometres apart. The barrows generally contain a single, central burial pit, though occasionally double burials are found, and secondary burials, particularly of infants, are not uncommon in the barrow ditch. Where there is no central pit, and no surviving burial, the remains may have been placed on the ground surface, where all trace has been removed by ploughing. Barrows without burials are often the larger ones of Cowlam type, over 10–12 metres across, which Dent (2010: 65–6) maintained were the earliest chronologically, whilst the smaller barrows with deeper pits were later. The standard ritual was crouched inhumation, commonly oriented with head towards the north or north-east, though a significant minority was interred on the reciprocal orientation. A notable anomaly was the later cemetery at Rudston (Makeshift), where fifty-four extended or slightly



 $\label{eq:FIGURE 2.6} \textbf{Map of eastern Yorkshire barrow cemeteries and burials}$

Source: Drawing by D. W. Harding.



FIGURE 2.7 Scorborough, Yorkshire, barrow cemetery

Source: Photograph by D. W. Harding.

flexed inhumations were aligned east-west, and were accompanied by a range of grave-goods and meat offerings different from those of the earlier cemetery (Stead, 1991). The reason for this change is unclear and has not been paralleled elsewhere.

Just over twenty known chariot burials of the Arras series have not surprisingly attracted attention disproportionate to their numbers, from the earliest nineteenth century discoveries to the more recent finds since the 1970s. In the majority of the Yorkshire examples, the vehicle is dismantled, the flexed inhumation commonly being placed over the wheels and perhaps even covered with the inverted bodywork of the chariot. Burial of the chariot intact in the continental fashion is rare, though the wheel-slots recorded at Pexton Moor imply intact burial of the vehicle, and provision is sometimes made for the draught pole in an extension of the pit. The horse team is not included, so that the discovery of a pair of horses in the King's Barrow at Arras is exceptional; instead, horse-bits, terrets and items of horse-gear are included as a proxy for the team itself.

Among more recent discoveries of chariot burials, that from Ferry Fryston in west Yorkshire was intact rather than dismantled, though the excavators (Boyle et al., 2007) argued that the chariot was composite rather than a practical working vehicle. The barrow was sited between two Bronze Age barrows in a landscape that appears to have had ceremonial significance over a long period. In the primary ditch were deposits of cattle bones that could have been from a funerary feast, but higher in the ditch filling were quantities of animal remains dating from the second to fourth centuries AD, suggesting that the site may have been a focus of ritual activity more than half a millennium after the chariot burial itself (Boyle et al., 2007: 131–3).

Whether chariot burials are indicative of high social status, representing an élite among the warrior class, or whether chariot burial was accorded to individuals who had distinguished themselves in other roles is unclear, not least because the grave-goods accompanying chariot burials are limited beyond the equestrian and vehicle assemblage. Two of the three chariot

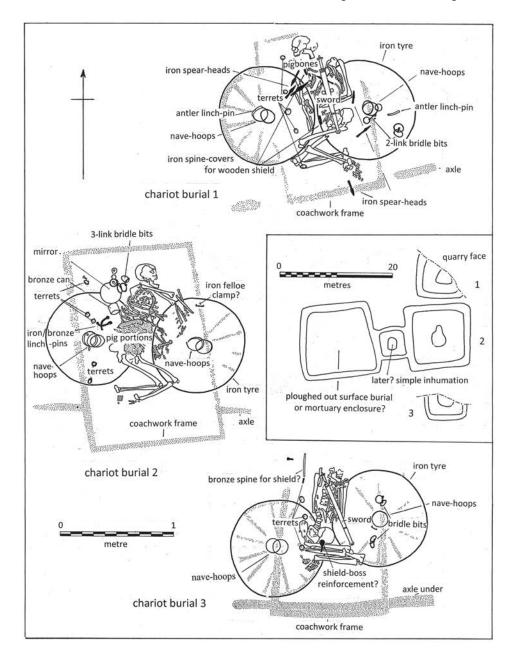


FIGURE 2.8 Wetwang Slack, Yorkshire, Chariot Burials 1–3 Source: Drawings by D. W. Harding, adapted from Dent (1985).

burials from Wetwang Slack (Figure 2.2, 8; Dent, 1985) included swords with decorated scabbards (Figure 2.2, 9) that might signify warrior status. The third included a mirror, and like the chariot burial from Wetwang Village that also included a mirror, is among the relatively few burials that have been identified as female reliably, rather than on the basis of artefact

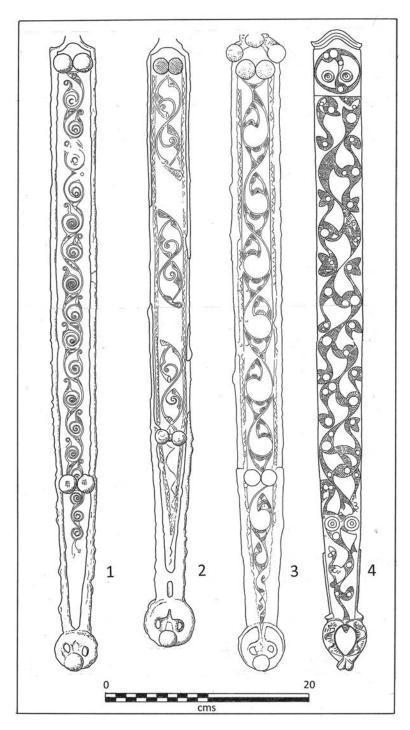


FIGURE 2.9 Decorated scabbards from Yorkshire warrior burials, 1, Wetwang 1; 2, Wetwang 3; 3, Kirkburn; 4, Bugthorpe

Source: Drawings by D. W. Harding, adapted from Stead (2006).

associations, as was commonly the practice in the past. Graves containing swords have conventionally be interpreted not simply as male, but as those of warriors, assuming that grave-goods were possessions reflecting the role of the deceased in life, rather than being tokens of respect deposited by family or dependents, or simply gifts to spirits of the otherworld (Harding, 2015). Where the deceased is buried with the full warrior panoply of sword, spear and shield, as at Grimthorpe, it may be perverse to argue to the contrary, but even the Kirkburn K3 burial assemblage, with elaborately decorated scabbard (Figure 2.2, 9) and multiple spear-heads, could have been ceremonial accoutrements rather than a practical set of weapons.

One particular curiosity of the Yorkshire cemeteries is the so-called 'spear ritual', in which multiple spears have apparently been thrust into the grave from various angles, in some cases like Garton Station 10, penetrating the leather bound wooden shield that had been placed over the body. Most recently, a warrior's burial at Pocklington was found to have been speared in this manner. Ethnographically, the dead are sometimes believed to harbour malevolent spirits that can threaten the surviving community, so that this ritual may have been intended as some form of 'ghost killing'.

Dating of the square-ditched barrow cemeteries and chariot burials remains contentious. Based upon artefactual evidence conventional dating has been broadly from early fourth to late second centuries BC. The earliest artefact associations were La Tène 1 brooches of Marzabotto type from Cowlam and Burton Fleming, and the paucity of late La Tène brooches suggests that the tradition did not extend into the first century BC. The decorated scabbards from Kirkburn K3 and from the two 'warrior' graves from Wetwang Slack all have essentially La Tène 1 open ring-chapes that should not be much later than fourth century. A recent programme of radiocarbon dating (Jay et al., 2012), however, based upon the Wetwang Slack cemetery, has suggested a shorter span of no more than 150 years, centred on the later third and early second centuries BC. If this proves to be generally applicable to the eastern Yorkshire cemeteries, then it will evidently have implications for demographic calculations and will raise issues regarding the nature of the funerary record for the earlier and later pre-Roman Iron Age phases. What has become clear is that, in and among the more distinctive square-ditched barrows and chariot burials, there are other less formal modes of disposal, including unenclosed pit burial, comparable to those that characterize much of the insular Iron Age elsewhere in Britain, that may have constituted the sub-stratum of funerary convention here as elsewhere (Harding, 2015).

The relationship of the Yorkshire burial tradition to continental counterparts has been described as a product of the cultural-historical paradigm and no longer relevant to contemporary archaeology (Giles, 2007a: 104). Similarities and subtle differences between the two regions nevertheless invite explanation, and the application of DNA analysis as at Pocklington has certainly revived the issue. The notably compact distribution of cemeteries in eastern Yorkshire encourages a presumption that they might reflect a distinct population group. Yet the fact that the chariots are generally dismantled rather than buried intact and the flexed posture of their inhumations both distinguish the Yorkshire chariot burials from the continental series. Equally, the artefactual assemblages include no convincing imports or continental types. Distinctive types like involuted brooches, with their swivel-mechanism replacing the spring of earlier La Tène types, are decidedly insular and are novel technical devices found elsewhere in southern Britain from the fourth century. The pottery series from the Yorkshire graves furthermore is plain and coarse (Figure 2.10), quite unlike early La Tène fashions of the Champagne, where wheel-thrown vessels finely ornamented with geometric or curvilinear designs are not uncommon.

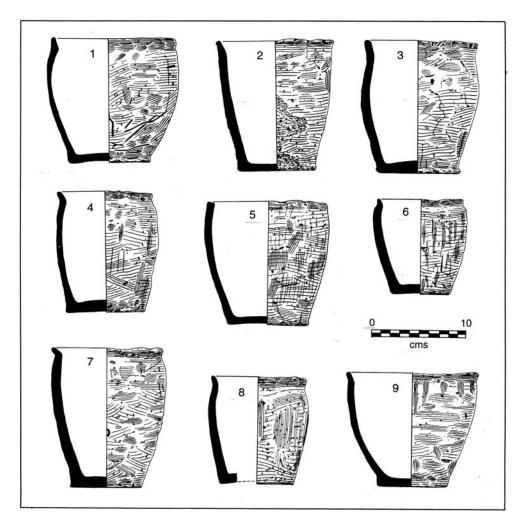


FIGURE 2.10 Pottery from eastern Yorkshire, 1–5, Danes Graves; 6–8, Eastburn; 9, Riggs Farm *Source*: Drawings by A. J. Challis, reproduced by kind permission.

Apparent similarities between the construction of iron tyres of the Yorkshire chariots and some from the region around Paris has revived the idea (Halkon, 2013) of a possible link between Yorkshire Parisi, first recorded in Ptolemy's *Geography*, and the Gaulish Parisii, who were a political entity in the Paris region by Caesar's time. This link had been discounted by Hawkes and Jope in the late 1950s and treated with increasing caution by Stead (1965, 1979) on the grounds that the documentary evidence for both was too late to be associated reliably with much earlier Iron Age distributions. The point was also noted that the only town of the Yorkshire Parisi listed by Ptolemy, *Petuaria*, identified by inscription as Brough-on-Humber, was peripheral to the cemetery distribution, though this would be less surprising if, as Halkon (2011) has argued, the power and prestige of the east Yorkshire élite was based upon control of iron production, notably in the Foulness valley, and the maintenance of external contacts via the Humber estuary.

The marked contrast between the distinctive 'Arras' cemeteries and the absence of any regular funerary traditions elsewhere in northern England still requires explanation, and, whilst the archaeological agenda has shifted away from cultural-historical interpretations and simplistic notions of colonization from continental Europe, we need not exclude interaction between kin-related groups, diplomatic, social, economic or even 'missionary' (Anthoons, 2007).

Investigation of settlement sites contemporary with the east Yorkshire cemeteries has been comparatively neglected until recent times, with the notable exception of Wetwang Slack (Dent, 1982), where the adjacent open settlement of around a hundred round-houses reflected a protracted period of occupation from the middle Iron Age to the Roman period. The settlement, extending over a distance of 1.5 kilometres, was essentially unenclosed, sometimes with single houses, sometimes clusters of two or three. Several small rectilinear palisaded or ditched enclosures, some containing just a single central round-house, may signify different occupancy or function from their unenclosed counterparts, but there was no obvious distinction in terms of size of building or method of construction. The houses were of either posthole or ring-groove construction, commonly with south-east facing porched entrances. Together with West Heslerton and North Cave (Dent, 1989), they indicate that open settlement was an important component of the Iron Age landscape.

What distinguishes the landscape of the Yorkshire Wolds is the extent and complexity of monumental linear earthworks, giving a perhaps artificial impression of an ordered system of land boundaries and divisions. In reality, as Giles (2007a) has argued, they represent a cumulative process of construction over a protracted period of time, with numerous examples of re-digging and re-alignment of linear works (Powlesland, 1988). Double-ditched earthworks could evidently have served as cattle drove-ways, essential in a mixed agricultural economy. Larger-scale earthworks can be multiple with limited access between them, as if intended to afford transit between defined blocks of land. Some linear boundaries incorporate pitalignments, though quite how pit-alignments functioned as barriers remains unclear. They doubtless represented 'long-held rights of access to grazing pasture, cultivable soil and water resources' (Powlesland, 1988: 107), previously based on memory and oral tradition that was communally respected and only latterly reinforced physically by monumental earthworks. Unlike some of the hillforts of Wessex, the linear earthworks of the Wolds are not obviously aligned on or related to particular focal points, though in the case of Paddock Hill, Thwing (Figure 2.5), it is hard to see the convergence of three major earthworks, presumably later than the Late Bronze Age-earliest Iron Age ring-work, as coincidental. The emergence of linear earthworks in the landscape from the time when the formal cemeteries began around the fourth century BC may therefore represent a formalization of the communities' entitlement in the landscape.

Elsewhere in Iron Age Britain, that statement of communal identity is perhaps best witnessed in the construction of hillforts. Some years ago Bevan (1999b: 123) observed that the 'most notable differences are the presence of square barrow burials and absence of hillforts in eastern Yorkshire', a contrast which archaeologists have generally not regarded as causally related. Grimthorpe is an obvious exception, though its circular plan and early date might suggest a different role from hillforts elsewhere. Crop-mark sites like those at Greenlands, Rudston and Driffield Wold, Nafferton all bear a resemblance in plan to small hillforts, but what is lacking in Yorkshire is any site that might be a contender for Cunliffe's Wessex class of 'developed' hillfort that might have served as central places within a resource controlling and redistributing economic system.

42 The earlier Iron Age

This pattern of landscape demarcation culminated in the 'ladder settlements' of the later pre-Roman Iron Age, characterized by rectilinear habitation enclosures and associated fields aligned along trackways (Giles, 2007b). In some instances, such as Bell Slack, the 'ladder settlements' actually overlie earlier cemeteries of square-ditched barrows. The demise of the cemeteries evidently took place by the first century BC, with the new settlements developing around the same time and continuing into the period of Roman occupation. What, then, accounts for the disappearance of the cemeteries from archaeological visibility? Were we able to resolve this question, we might be closer to understanding the social and ideological rationale that prompted their appearance in the first place.

Haselgrove (1984) suggested that the introduction of formal rites for the disposal of the dead could have been triggered by social stress resulting from increased pressure on land and resources and that conversely the success of agricultural intensification strategies may have resulted in their abandonment. The adoption of a novel rite of continental derivation, and its subsequent demise, might still most plausibly be explained by a change in the ruling élite, or by the 'conversion' of a ruling élite to a novel convention through diplomatic or commercial missionaries.

The Humber to the Tees

The Humberhead levels are not noted for evidence of prehistoric settlement, being notoriously unproductive in terms of remote sensing surveys. Nevertheless, sites are known, such as the late pre-Roman and Roman Iron Age settlement at Topham Farm, Sykehouse (Roberts, 2003), where houses are distinguished by ring-gullies, no doubt for drainage. On the edge of the Humber wetlands, the paired enclosures at Sutton Common (Figure 2.11; van de Noort et al., 2007) are of special interest, hardly conforming in location or layout to the expectations of a 'hillfort' in Wessex terms. In the earlier phase of occupation, the interior of the main enclosure appears to have been dominated by four- and six-posters, sometimes in alignment as in Wessex hillforts like Danebury, but hardly in the same density or concentrations. Communal storage would be a logical function, and in the wetland context of Sutton Common, the absence of complementary pit storage is hardly surprising. In the later phase of occupation, dated from the fourth to second centuries BC, a number of small enclosures termed 'mortuary rings' by the excavators were found aligned down the western side of the interior. Their function was not determined beyond question, but their use as mortuary enclosures or in some way related to funerary rituals was plausibly argued. Sutton Common was evidently a communal enclosure, though hardly a hillfort in the conventional sense (Harding, 2012).

Until the 1990s, knowledge of settlement archaeology through the Vale of York was limited, a notable exception being Dalton Parlours, south of Wetherby (Wrathmell and Nicholson, 1990). Here, a long-lived Iron Age settlement was characterized initially by a sub-rectangular enclosure containing successive round-houses, to which were aggregated additional, irregular enclosures, also with round-houses, over an uncertain time-span covering the second half of the first millennium BC. Beyond the settlement area were surrounding fields, linear dykes and trackways, some of which may be expected to have had their origins in the Iron Age. In the later second or third centuries AD, the site was occupied by a suite of Roman buildings.

The Iron Age round-houses, of both ring-groove and posthole construction, mostly range in size from 9 to 11 metres in diameter. Some are unusual in having two entrances, either diametrically opposed or nearly so in most cases (Figure 2.12, 1–2). Though two entrances have

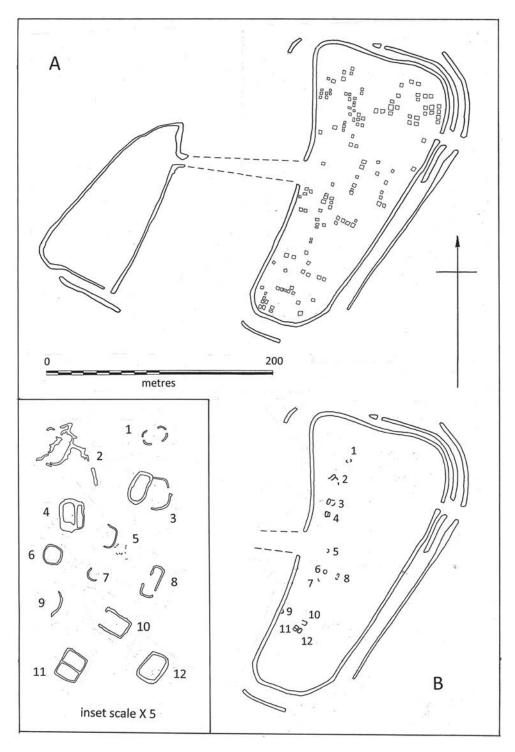


FIGURE 2.11 Sutton Common, Yorkshire, plan of structural layout in earlier and later phases *Source*: Drawings by D. W. Harding, adapted from van der Noort *et al.* (2007).

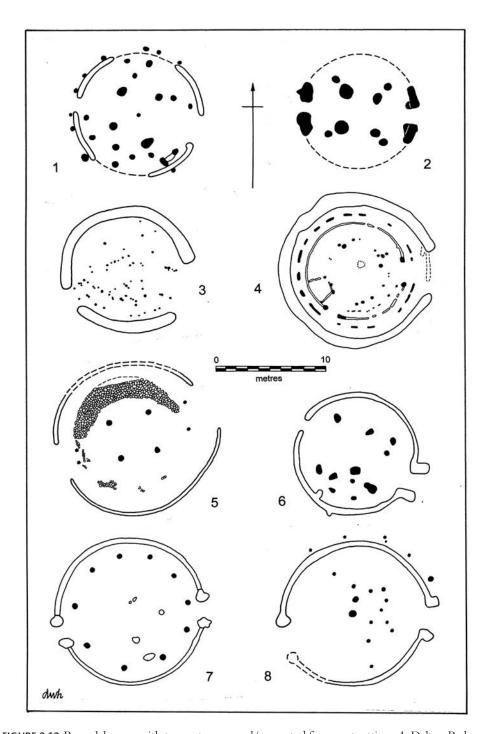


FIGURE 2.12 Round-houses with two entrances and/or central four-post settings, 1, Dalton Parlours, Yorkshire, House 3; 2, Dalton Parlours, Yorkshire, House 2; 3, Roxby Moor, Yorkshire, House 1; 4, Roxby Moor, Yorkshire, House 2; 5, Wolsty Hall, Cumbria; 6, Hayknowes, Dumfriesshire; 7, Rispain Camp, Wigtownshire; 8, Carronbridge, Dumfriesshire

Source: Drawings by D. W. Harding, adapted from Wrathmell and Nicholson (1990), Inman et al. (1985), Blake (1959), Gregory (2001), Haggarty and Haggarty (1983), Johnston (1994).

been recognized elsewhere, the pattern is not as common as might be expected, considering the obvious advantages in terms of internal light or shelter from wind. Nevertheless, it suggests that the orientation of round-house doorways may have been governed more by practical than cosmological considerations (Oswald, 1997). Round-house 5 with two entrances (Wrathmell and Nicholson, 1990: Figure 2.19) was larger than average. At 17 metres, it would have enjoyed up to three times the internal floor area of the smaller houses, discounting any upper or mezzanine capacity, perhaps an instance of status being reflected in differential house size. It appears also to be among the earliest structures on the site, and unenclosed, though its continuing existence into later phases is implied by the way that the adjacent ditch appears to divert around it. The Dalton Parlours sequence thus appears to indicate a shift in social pattern from the single large round-house to smaller round-houses within their individual enclosures. Where more than one house plan was recovered within an enclosure there is no positive evidence of contemporaneity, and in some cases clear evidence from overlapping plans that they were not in simultaneous use. The existence of separate but apparently contemporary house-enclosures, however, implies social units in which domestic space and perhaps land-holding were separately identified rather than communal.

Houses with two entrances were also present in the eastern and western settlements at Catterick in north Yorkshire (Moloney et al., 2003). Dating was based upon thermoluminescent analysis of pottery sherds from the round-houses, which indicated a middle pre-Roman Iron Age occupation, though structurally the houses and enclosure represent a sequence of occupational episodes. The ditches are wider and deeper than normal ring-groove foundations for an outer wall, and from the plan of Structure 8005, with its looped annexe in the eastern group of buildings, look much more like drainage gullies around the eaves of buildings located within the ditches. In the case of Structure 8004, it is conceivable that the roof rafters were bedded in a low ring-bank formed by the upcast from the ring-ditch. The variant with two entrances, predominantly east/south-east and west/south-west, again suggests that entrance orientation was determined by practicalities of daylight and prevailing winds.

The deficiency in the settlement record has been significantly redressed over a period of twenty years by extensive upgrading of the A1 road network in west, south and north Yorkshire. Despite the now-routine application of radiocarbon dating the 'archaeological invisibility of the Iron Age in terms of material culture remains a problem in establishing the date of excavated settlements' (Brown et al., 2007: 46), and one which is not simply the result of a largely aceramic tradition until the latest pre-Roman Iron Age. The pattern of sub-rectilinear enclosures linked to linear landscape features is one that only becomes established in the midto later pre-Roman Iron Age, so that the predominantly open settlements of earlier periods are less readily detected.

In addition to round-houses, these more recently discovered settlements, perhaps surprisingly, include elements not unlike those of the classic settlements of southern England, namely, pits and four-post structures. Site M in the Castle Hills settlement at Micklefield (Figure 2.13; Brown et al., 2007) was not a simple, enclosed settlement but extended along a major linear ditch that was itself part of a wider network. There were two round-houses, at the southern and northern limits of the settlement respectively. The southern was defined by a ring-groove 11 metres in diameter, standing some 2 metres inside a larger ring-ditch that was probably a soak-away to take rainwater from overhanging eaves. The northern structure had been severely eroded, two surviving arcs of gully defining an oval area some 9 metres across at widest. Between the two was a concentration of more than 300 pits confined to the north-east side of

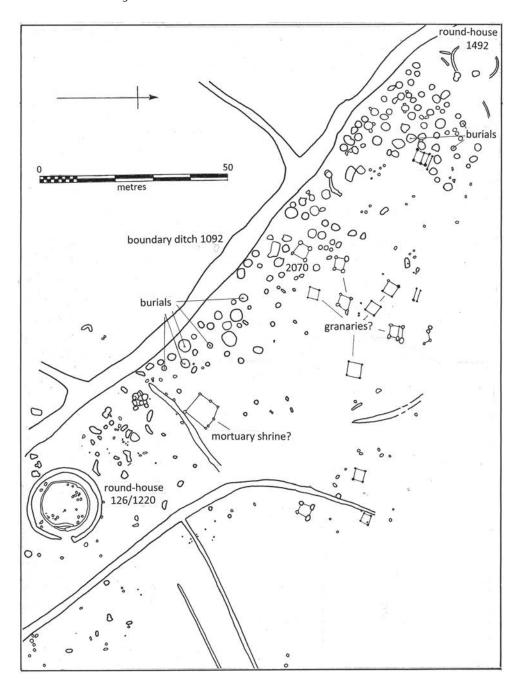


FIGURE 2.13 Site M Micklefield, west Yorkshire

Source: Drawing by D. W. Harding, adapted from Brown et al. (2007).

the major linear ditch, the area to the south-west presumably being paddocks or arable fields. Some of these pits, despite truncation, were up to 2 metres in depth, as deep as any in Wessex hillforts, though most were significantly smaller. Their purpose remains unclear, though three near the northern round-house and five closer to the southern contained crouched burials,

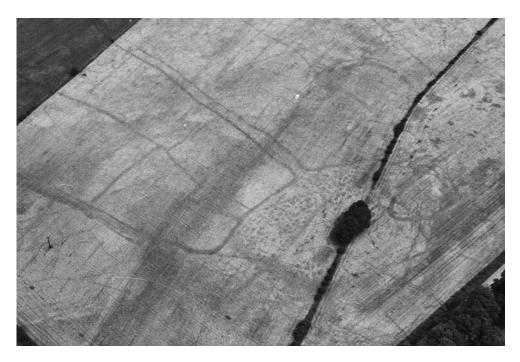


FIGURE 2.14 Ledston, west Yorkshire, air-photograph of enclosures and pits Source: Copyright Historic England Archive (Derrick Riley collection).

some with associated artefacts, suggesting small burial grounds of two nuclear family units. The southern group was separated from the round-house by a gully that probably supported a fence, while the alignment of pits at the northern end suggested the possible existence of a similar boundary that had been destroyed by mechanical stripping. Adjacent to the pits were clusters of four-posters, one of which, Posthole 2070, yielded a massive quantity of charred grain. Though not conclusive, this certainly suggests their function as granaries, though the use of the pits as underground grain silos seems less probable this far north. Occasional pits, as at Dalton Parlours and elsewhere, may have fulfilled a variety of domestic, agricultural or ritual purposes, but where concentrations are found, storage on a communal scale seems possible. The issues have been discussed in the context of the pit group at Ledston (Figure 2.14; Roberts, 2005), where some 285 pits were located adjacent to a network of fields divided by parallel-ditched trackways. The layout of these settlements implies a mixed agricultural regime in which cereal production was an important component, but in the case of neither Site M nor Ledston was there any substantial protective enclosure of the pit complexes to suggest that these sites fulfilled the function of a central repository for storage and redistribution, comparable to the southern hillforts.

One of the most distinctive sites in west Yorkshire in its structural layout is Moss Carr Site 1 (Figure 2.15; Roberts and Richardson, 2002), where two adjacent and broadly contemporary enclosures both contained a succession of circular buildings. The relationship between the two enclosures is unclear, but radiocarbon dates indicate that both were in occupation in the earlier Iron Age, dating which is consistent with the presence of saddle as well as beehive querns and a small, translucent blue glass bead of Guido's Group 6 from the ditch of Enclosure B. An initial issue of interpretation again is whether the curvilinear trenches all represent wall foundations or drip-trenches beneath overhanging eaves. No actual post emplacements appear

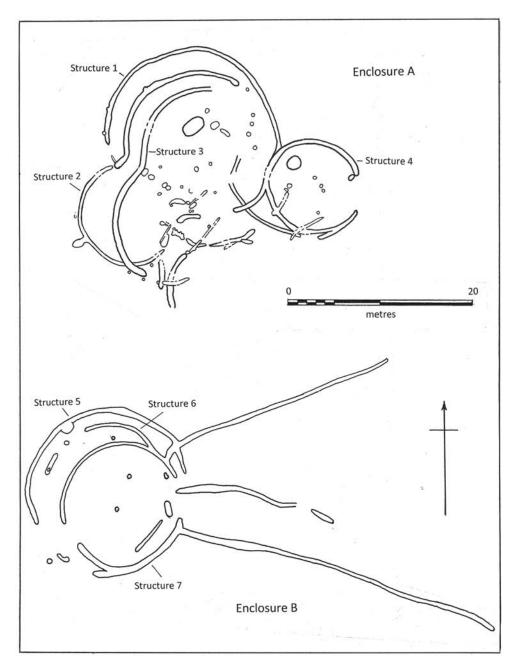


FIGURE 2.15 Moss Carr, west Yorkshire, enclosure plans

Source: Drawings by D. W. Harding, adapted from Roberts and Richardson (2002).

to have survived, and the largest of the circles, Structure 1 in Enclosure A and Structure 5 in Enclosure B, were both around 18 metres in diameter, on the upper limits of normal round-house construction. The sequence in Enclosure A appears to have included both circular and

figure-of-eight plans, the latter a form of building that is well-known in the later Iron Age of Northern Britain and Ireland, but which is abnormal in the earlier Iron Age. Enclosure B likewise had a sequence of superimposed ring-trenches, though Structure 6 may in fact have been part of the same building as the concentric Structure 5, with which it shares very nearly the proportions of some of the major southern English round-houses (Harding, 2009: 63). An unusual feature of this complex, however, is the 'avenue' radiating from its eastern entrance in its later pre-Roman Iron Age phase outwards towards the enclosure perimeter, or, in the case of earlier Iron Age gully 6107 leading directly to the enclosure entrance. On a larger scale, antennae ditches are known radiating from enclosure entrances at Little Woodbury and Gussage All Saints, for example, where it is commonly supposed that they provided a means of channelling stock into the enclosure. But they are not readily paralleled attached to internal buildings, though the examples cited by the excavators from Dun Ailinne, Co. Kildare (Johnston and Wailes, 2007), and Navan fort, Co. Armagh (Waterman, 1997) are particularly intriguing on account of their association there with figure-of-eight ground-plans. The implications of the Irish parallels, however, would be that the flanking fences controlled processional access to buildings of special purpose, for which at Moss Carr there is otherwise no archaeological evidence.

The North York Moors

The field monuments and settlement sites of the North York Moors, including linear earthwork boundaries (Spratt, 1981), have been investigated over a number of years, mainly by locally sponsored research projects. The high moors in later prehistory were doubtless used as summer pasture for communities whose permanent settlements were on lower-lying land, in the Vale of York or on the Tabular Hills above the Vale of Pickering. The few hillforts in the region - Eston Nab, Sutton Bank and Boltby Scar - are located peripherally to the high moors but pivotally between the high pastures and lower-lying settlements and agricultural land. The distribution of beehive querns (Hayes et al., 1980) broadly corresponds to areas of good agricultural land.

Dating, as ever, remains tentative, though the negative evidence of absence of material of Romano-British date, as at Percy Rigg, Kildale (Close, 1972), in an area where numerous settlements have evidence of occupation in the Roman period, allows the assumption of earlier occupation. At Eston Nab, the presence of a palisaded enclosure preceding a rampart and ditch, together with the pottery assemblage from the site, would be consistent with the later Bronze Age to Iron Age dating proposed by the excavator, and now offers the best local model for the late Bronze Age and earliest Iron Age material culture from the region (Vyner, 1988). The discovery beneath the rampart at Boltby Scar of gold, basket-shaped 'ear-rings', dateable between the Beaker period and later Bronze Age (Challis and Harding, 1975: 111), provides no more than a terminus post quem for the construction of its defences. Spratt's analysis (1982) of the Cleave Dyke system, with which the Boltby fort was almost certainly an integral part, therefore depended perhaps a little too heavily upon the dating of the fort as evidence of the date of the dykes. Nevertheless, agricultural re-organization and territorial demarcation of the earlier first millennium BC would afford the most appropriate context for this remarkable series of field monuments. The principal dyke, or discontinuous series of dykes, is aligned close to the north-south watershed of the Hambleton Hills, with branches extending from it periodically towards the heads of tributary valleys of the Rye to the east. The system is evidently designed

to create land divisions in which both upland and lowland, water supply and peat deposits were available. The main dyke is not evidently aligned in relation to the later Hambleton Street; instead, it shows a marked correlation to the liminal distribution of Bronze Age barrows, suggesting that it was a development out of an earlier, Bronze Age system of land division. It was evidently of more than one phase of construction, and research, based upon air-photographic evidence (Spratt and White, 1986), indicated that the Cleave Dyke in its earlier phase was based upon a pit-alignment rather than a continuous ditch. The longevity of use of the Boltby promontory would seem entirely consistent with this view.

A programme of excavation in 2009 and 2011 (Powlesland, 2011) clarified the sequence of structures in the entrance at Boltby Scar, where the inturned palisaded entrance was replaced by a timber-framed passage through the subsequent rampart and ditch. Despite severe truncation from bulldozing in 1961, it was possible to establish that the rampart was essentially a dump, revetted at its front by turves and at its rear base only by occasional stones. The final four pits of the Cleave Dyke pit-alignment were also excavated in the hope of recovering environmental and dating evidence, but proved unproductive.

To the east of the Cleave Dyke, on the Tabular Hills flanking the north side of the Vale of Pickering, is an even more extensive network of dykes (Spratt, 1989). The principal dykes run along the upper sides or into the heads of valleys, with cross-ridge dykes, possibly of later Iron Age or early Roman date, extending across spurs and valley heads. Dating is notoriously difficult to determine, and except for the dykes on Levisham Moor, which stratigraphically precede the Iron Age and Roman native settlement, remains inconclusive. As with the Hambleton Hills system, the relationship between the dykes and earlier Bronze Age cairnfields and barrows suggests the probability of their origins in the later second millennium, though there is evidence of later re-use. The effect of the system, doubtless supplemented by the natural boundaries provided by topography, is to create a series of territories, or 'estates' in Spratt's terminology, each with its share of the terrain resources, and conforming quite closely to the surviving townships, except where obvious changes have been imposed upon the older system in Medieval times. There is no direct connection between the Tabular Hills system and the dyke-systems of the northern Wolds, to the south of the Vale of Pickering, though the two systems might well have been in broadly contemporaneous use in the first millennium BC. It should also be noted that square-ditched barrows do occur on the north side of the Vale of Pickering, and two chariot burials, at Pexton Moor and Cawthorn Camps, are within the south-western concentration of dykes on the limestone hills. As regards the function of the dyke-systems, current opinion favours their interpretation as territorial divisions, perhaps of communities for whom pastoralism was an important but not necessarily dominant element in the economy. Though the soils on the corallian limestone of the Tabular Hills are suitable for arable cultivation, enclosures in proximity to the dyke-systems might argue for pastoral activities. The major dykes of the Scamridge system, on the other hand, are of a different scale order and would have required a much greater effort and resource for their construction. Spratt saw them as tribal or political boundaries in the first instance, but their subsequent modification indicated their adaptation into the wider and more general system of 'estate' boundaries.

Levisham Moor (Hayes, 1983) shows a similar pattern of dykes with barrows or cairnfields of presumptively Bronze Age date on the higher moors. This important complex of earthworks includes enclosures that were evidently used for domestic occupation, some that possibly served as paddocks, and one that certainly was the focus of an ironworking industry. Some of these may represent infilling, secondary to the establishment of the basic dyke-system.

In close proximity were fields of 'brickwork' pattern defined by stony banks that could well be the remnants of an earlier agricultural system, later obliterated by the intrusion of Medieval rig-and-furrow. The site is generally assigned to the later Iron Age and Romano-British periods. Enclosure A produced Roman pottery, and Enclosure B yielded a fragment of late first- or second-century glass bangle. By contrast, the absence of definitively Roman pottery from Enclosures C and D argues strongly for an earlier occupation of these sites. Hayes recognized that the 'native' forms could have been in fashion from the third century BC to the later Roman period. On the basis of the pottery forms alone, there seems to be no good reason for denying the possibility that this complex settlement was in use from the early first millennium, when the dyke-system was first established. Once again dating has inevitably been retarded because the only diagnostic types are those from the site's Roman occupational horizon. It is simply not credible that these sites were not in use in the early and middle Iron Age, just because the archaeologically diagnostic material acts as a magnet, polarizing our attention on either the later Bronze Age or Romano-British phases.

Along the northern fringes of the North York Moors, among numerous settlements of the Roman native phase, are several sites for which an earlier Iron Age date is probable. Principal among these is the nuclear settlement at Percy Rigg, Kildale (Close, 1972), essentially an unenclosed cluster of round-houses, though perhaps located within a larger terrain enclosure. Its five principal houses almost certainly represent two or three phases of construction, of which the latest have stone wall-foundations surviving to several courses. Each house was surrounded by a drainage trench or a network of trenches that may have embraced ancillary working areas. The houses, averaging 6 or 7 metres in internal diameter, had thick stone walls and paved floors, generally with a central hearth. Their stone foundations might have prompted their dating to the Roman period, but the coarse pottery from the site, the predominance of saddle querns over a single rotary quern, and the absence of diagnostically Roman material, argues for an earlier occupation. In fact, if the querns are indicative of arable agriculture, as opposed to just cereal processing, then it is hard to imagine that farming at 270 metres would have been viable as late as the period to which the site has conventionally been assigned. A sub-square enclosure a little over a mile to the west on Great Ayton Moor (Tinkler and Spratt, 1978), by contrast, was regarded as pastoral in purpose; its enclosing bank with internal ditch is certainly suggestive of containment rather than exclusion, and the absence of querns may be significant. The single structure uncovered within the enclosure was oval in plan, with timber posts that could have supported a ridge-roof. The wall-foundations were of stone, with stone paving and central hearth, but otherwise the structural similarities with Percy Rigg are not close. Nor are the ceramic assemblages as close as might be expected in such proximity, and it may be that they belong to quite different periods of settlement, though both probably in a pre-Roman horizon.

Further to the east, the settlement on Roxby Moor (Inman et al., 1985) included both enclosed and unenclosed houses, again with surrounding ditches or gullies, the purpose of which appeared to be for drainage. Again a notable feature of several house plans was a secondary entrance (Figure 2.12, 3-4), indicated either by a second break in the surrounding ditch or by the presence of door-posts. The orientation of the principal entrance was generally to the east, with the subordinate entrance between west and south-west. House 2 showed singular detail in its plan. The main wall was built of stakes, bedded into a ring-groove, continuous except for its two doorways, and describing a circle nearly 9 metres in diameter. More substantial postholes in the interior could have retained earth-fast, weight-bearing timbers to support

the roof. Beyond the stake-wall was a further circle of slots, which the excavator suggested, on account of their squared cross-section, may have held sill-beams to provide external securing of eaves-supports or the heel of the main rafters themselves. Adjacent to the second entrance and projecting inwards from the stake-wall were two further lengths of gully, possibly part of some internal fixture but, in any event, indicative of radial division of internal space. The radial division of internal space is doubtless integral to circular architecture, but it is more expressly manifest archaeologically in the stone buildings of the Atlantic Scottish Iron Age.

The Roxby settlement, truncated by later agriculture, probably spanned a protracted period of time, from the pre-Roman Iron Age, into the opening centuries AD at least. In its pre-Roman phase, it appears to have been for permanent rather than seasonal occupation by a community formerly engaged in arable cultivation as well as pastoralism, in view of the pattern of cross ploughing underlying House 1. Ironworking was indicated by a bowl furnace in House 3 and a smithing hearth in House 2, though in view of the relatively small quantities of debris the excavator was inclined to view this as a repair–workshop rather than a large–scale local industry. Metalworking in this instance therefore need not be a measure of high status.

Specialist crafts or industries were also indicated at Street House, Loftus, on the Cleveland coast (Sherlock 2012: 64–6; Sherlock and Vyner, 2013), in this case most obviously salt production but with some evidence for jetworking as well. Originally an enclosed settlement, Street House became an open settlement from the mid-first century BC, thereafter continuing into the early second century AD. Its round-houses were characterized by ring-groove construction, in the case of the multi-phased House 3 (Figure 2.16, 4) having an external penannular drainage gully, the layout being very similar in plan and proportions to the principal house at Melsonby (Figure 2.16, 1; Fitts *et al.*, 1999). Salt-evaporation hearths from Street House contained fragments of briquetage, and the evidence suggests a thriving local industry in the north-east comparable to that of Lincolnshire from the first century BC to around AD 100.

Tees to Northumberland coastal plain

Longevity in the pattern of land-use was abundantly demonstrated in Upper Teesdale, notably by fieldwork in the 1970s and '80s by Coggins and Fairless (Coggins, 1985, 1986). Settlements ranged in date from the later Middle Bronze Age at Bracken Rigg to the eighth century AD at Simy Folds, with early Iron Age occupation the least positively demonstrated. It seems probable, nevertheless, that the homestead at Forcegarth Pasture North (Fairless and Coggins, 1980) originated in the later first millennium BC, since there was no Roman material present on this site, in contrast to the neighbouring Forcegarth Pasture South (Fairless and Coggins, 1986). Within the enclosure a central house cluster of three conjoined rooms could have been spanned by a single roof. Unlike the Bracken Rigg houses, whose wall foundations were no more than a spread of stony rubble, these walls were properly coursed. Two internal hearths yielded evidence of ironworking. There was a further separate round-house within the enclosure. Two further round-houses just outside may have resulted from expansion of the settlement, or perhaps were part of an earlier, unenclosed phase of occupation. On the south side of the valley, extensive linear dykes and field enclosures suggest an ordered system of landscape division, probably dating from the prehistoric period, though modified in later generations. Palaeo-botanical evidence also indicated cereal cultivation from the Bronze Age, though pastoralism was probably always the dominant element in the economy.

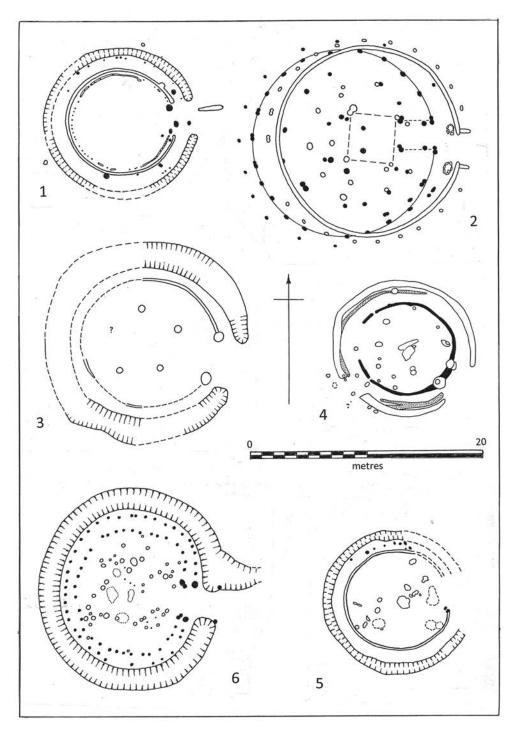


FIGURE 2.16 Ring-groove and posthole round-houses in north-east England, 1, Melsonby, north Yorkshire; 2, West Brandon, Co. Durham; 3, Thorpe Thewles, Teesside; 4, Street House, Loftus, Cleveland; 5, South Shields, Tyneside; 6, Burradon, Northumberland

Source: Drawings by D. W. Harding, adapted from Fitts et al. (1999), Jobey (1962), Heslop (1987), Sherlock and Vyner (2013), Hodgson et al. (2001), Jobey (1970)

54 The earlier Iron Age

The Tees-Tyne region is notably devoid of hillforts, but from the 1970s, air-photography identified a number of rectilinear enclosed homesteads that were assumed to be of Iron Age date (Harding, 1979). These typically contained a single, centrally located large round-house that was presumably occupied by an extended family unit. Among older excavations, the classic site of West Brandon in County Durham (Jobey, 1962) was attributed to the Iron Age, in the absence of radiocarbon dates or a diagnostic material assemblage, largely on the basis that there were no Roman finds, and because the querns were saddle querns, suggesting a dating earlier than the last quarter of the first millennium BC. The main enclosure (Figure 2.17, 1) displayed two major constructional phases, the first of twin-palisaded construction, the second a single bank and ditch. That the two were successive rather than contemporary elements of a more complex enclosure was indicated by the offset alignment of their entrances. Palisades are hardly chronologically diagnostic, but they are widely represented in the Borders in the mid-first millennium BC, so that the enclosed settlement at West Brandon need not have been as late as Jobey's cautious estimate. A smaller post-ring round-house in the south-east corner of the site, external to the palisaded enclosure and truncated by its ditched successor, suggests an earlier unenclosed phase of occupation in the vicinity and was tentatively assigned by the excavator to the later Bronze Age.

The central round-house (Figure 2.16, 2), with its successive plans marginally offset, was one of the largest known at the time, with an overall diameter of nearly 18 metres. It is also unusual in having in its primary phase no less than four concentric circles of postholes. Of these, the second largest circle was interpreted as the external wall of the house, corresponding to the continuous ring-groove of the Phase 2 plan. Within this was the main weight-bearing circle of postholes, conforming to the proportional range of southern British round-house geometry (Harding, 2009). The innermost ring of House A could relate to support of a central tower projecting through the roof-line, which would rest against it, itself roofed by an independent cone of thatch. This would overcome the need for rafters of excessive length (and girth) for houses of larger than standard diameters. Alternatively, or additionally, the innermost post-circle could have supported an upper or mezzanine floor, without which the internal area afforded by such a high roof would be largely wasted. In House B, a central setting of four posts, distinguished by their greater depth, could have served a similar function. Notwithstanding the Little Woodbury model, central roof support is not essential for houses up to 15 metres or thereabouts in diameter, though four-posters would have been an asset like a builder's scaffolding frame in the constructional stages and could have been used to support an upper floor or internal fittings around the hearth thereafter. Like a modern scaffolding tower, this frame could have been free-standing, so that it need not leave earth-fast postholes. In both phases at West Brandon, an outermost ring of posts was interpreted by the excavator as eaves-support. Integral external buttressing in this manner was hardly necessary, though the thatched eaves might have required protection from livestock.

West Brandon, together with the comparable single homestead at West House, Coxhoe (Haselgrove and Allon, 1982), both lie along the edge of the 125 metre contour, where, as Haselgrove (1982a) argued, they would have been ideally located to exploit the lower pastures and water sources of the Wear valley for cattle raising, but retaining access to upland grazing for sheep. It is therefore conceivable that the abandonment or relocation of these settlements was coincident with a period of agricultural intensification in the last centuries before the Roman occupation, when cereal production achieved greater prominence in the lower margins of the Tees and Wear, whilst in the Pennine valleys seasonal pastoral sites may have been

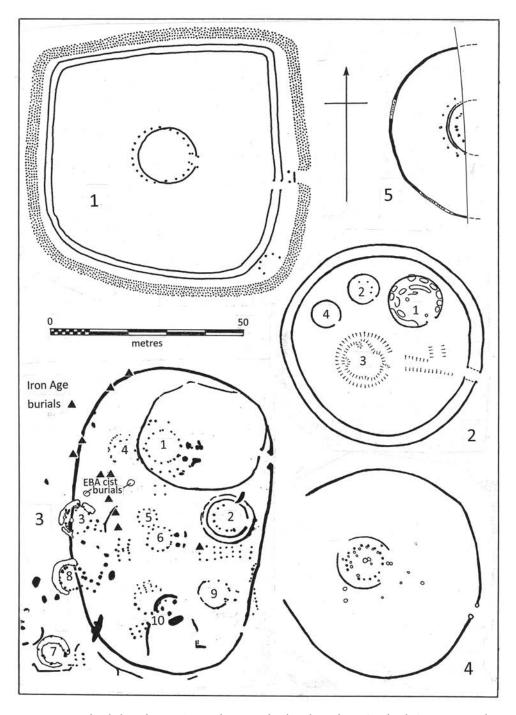


FIGURE 2.17 Palisaded enclosures in northern England and southern Scotland: 1, West Brandon, Co. Durham; 2, High Knowes, Alnham, Northumberland; 3, Dryburn Bridge, East Lothian; 4, Aird Quarry, Castle Kennedy, Wigtownshire; 5, Lower Greenyards, Bannockburn, Stirlingshire

Source: Drawings by D. W. Harding, adapted from Jobey (1962), Jobey and Tait (1966), Triscott (1982) and Dunwell (2007), Cook (2006), Rideout (1996).

exploited on a more regular basis. This process of agricultural intensification, or extensification, would be consistent both with palynological evidence for an increase in forest clearance in the later pre-Roman Iron Age, and for innovation in cereal cultivation in parts of northeastern England at this period.

Van der Veen's (1992) analysis of cereals from excavated sites in the Tees lowlands on the one hand, and from a group of sites north of the Tyne on the other, suggested that two significantly different crop husbandry regimes were being practised. Her Group A sites, north of the Tyne, yielded predominantly emmer, with barley and some spelt wheat; the weed assemblage contained annuals rather than perennials, suggesting a considerable degree of soil disturbance, and nitrogen levels were high, indicative of manuring to enhance fertility. Group B, in the Tees valley, produced no emmer but consisted predominantly of spelt with barley, on soils which were low in nitrogen, suggesting more extensive cropping, and in association with perennials as well as annual weeds, suggesting a relatively lower degree of soil disturbance. Research since the Stanwick excavations of the 1980s has broadly endorsed this distinction (van der Veen, 2016), suggesting that it was a measure of the extent to which animal husbandry was integrated into the agricultural regime. Excavation of larger enclosed sites of south-east Northumberland, notably Blagdon Park 2 and East and West Brunton (Hodgson et al., 2012), showed that these sites exploited spelt wheat and hulled barley, thereby pushing the boundary of Group B cultivation further north. On the other hand, excavations in the East Lothian plain has shown the continuing predominance there of a Group A regime.

The relative merits of emmer and spelt wheat in terms of yields have not been closely documented experimentally, but there is evidence that the increasing dominance of spelt in the later first millennium BC was because it proved hardier, more disease resistant and more tolerant of a range of soil types than emmer. It was tentatively suggested that the cultivation of the Group A sites might have been by spade and hoe, in contrast to plough agriculture practised in the Group B regime. The intensification of agriculture in the later pre-Roman Iron Age, witnessed in different degrees in north-eastern England, was evidently not prompted initially by the Roman occupation, though the demands of the Roman army on the northern frontier would certainly have had its impact on the local economy. The causes were doubtless social as well as economic, with population expansion resulting in a need for greater agricultural production. Agricultural intensification in turn may have induced a decline in soil fertility and yields, prompting diversification in agricultural practice. Pastoralism would have been a major if not the dominant component in the agricultural economy of much of northern England, and even in a fertile belt like the Tyne-Tees region, cattle, with sheep, remained an important component of the faunal assemblages at Catcote, Hartlepool (Long, 1988), at Coxhoe and at Stanwick. There is nevertheless very little evidence for field-systems in association with the homestead settlements of the Tyne-Tees region.

The site at Thorpe Thewles (Heslop, 1987) demonstrated a complex sequence of occupation. After ephemeral beginnings, the principal enclosed phase (Phase 2) was not unlike the rectangular homestead model, with a single large house at its centre (Figure 2.16, 3). Like some of the Yorkshire examples, the house was defined by an enclosing drainage ditch, made broader by re-cutting, but its external wall was evidently set in a ring-groove and an inner setting of posts provided roof support. Substantial posts marked the south-east entrance. Ancillary buildings of more than one sub-phase of construction were clustered around the principal building. In the next phase (Phase 3), the homestead enclosure ditch was evidently backfilled to allow expansion of the settlement, unenclosed and with numerous smaller round-houses and

ancillary structures. Finally, the Phase 4 occupation again involved rectilinear ditched enclosures dating to the first or second centuries AD. Dating of the earliest occupation at Thorpe Thewles was hard to establish, but thermoluminescent dating suggested it may have been no later than the third quarter of the first millennium BC, and the presence of saddle querns would be consistent with this assessment. The site in its later pre-Roman or early Roman occupation is remarkable for the relative wealth of its material assemblage, with several small personal ornaments including probable imports from southern Britain or the Continent.

At Catcote, Hartlepool (Long, 1988), the date of the native settlement on the ridge top was originally assumed to be late on account of the presence of Romano-British pottery and artefacts, but the sequence evidently began earlier in the pre-Roman Iron Age, a conclusion that was endorsed by thermoluminescent dating for the adjacent downslope site (Vyner and Daniels, 1989). Both Stanwick and Catcote showed evidence of imported pottery from southeastern England or beyond of the immediately pre-Roman period. Apart from the obvious land-route through the Vale of York to the south, there is therefore the further possibility that sea-borne trade or cabotage was responsible for the introduction of these exotic goods.

Excavations and re-assessment of Stanwick (Plate 1A) in the 1980s has resulted in a major review of Wheeler's conclusions of the 1950s (Haselgrove, Lowther et al., 1990; Haselgrove, Turnbull et al., 1990; Welfare et al., 1990; Haselgrove, 2016). The earliest settlement of the Tofts, radiocarbon dated from the second quarter of the first century BC, was essentially undefended, though it may have had several small, ditched enclosures. Notable among the structures uncovered by the 1980s excavations was a sequence of massive circular foundations (LS 1 and 2) with post-pits more than a metre deep signifying huge timbers of structures some 15 metres in diameter. Though a case can be made for these being roofed buildings, other possibilities should also be considered, given that the site was almost certainly, even by the later first century BC, an important communal and possibly ritual centre. The Tofts rampart too was added in the later first century BC, with the outer earthworks being a broadly contemporary addition of the mid-first century AD.

The nearby site at Melsonby (Fitts et al., 1999), where the so-called Stanwick hoard was found in 1843 (MacGregor, 1962), was likewise an open settlement, perhaps in use as early as the third or fourth centuries BC. The principal excavated structure of this early phase of occupation was a ring-groove building some 9 metres in diameter, set concentrically within a penannular drainage gully (Figure 2.16, 1), radiocarbon samples from which confirmed its use in the second half of the first millennium BC. The ring-groove was shadowed internally by a fainter slot with stake-holes, presumably indicative of more than one construction episode. By the first century AD, the settlement comprised a network of small ditches and gullies, but open settlements at Stanwick and Melsonby may have formed an integral part of the local Iron Age landscape from a much earlier date.

The Iron Age settlement beneath the Roman fort at South Shields (Hodgson et al., 2001) produced a particularly informative round-house plan (Figure 2.16, 5). The South Shields house was of ring-groove construction, at 8.75 metres in diameter not one of the larger variety, but in this case having a ring-ditch outside it, the upcast from which was detected on its inner edge between it and the ring-groove. On the north side, several postholes in the low bank forming a concentric arc were interpreted as possibly from secondary buttressing. The ring-groove unquestionably held upright posts, between 100-150 millimetres in diameter and at 150 millimetre (6 inch) intervals, sufficient to sustain a conical roof without further internal support. The doorway was to the south-east but had been truncated by later activity. The concentration of bracken and heather towards the back of the house, opposite the entrance, suggested sleeping quarters, whilst cereal processing may have taken place nearer the door, as well as externally, affording a variation on the widely affirmed notion of cosmological ordering of internal activity.

Perhaps the most radical change in our understanding of earlier Iron Age unenclosed (and indeed enclosed) settlements has resulted from developer-led excavation in the south-eastern Northumberland coastal plain (Hodgson et al., 2012). In fact, the evidence for early occupation had already been recognized by Jobey at Burradon, where he correctly identified coarse ware jars with finger-tip ornament as 'earliest Iron Age' with 'Bronze Age antecedents' (1970: 72-8 and Figure 2.8). He also recognized the possibility that the earlier occupation had been unenclosed, though on balance preferred to see successive enclosed settlements rather than the now more plausible sequence of unenclosed followed by double enclosed settlements. Hodgson's excavations at Blagdon Park 2 and East and West Brunton (Figure 2.18) have further demonstrated beyond doubt that the substantial, rectilinear ditched enclosures of south-east Northumberland, containing either a single major round-house or perhaps a pair of roundhouses, were not typically Romano-British, as Jobey had inferred, but had become a regional class of homestead of an extended family unit from around 200 BC. This of course need not prejudice our assessment of the rather smaller rectilinear enclosures of north Northumberland, like Tower Knowe (Jobey, 1973), Belling Law (Jobey, 1977) and Kennel Law (Jobey, 1978b). Notwithstanding the 'widespread shift from unenclosed settlement to earthwork enclosure between Tees and Tweed in the last two centuries BC' (Jobey, 1978b: 188), the sequence was locally more complex, with less substantial early enclosures and palisades also represented.

Very little survived of the house structures themselves, the position of which was indicated solely by their surrounding drainage trenches or drip gullies. In the case of the principal house of Phase 3 at East Brunton, the scale of the ditch is such that it could have served not just as a soak-away but as a ha-ha keeping stock away from the walls of the house, an interpretation that is encouraged by the ditched 'hornwork' at the entrance to the house, perhaps intended as a further control of access if stock was kept within the compound. At Blagdon Park 2, the drainage ditches of the two latest houses were likewise significantly larger than those of the earlier houses, of which more than twenty from the earlier open settlement were distributed individually or in small clusters across the site. As the excavator observed, it is unlikely that more than a few of these were occupied at any one time, as re-cutting of the ring-trenches indicated successive episodes of construction. What kind of social unit was represented by these small open 'villages' is unclear, but the shift in structural format to larger enclosed settlements must represent a significant change in the social order.

One interesting factor in both the Brunton sites is the very close proximity of paired enclosures that were apparently in broadly contemporary occupation. Hodgson rightly questioned whether the not insubstantial ditches of this class of enclosure were ever intended to be defensive, as opposed to statements of identity and entitlement, and their immediate juxtaposition, like those of enclosed sites elsewhere in Northern Britain, certainly militates against any simplistic defensive explanation. In such close proximity, it seems likely that we are here dealing with related kin groups, and the possibility might be considered that they represent shared tenure of land. How land was held or allotted in the pre-Roman Iron Age is unclear, but the recognition of several pit-alignments in the area makes it clear that there were divisions in the landscape that could reflect ownership as well as agricultural management. In view of the fact that dating pit-alignments hitherto has been problematic, it is significant that, on the basis of

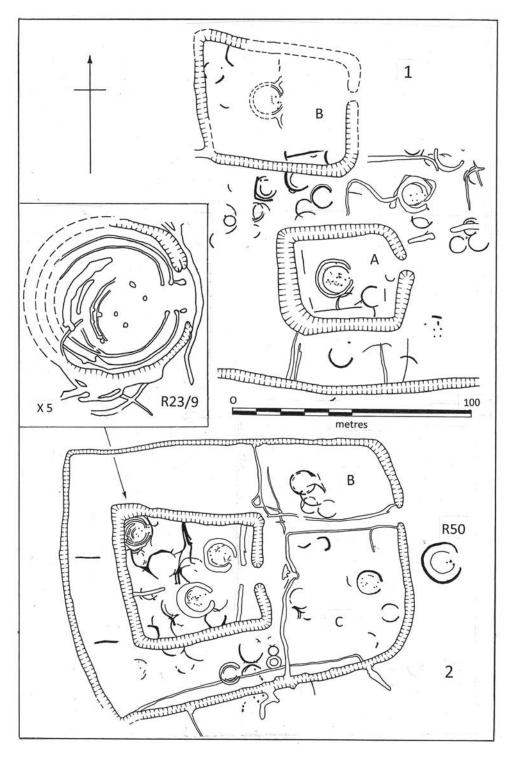


FIGURE 2.18 Settlements of the Northumberland coastal plain: 1, West Brunton; 2, Blagdon Park 2 Source: Drawings by D. W. Harding, adapted from Hodgson et al. (2012).

optically stimulated luminescence (OSL) dating, these divisions were apparently in use by the first half of the first millennium BC and, even if not maintained throughout the Iron Age, were still visible in the later pre-Roman period.

The diversity of settlement patterns, even within a relatively localized area of south-east Northumberland, however, is demonstrated by the sequence at Pegswood Moor, Morpeth (Proctor, 2009), where the unenclosed settlement was succeeded not by substantial sub-rectangular enclosures but by a possibly cumulative complex of enclosures to which the excavator assigned a variety of domestic, agricultural and industrial functions, within a wider network of arable fields and pasture. The settlement focus of the developed settlement was certainly within the central enclosure, but thereafter appears to have shifted to a group of round-houses that, whilst aligned in a linear spread, were not strictly enclosed. The latest occupation appears to extend into the second century AD, and though it represents a significant re-organization of the site layout, it hardly suggests complete abandonment after the creation of the frontier zone.

The Northumberland coastal plain excavations certainly show how extensive area stripping, backed up by a suite of radiocarbon dates, can transform our understanding of Iron Age settlement. Equally, large-scale investigation plainly has a greater prospect of detecting unenclosed occupation, though air-photography in the 1970s and '80s, before the intervention of agricultural spraying regimes began to mitigate the element of contrast in crop-mark recognition, was capable in optimum conditions of detecting such fugitive evidence of settlement. At the same time, it would appear that the level of constructional detail surviving from recent excavations, as a result of deeper plough damage or mechanical site stripping, is significantly less than from earlier investigations.

The central and southern Pennines

The relatively sparse distribution of hillforts in northern England suggests that the political, social and economic roles of southern hillforts were fulfilled in other ways in the north. Quite evidently, the higher Pennines over 300 metres would have been less attractive climatically for settlement, at any rate by the first millennium, so that it is significant that Mam Tor in the Derbyshire Peak (Figure 2.19; Coombs and Thompson, 1979), where house stances appear to have been quite densely concentrated, yielded radiocarbon dates indicating occupation, though not certainly fortification, in the middle Bronze Age. A fragment of socketed axe of lead (Guilbert, 1996), plainly impractical as a functional tool, but possibly indicative of early exploitation of lead resources in the Peak, also probably pre-dates the construction of the hillfort. In the southern Pennines, there are several hillforts that have timber-framed or stone-revetted ramparts including Bunbury Camp, Ball Cross and probably Wincobank (Beswick, 1987), all of which could have been constructed or occupied in the later Bronze Age or early Iron Age. The extent of occupation in the Peak district in the Iron Age, as opposed to the Bronze Age or ensuing Roman period, remains a matter of debate (Bevan, 2005).

One of the most striking discoveries of recent years has been the massacre of women and children at Fin Cop in Derbyshire (Waddington, 2012). Here, a total of fifteen skeletons was discovered in several widely separated sections across the perimeter defences, suggesting that the total number of dead could have been much greater. The excavator inferred that the defences had not been completed, particularly the attempt at bivallation in the north-east section. The massive limestone walls of the principal rampart had subsequently been dismantled systematically into the ditch, among which the dead had apparently been thrown unceremoniously





FIGURE 2.19 Mam Tor, Derbyshire, A, air-photograph; B, interior showing ramparts and hut platforms

Source: A (above), Copyright reserved: Cambridge University Collection of Aerial Photography, BAW 09; B (below), interior showing ramparts and hut platforms. Photograph by D. W. Harding.

without formal burial. Unlike the so-called war-cemeteries of southern British hillforts, these burials were not concentrated adjacent to the hillfort entrance but were located variously around the perimeter. The fact that they were exclusively women and children suggests punitive reprisals against a community of non-combatants, the male population having been slain in battle or taken in slavery. Furthermore, dating evidence indicated that the defences had been built around 400 BC, with the destruction episode in the mid-later fourth century, after which the hillfort was abandoned, never to be re-occupied. The episode is of interest particularly in the light of the current fashion for the 'pacification of prehistory', and because the dating evidence plainly absolves the Romans from responsibility.

Castle Hill, Almondbury, was for many years regarded as the centre of the southern Brigantes on the eve of the Roman conquest and identified with Ptolemy's *Camulodunon* (Richmond, 1925), an identification that was made more plausible by the false attribution of Corieltauvian coins from the Lightcliffe hoard to a find-spot at Almondbury (Allen, 1961: 260–1, 293, 1963: 22–8). As a result of a series of radiocarbon dates from his later excavations, Varley (1976) revised his earlier assessments and acknowledged that Castle Hill was abandoned several centuries before the conquest. He proposed a fourfold structural sequence, for the last three of which a series of radiocarbon dates was centred in the sixth and fifth centuries BC, giving a calibrated span beginning in the first half of the first millennium BC. This re-assessment was also consistent with the thermoluminescent date for the actual destruction of the final multivallate fort.

From the available evidence, therefore, all of the hillforts in the southern Pennines could have been abandoned by the later fifth or fourth centuries BC. Settlement remains of the second half of the first millennium BC have proved so elusive that some have argued that the region must have been depopulated in consequence of climatic deterioration and used only for occasional summer transhumance until the Roman occupation, when exploitation of lead deposits encouraged re-settlement on a significant scale. Palaeo-environmental evidence, however, suggests that agricultural activity was unbroken throughout the first millennium BC (Bevan, 1999c: 12–13, 2000: 148), and it is more probable that the problem lies in dating the origins of settlements that continued to be occupied in the Romano-British period.

In the central Pennines Ingleborough (King, 1987; Bowden et al., 1989), overlooking a tributary of the Lune, is indeed exceptional. At 723 metres, it is hard to conceive that this was in permanent rather than seasonal occupation, even in the later Bronze Age. Rivet (1958: 142) proposed the identification of the site with Ptolemy's *Rigodunon*, but Challis (Challis and Harding, 1975: 123) questioned whether the occupation and maintenance of this substantial 6 hectare fort would have been permitted in the Roman period. The univallate enclosure is itself noteworthy for its external stone facing, combining orthostats and coursed walling. Within its core, the rampart was divided as in casemate construction with vertical slabs forming a series of compartments, a technique that may be related, though not necessarily derivatively, to timber box-ramparts. Whatever its date, the Ingleborough fort occupies an imposing situation atop of series of natural steps, reinforcing its role as a symbolic focus in the landscape (Figure 2.20).

Twenty miles to the east, in Wharfedale north of Grassington, is one of the densest areas of upland field-systems anywhere in Northern Britain (Figure 2.21). Lying between the 250 and 300 metre contours, they are made up of small, square and larger rectangular fields, with occasional settlements in which circular, stone house foundations are visible. Since the pioneer

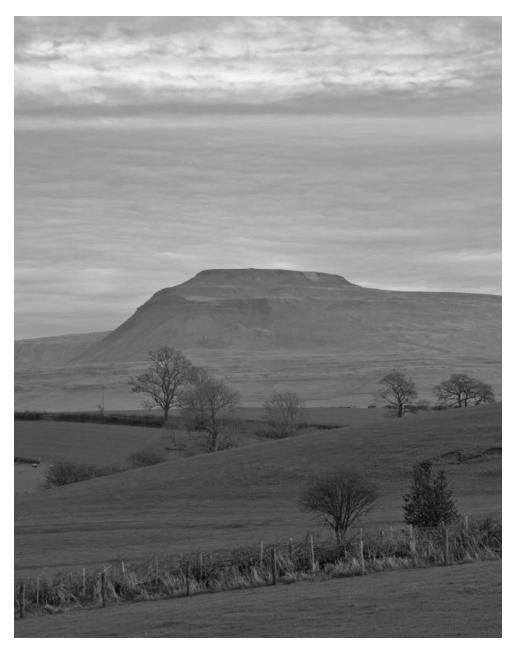


FIGURE 2.20 Ingleborough, Yorkshire, hillfort from the west Source: Photograph by D. W. Harding.

fieldwork of Raistrick and Chapman (1929), Raistrick (1937, 1939) and King (1978), these have been assigned to the later pre-Roman and Roman Iron Age, on the basis of pottery scatters, but the expectation must be that their origins lie in the Bronze Age or early Iron Age, had we the means archaeologically to test this hypothesis.



FIGURE 2.21 Grassington, Yorkshire, air-photograph of field-system

Source: Copyright reserved: Cambridge University Collection of Aerial Photography, K17-AC26.

Cheshire and Lancashire

If Iron Age settlement in the Pennines is sparsely represented, in the Mersey and Ribble coastal belt until recent years it was virtually non-existent (Haselgrove, 1996). The geography of the region, with its natural routes of access to and from the Irish Sea, made this seem implausible, but major conurbation and related development have hindered archaeological visibility until the advent of developer-led fieldwork. It has commonly been assumed that the region was still extensively wooded at the time of the Roman advance under Agricola, though environmental

evidence may now qualify this view (Schoenwetter, 1982). A brief phase of woodland regeneration in the early first millennium BC appears to have been followed by a second phase of woodland clearance in the Mersey basin, accompanied by an increase in cereal pollen indicating arable cultivation (Nevell, 1999b). Because of climatic fluctuation the limit for cereal cultivation may have been between 110-250 metres ordnance datum (OD) around the Pennine margins, improving in the early Roman period (Nevell and Roberts, 2005), but agricultural marginality could hardly have been a problem in the coastal belt.

The paucity of known settlements is not exclusive to the Iron Age; apart from coin-hoards, evidence of settlement in the Roman period between the Mersey and the Ribble has been equally sparse, with villas and related sites still virtually unknown north of Chester. Airphotographic survey has identified a number of enclosed settlements, some of which, like Great Woolden Hall in Greater Manchester (Figure 2.22, 1; Nevell, 1989), were demonstrably occupied in the Iron Age, while others by analogy most probably were. For some years Great Woolden Hall, with its substantial ring-ditch round-houses within a twin-ditched promontory enclosure served as a type-site for the region, but more recently other sites have demonstrated occupation in the earlier Iron Age. At Mellor (Noble and Thompson, 2005), the substantially ditched enclosure included successive examples of round-houses on ring-groove foundations (Figure 2.22, 2) dating from the mid-first millennium BC. Limited evidence of pre-Roman settlement has been recognized in west Lancashire (Cowell, 2005), notably at Duttons Farm, Lathom (Cowell, 2003), where one round-house was defined by an external ring-groove around 10 metres in diameter and with opposed east-west entrances (Figure 2.22, 3). An anomalous feature was its central posthole, unusual, if integral, in a round-house of this size.

In Cheshire, traces of round-house settlements have been found at Brook House Farm, Bruen Stapleford (Fairburn, 2003) and more recently at Poulton (Cootes and Emery, 2014). The site at Bruen Stapleford was especially notable for the series of Late Bronze Age radiocarbon dates for its ring-groove round-houses. House 3 and House 5 were of similar size and construction (Figure 2.22, 4-5), with ring-grooves around 10 metres in diameter within an outer drainage ring-gully. House 3, however, was notable for the slightly polygonal outline of its wall-trench, a feature first noted at Little Waltham, Essex (Drury, 1978), and presumably indicative of sill-beam construction. House 3 and House 6 were broadly contemporary, charcoal from the gully of the former yielding a radiocarbon date of 920-780 cal BC (AA-49271) and grain from the outer ring-gully of the latter a date of 800-350 cal BC (AA-49267).

From a number of these sites there is also evidence for specialized activities, notably the production of salt, which through the first millennium BC was traded through North Wales and the Welsh Marches, as indicated by the distribution of Cheshire salt containers, or 'Very Coarse Pottery' (VCP) (Morris, 1985). Indeed, Matthews (2001) argued that the production and distribution of salt was controlled by a local élite based on a coastal emporium, now lost to marine erosion and represented only by occasional exotic finds from the mudflats at Meols on the Dee estuary (Matthews, 1999). Structural evidence for occupation in the middle Iron Age at Irby in the Wirral (Philpott and Adams, 2010) was very disturbed by later activity, but VCP from the site may have been in use at this time. An extraordinary find from Irby was a steatite

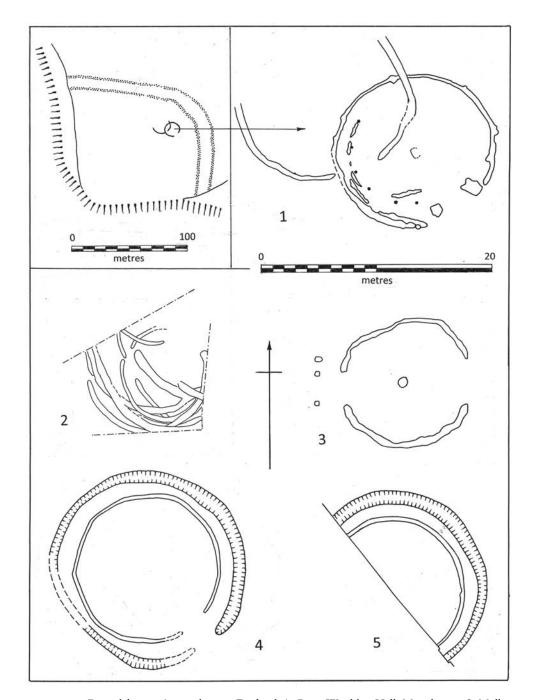


FIGURE 2.22 Round-houses in north-west England: 1, Great Woolden Hall, Manchester; 2, Mellor, Greater Manchester, Area C, trench 26; 3, Duttons Farm, Lathom, Lancashire; 4, Brook House Farm, Bruen Stapleford, Cheshire, House 3; 5, Brook House Farm, House 6

Source: Drawings by D. W. Harding, adapted from Nevell (1989), Noble and Thompson (2005), Cowell (2003), Fairburn (2003).

spindle-whorl (Foster, 2010) ornamented in a simple version of the Plastic Style of La Tène art with raised bosses linked a series of fleshy scrolls, and dating stylistically around the third century BC, though this example was quite badly worn, so could have been in use for some time.

Whether hillforts played any role in the control and distribution of salt has yet to be demonstrated, but their distribution, ringing the estuaries of the Dee and Mersey, by contrast to their almost total absence north of the Mersey, certainly implies a linked network. Dating of these hillforts is far from firmly established, but current indications are that their principal occupation was well before the Roman period. Two Cheshire forts, Eddisbury (Varley, 1950) and Maiden Castle, Bickerton (Varley, 1935, 1936a, 1936b, 1964), apparently had timber-laced ramparts with stone facing, which may have been part of a late Bronze Age or earlier Iron Age defensive system, though probably within a longer structural sequence. The rampart and underlying palisade at Beeston Castle (Ellis, 1993) could likewise date from the later Bronze Age. Several of these hillforts were re-examined in 2009-11 as part of the Habitats and Hillforts project (Garner, 2016) sponsored by Cheshire West and Chester councils, the purpose of which was to promote public presentation and to assess the degree of threat of erosion from ploughing and vegetation. Excavation was therefore largely restricted to re-cutting sections of earthworks previously examined by earlier investigators to check constructional details and dating.

The disposition of the Cheshire hillforts around the Mersey and Dee estuaries is mirrored in lesser scale by the three known hillforts facing Morecambe Bay, Skelmore Heads, Castle Head and Warton Crag. Skelmore Heads (Powell et al., 1963) showed a sequence from stockaded enclosure to earthwork fort, which may have included a timber box-rampart. The late Bronze Age hoard from the site is not demonstrably of the same period as the fort, but that possibility cannot be ruled out. Dating is uncertain for all three, but there is no compelling evidence for late occupation. Among the most enigmatic sites in this area is Urswick Stone Walls (Dobson, 1907), only a mile south-west of Skelmore Heads. Its dating remains uncertain, but the absence of Romano-British pottery from the early excavations argues against its occupation in the Roman period (pace Challis and Harding, 1975: 135). The fact that the enclosure walls and the dun-like walls of the principal round-house were constructed of stone certainly need not imply a Roman date, especially when the construction includes massive, undressed, orthostatic boulders. Finally among the Lancashire group are the hillforts of Portfield, Whalley and Castercliff, overlooking tributaries of the Ribble. The cliff-edge fort at Portfield (Beswick and Coombs, 1986) certainly had multi-period defences, with stone-revetted and timber-laced walls, but the sequence was not absolutely resolved by excavation. A late Bronze Age origin for the hillfort was inferred in part from the discovery within the enclosure of a hoard of bronzes, including two socketed axes, a tanged knife and a socketed gouge, which Longworth (Blundell and Longworth, 1967) had concluded was a bronze worker's scrap hoard, buried perhaps as late as the seventh century BC. Two gold items, a penannular tress-ring and a bracelet, nevertheless, were surely higher-status items and, if contemporary with the hillfort, may indicate that site's social importance. The small, oval hillfort at Castercliff was certainly defended with stone and timber ramparts from an early date, excavations (Coombs, 1982) having produced uncalibrated radiocarbon dates centring on the mid-first millennium BC. The site evidently had a turbulent history, its inner rampart being partly vitrified and the outer remaining unfinished.

Though our knowledge of the hillforts of this region is plainly insufficient to support more than provisional conclusions, they are nevertheless not entirely without rationale. The Cheshire and Morecambe Bay distributions might well imply communities controlling access to and from the Irish Sea routes, the former with the particular asset of salt production, and the latter combining access to arable resources within reasonable proximity and upland pastures beyond.

By way of a postscript, we may note that one of the two principal hillforts on the Isle of Man also appears to have been occupied in the first half of the first millennium BC, consistent with the evidence from northern England. At over 480 metres, the hillfort of South Barrule, like Ingleborough, might appear to be too high to sustain permanent occupation, yet contained within its inner rampart at least eighty circular house stances, one of which yielded an early date for a single radiocarbon sample from its latest occupation. Pottery, mainly simple barrel-shaped jars, could be consistent with a late Bronze Age or earliest Iron Age attribution and certainly sets the site apart from the local Iron Age promontory forts, which are largely aceramic (Gelling, 1972). Lines of stake-holes beyond the inner rampart's ditch, apparently inclined outwards, have been interpreted as emplacements for wooden *chevaux-de-frise* (Harbison, 1971).

Bog bodies

Bog bodies are best known in northern Germany and Scandinavia, with well-preserved examples such as Tollund Man and Grauballe Man dating from the pre-Roman Iron Age. They are particularly noted for the extreme violence of their deaths, some resulting from multiple lethal injuries, commonly hanging or garroting, stabbing or throat-cutting, or simply violent blows to the head or body. Opinion regarding bog burials has been divided, Danish archaeologists believing they were sacrificial rituals, the German view regarding them as criminals or outcasts who have otherwise violated the social codes.

In northern England, the head found in 1958 at Worsley, Manchester (Garland, 1995), has been re-examined and found to have been speared deep in the neck in a manner reminiscent of the Yorkshire spear ritual. Dating around AD 100, he also suffered multiple injuries, a heavy blow to the head, garroting and decapitation. Perhaps somewhat earlier, the body found in Lindow Moss, Cheshire, in 1984 (Stead *et al.*, 1986) had likewise been struck on the head and possibly garrotted and had his throat cut, though it is not altogether clear which of multiple injuries were the cause of death and which result from post-mortem effects. These multiple injuries may imply a ritual 'triple death' or may result from more than one executioner being involved. A further factor indicating possible sacrificial process is that the victims are frequently naked or minimally clothed, in the case of Lindow Man with just a fox-fur arm-band. Lindow Man may have had body paint, but bog bodies were not tattooed. The remarkable state of preservation allowed investigation of the victims' last meal, which was evidently cereal-based and simple, but with traces of mistletoe pollen, implying for some more than the season at which death took place.

Cumbria and north-west England

Hillforts are not a major component of earlier Iron Age settlement in north-west England. Only Carrock Fell (Figure 2.23), at over 2 hectares (5 acres) stands out as potentially on the scale of a regional *oppidum*. R. G. Collingwood (1938) thought that it could have been occupied as a major tribal centre and that the breaks in its perimeter walls were the result of deliberate slighting of the defences by Roman forces. But its height (650 metres) and exposed location, together with the absence of any surviving surface traces of habitation, make it unlikely that it was more than seasonally occupied (Higham, 1986: 128–9). More suitable for permanent





FIGURE 2.23 Carrock Fell, Cumbria, A (above), air-photograph; B (below), hillfort from the east *Source*: Photographs by D. W. Harding.

occupation was the settlement at Dobcross Hall (Higham, 1981), a univallate enclosure of 3 hectares in which the ditch was of defensive proportions, and which the excavator considered was probably pre-Roman, notwithstanding the later Romano-British homestead within its enclosure. Among smaller enclosed sites, the triple-ditched cliff-edge enclosure at Swarthy Hill on the Solway Plain produced a single radiocarbon date from its ditch filling of 450 +/- 50 bc (GU-2657; Bewley, 1992), and other ditched enclosures now recognized from air-photography may have been occupied in the earlier pre-Roman Iron Age (Bewley, 1986, 1993, 1998).

Nowhere in Northern Britain is the problem of identifying pre-Roman Iron Age settlement in the absence of a diagnostic early Iron Age assemblage so acutely demonstrated as they are in Cumbria. Some sites like Fingland (Richardson, 1977), Crosshill, Penrith, and Silloth (Higham and Jones, 1983) have been shown to have been occupied in the Roman period, but definitively Iron Age sites are still elusive (McCarthy, 2000). Yet the relative density of settlements, either surviving above the zone of later destruction like the extensive habitations, enclosures and fields on Crosby Garrett and Crosby Ravensworth fells, or as crop-marks identified by air-photography in the Eden valley or Solway plain, makes it unlikely that the region was only sparsely settled in the pre-Roman (or later, post-Roman) Iron Age. At Crosby Garrett (Figure 2.24), fields radiate around the Severals settlement in a way that suggests an integral

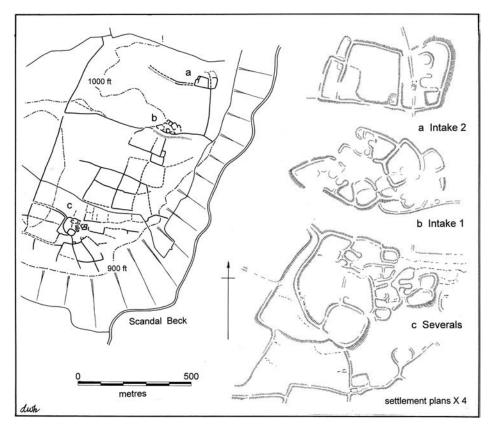


FIGURE 2.24 Crosby Garrett, Westmorland, plan of native settlements

Source: Drawings by D. W. Harding, adapted from RCHME (1936).

system. The disposition of sites along the fell almost implies space for an original fourth focus between Severals and Intake 1 that has been subsequently over-ridden and obliterated. Many sites display a degree of complexity that suggests longevity of occupation, though morphologically no radical change in settlement is apparent.

In his survey of the Crosby Ravensworth sites, Collingwood (1933) had noted the frequent occurrence of barrows of presumed Bronze Age date in proximity to native settlements, from which he inferred that in this cultural backwater Bronze Age traditions continued uninterrupted until the Roman period. This relationship might now be regarded as evidence of prehistoric communities' awareness of 'phenomenology' in the landscape.

Ewe Close (Figure 2.25) has remained in the archaeological canon as an archetypal Roman native homestead in the west Pennines, based on the presence of pottery of second to fourthcentury date, and accordingly is worth revisiting (Collingwood, W. G., 1908; RCHME, 1936: 83).



FIGURE 2.25 Ewe Close, Cumbria, air-photograph from the north-east Source: Copyright reserved: Cambridge University Collection of Aerial Photography, AQM04.

72 The earlier Iron Age

Plainly, the complex of enclosures, house stances and dykes is the product of composite construction over a protracted period of time, as Jobey observed (1966b: 11). The fact that the Roman road from Low Borrow Bridge to Brougham deviated in its route to accommodate the settlement presumes its pre-existence (though by how long remains uncertain) and continuing importance. The sub-square enclosure on the west side of the complex containing the large stone-built roundhouse is not unlike Northumbrian Iron Age homesteads when detached from the encroaching network of irregular enclosures and garths, and it would be tempting to think that there could have been earlier phases of construction, whether of stone or timber, beneath the surviving walls and paving. W. G. Collingwood recognized that there were intrusions into the subsoil beneath the paving of the central round-house, which he therefore acknowledged may have been secondary. He also reported quite specifically that one of the round-houses (K) contained no Roman material or finds whatsoever despite careful excavation, which, in the light of Roman finds elsewhere within the enclosure might indicate that this building was not part of the contemporary layout. Equally of course, we should not discount the possibility of post-Roman occupation, which archaeologically could prove as elusive as evidence of pre-Roman settlement. The construction of the enclosure walls is distinctive, using substantial boulders, frequently described as 'set on edge' in a style that recalls the monumental enclosure at Urswick Stone Walls. The cellular structures recessed into the thickness of the enclosure walls on either side of the entrance at Ewe Close might be reminiscent of guard chambers flanking hillfort entrances in the Welsh Marches, but the cellular style of building is one which has a long pedigree in Atlantic Britain and Ireland, arguably from the later Bronze Age and certainly into the mid-first millennium AD.

The combination of rectilinear enclosure with curvilinear or irregular enclosures is matched at Ewe Locks, Crosby Ravensworth, which also has a principal round-house located just off-centre within a rectilinear enclosure. Clusters of conjoined circular or cellular houses are found on several sites, though at Burwens some apparently conjoined houses are more probably the product of successive phases of rebuilding within a confined enclosure. The Crosby Ravensworth sites were evidently originally part of a more extensive landscape pattern, linked by a complex network of dykes. It extends across the Scandal Beck into the neighbouring districts of Crosby Garrett and Waitby, linking some 8 kilometres of landscape into a unitary system (Jones, 1975), including Severals and the Intake settlements. Excavation at Waitby (Webster, 1972) yielded only late Roman Huntcliffe ware from a context that the excavator argued was demonstrably secondary.

The bias in favour of a 'Roman native' horizon for these settlements must take account of the stratigraphic context of occasional dateable finds. At Yanwath Wood near Penrith (Higham, 1983), for example, abraded samian sherds and fragments of Roman glass were found 'close to the lip' of a ditch that must have silted up before these scraps were deposited. The clearest demonstration of this principle is the site at Wolsty Hall (Blake, 1959). Of the three adjacent enclosures, oval, circular and rectangular, the latter two both produced clear evidence of occupation in the Roman period. In the case of the oval enclosure, by contrast, Hadrianic pottery occurred in the *upper* levels of the ditch filling, suggesting that it was long since out of use by the early second century, whilst the round-house occupation within the enclosure produced no Roman material, consistent with this conclusion. Where Roman occupation is clearly attested in close proximity, here as at Ewe Close, it seems reasonable to conclude that its absence may be as indicative of a pre-Roman date.

The Wolsty Hall round-house (Figure 2.12, 5) was of a type that underlines the regional diversity of Iron Age round-house architecture. Its external wall, 13.5 metres in diameter, was based on a ring-groove, with two opposed entrances, each with a pair of postholes marking the

inner limit of a porch. A setting of four posts in the centre of the house is unusual, as we have seen, but not unique. Around the inner edge of the ring-groove, the excavator detected traces of a turf wall or revetment, which in turn was defined on its inner edge by an arc of cobbled flooring. Whether the combination of timber and turf represents composite construction or a phase of rebuilding is unclear. It may have been used more widely in Iron Age buildings than is generally in evidence from excavated ground-plans.

THE BORDERS AND SOUTHERN SCOTLAND

Any re-evaluation of later prehistoric settlement in the Borders (Figure 3.3, 1) should still begin with a review of Hownam Rings (Figure 3.2; Piggott, C. M., 1948), which served as the type-site for Piggott's Tyne-Forth province (Piggott, S., 1966) and for nearly forty years provided the model for Iron Age settlement in south-east Scotland. Already by the early eighties (Harding, 1982), the validity of the Hownam sequence as a regional model was being questioned, and its limitations were progressively acknowledged (Armit, 1999a; Harding, 2001). In essence, the sequence was based upon an inferred structural progression from the simplest to the most complex, from palisaded enclosure through univallate enclosure to multivallate defences. A final phase or phases, assigned to the Roman period, was represented by an open settlement of stone-built houses on foundations scooped into and over the derelict defences. In broad outline there seems to be no compelling reason to dispute the validity of this sequence for Hownam itself, though the excavation report prompts questions regarding the correlation of earthworks around the western and southern circuits. The problem arose in its application more generally as a regional model, since more recent research has indicated that any supposed 'progression towards enclosure', even if locally valid, need not have been regionally uniform or synchronous. Still less would current opinion accept that hillforts or the concept of enclosure appeared in southern Scotland as a result of cultural diffusion from the south, which was implicit in Piggott's scheme.

Mercer's fieldwork of the mid-1980s in the adjacent Bowmont valley (Mercer, 1987) in fact suggested the possibility of parallel progression from palisaded enclosures to walled or embanked enclosures, at Camp Tops and Craik Moor, Morebattle, among other sites, which might imply similar social and economic conditions among neighbouring communities. Perhaps more importantly, it showed that terracing was widely employed by the mid-first millennium BC as a means of combating the effects of soil erosion (Mercer and Tipping, 1994). Further afield, the classic site at Braidwood, Midlothian (Figure 3.3, 3; Stevenson, 1949a; Piggott, 1958b), demonstrably had a palisaded enclosure before the construction of earthwork defences. But elsewhere, most notably at Broxmouth, East Lothian (Hill, P., 1982b; Armit and McKenzie, 2013), the defensive sequence proved to be rather more complex, with ditched defences, univallate or bivallate, being maintained or neglected in a much more irregular

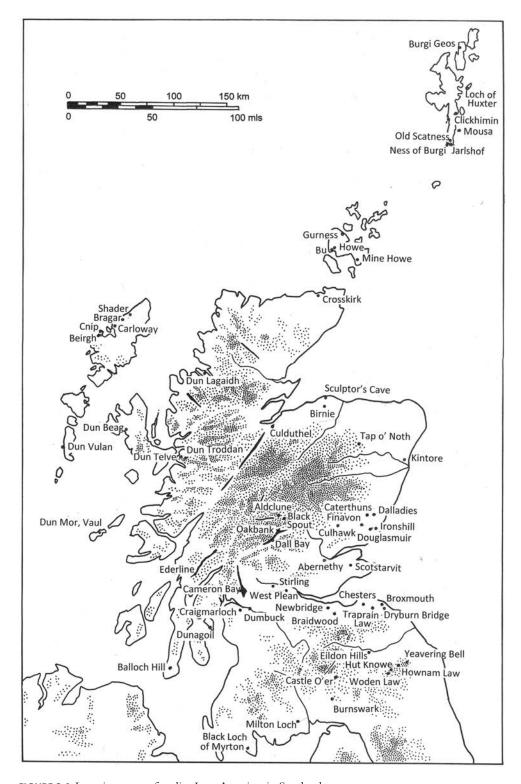
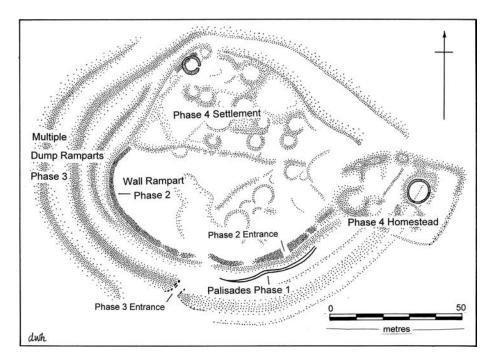


FIGURE 3.1 Location map of earlier Iron Age sites in Scotland

Source: Drawing by D. W. Harding.



 $\textbf{FIGURE 3.2} \ \ Hownam \ \ Rings, Roxburghshire, plan$

Source: Drawing by D. W. Harding, adapted from Piggott (1948).

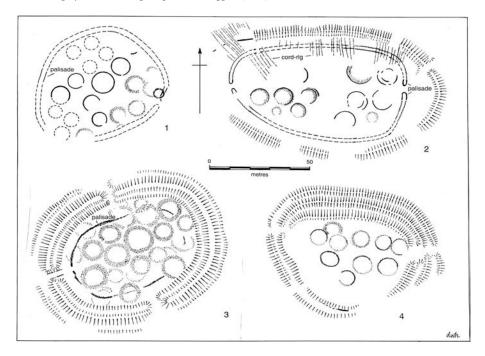


FIGURE 3.3 Enclosed villages of south-east Scotland and the Borders, 1, High Knowes B, Alnham, Northumberland; 2, Hayhope Knowe, Roxburghshire; 3, Braidwood, Midlothian; 4, Camp Tops, Roxburghshire

Source: Drawings by D. W. Harding, adapted from Jobey and Tait (1966), Piggott (1949) with additions from Mercer (1987) and DWH air-photographs, Piggott (1958b) with additions from Gannon (1999), RCAHMS (1956) with additions from Mercer (1987).

sequence. Here too the final phase of occupation appeared to be post-defensive, and represented by round-houses with stone-built foundations, though seemingly dating from the later pre-Roman period. Re-survey of the Braidwood settlement (Gannon, 1999) likewise suggested a more complex sequence, in which periods of unenclosed occupation may have existed before, between and after the phases of enclosed settlement. Other excavations in East Lothian indicated a much greater diversity in settlement patterns. At St Germains, Tranent, the settlement sequence seemed to bear little similarity to the Hownam model (Watkins, 1982), though the published conclusion still endorsed the general trend towards enclosure (Alexander and Watkins, 1998, 250). The twin enclosures at Fishers Road, Port Seton (Haselgrove and McCullagh, 2000), on the other hand, though incorporating both palisaded and ditched components, suggested a more complex system of complementary units within an integrated landscape pattern.

In south-western Scotland, field survey suggests similar complexity in settlement sequences. At Gibb's Hill, Dumfriesshire (Figure 3.4), a sequence of palisaded enclosures is later than the earthworks around the north-western sector of the site, while unenclosed houses also overlie the earlier earthworks, and this pattern is likely to have been replicated widely through the Borders. At Aird Quarry, Castle Kennedy (Figure 2.17, 4; Cook, 2006a), however, the palisaded enclosure and its single central round-house was firmly dated to the Late Bronze Age - earliest Iron Age transition.

The reality is that palisading is simply a constructional technique and cannot be regarded as chronologically or culturally diagnostic. Though requiring a substantial timber resource of suitable quality and convenient availability, it doubtless would have been less labour-intensive in construction than a stone-faced bank and ditch and, as such, might well have been employed in the initial stages of establishing a settlement. Yet equally, it could have been the simplest method of later renovation of a depleted earthwork. In some cases, the palisades demonstrably cut across earlier earthworks, as at Corsehope Rings, Midlothian, and in other instances, like Blackbrough, Roxburghshire (Figure 3.5), it seems improbable that the palisade within the earthwork would have survived, had it pre-dated the more substantial enclosure. In any event, palisades and earthworks need not be regarded as mutually exclusive. The embanked palisade has been a recognized form of enclosure since Feachem's work at Harehope in Peeblesshire (Feachem, 1960) and a combination of bank and fence seems particularly appropriate where the shallow bedrock made excavation of a deep quarry-ditch impractical. Finally, it should be stressed that these techniques of defensive or protective enclosure were not necessarily restricted to the later prehistoric period. Similar techniques were employed in the post-Roman or later Iron Age, and the paucity of diagnostic material remains from both pre-Roman and post-Roman contexts may make it hard to distinguish the two horizons.

What is commonly overlooked in contemporary reviews of the Hownam sequence is that Mrs Piggott's excavation at Hownam Rings was only one part of a more extensive campaign of field research into Borders hillforts and related settlements. Her two subsequent excavations, at Hayhope Knowe (Figure 3.3, 2; Piggott, C. M., 1949) and at Bonchester Hill (Figure 8.2, 1; Piggott, C. M., 1950) more than amply demonstrated the diversity of character of Iron Age settlements in the region. At Hayhope Knowe, the double palisade was indeed followed by the construction, presumed incomplete, of an earthwork enclosure. But even this latter apparently incorporated an element of palisading in its revetment. Bonchester Hill showed no trace of a primary palisade, either from Curle's work at the beginning of the twentieth century (Curle, 1910) or from Mrs Piggott's more thorough investigation of 1950. It did, on the other hand,



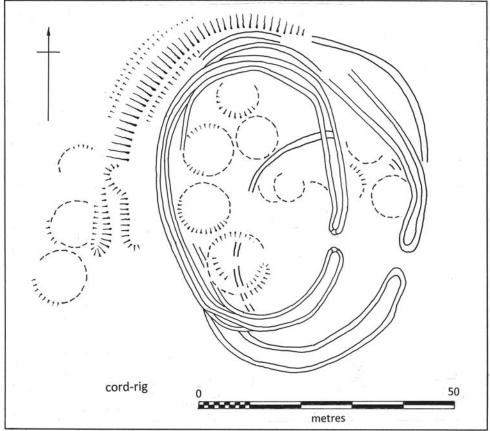


FIGURE 3.4 Gibb's Hill, Dumfriesshire, A, air-photograph, B, outline plan of major features *Source*: Photograph by D. W. Harding; drawing by D. W. Harding, adapted from RCAHMS (1997).



FIGURE 3.5 Blackbrough Hill, Roxburghshire, air-photograph

Source: Photograph by D. W. Harding.

yield a sequence of earthwork enclosures displaying at least three major constructional phases, probably from the early Iron Age and continuing into the late Roman or post-Roman Iron Age. The older excavations within the enclosure had produced saddle querns from two of the round-houses together with a crook-headed pin, which certainly points to the possibility of occupation from the earlier Iron Age, though whether in an open or enclosed settlement must remain in question. A La Tène 1c brooch spring from a residual context equally argues an early Iron Age occupation. In effect, Bonchester hardly conforms to the classic Hownam sequence, whilst the significance of its later occupation, clearly appreciated by Mrs Piggott, has been largely overlooked ever since.

During the late 1970s and '80s, air-photographic survey greatly amplified the number of known sites in the south-eastern Borders, especially of the newly recognized cord-rig agriculture (Halliday, 1983, 1986), increasing qualitatively our understanding of later prehistoric settlement. In areas like Hownam and Morebattle, intensive survey, from the air and on the ground, had resulted in a density of known sites that must approach very closely the most comprehensive that the archaeologist could expect to achieve, so that it should be possible to reconstruct the nature of the later prehistoric landscape more reliably here than in most other areas.

Hillforts and enclosure

The broad category of hillforts embraces a very wide range of sites, in terms of their enclosed area, and the scale and complexity of their earthwork defences. In southern Scotland, very few hillforts attain the scale of earthworks of many southern hillforts and certainly not their area enclosed. The largest were commonly referred to as oppida by analogy with their southern British counterparts, with the questionable implication that they served as communal centres with proto-urban functions and character. Burnswark in Dumfriesshire (Plate 1B), at 6 hectares with a topographical prominence that commands access to Annandale from the Solway Plain, might have some claim to being a regional centre. Others, like Eildon Hill North, Roxburghshire (Plate 2A), and Traprain Law, East Lothian (Plate 2B), have been linked in the past to known tribal entities like the Selgovae and Votadini and erroneously assigned a late pre-Roman date accordingly. Most hillforts, certainly within the south-eastern Borders, are relatively small and hard to differentiate from enclosed homesteads or small enclosed villages, though their enclosing earthworks, not massive in absolute terms, may sometimes be disproportionately substantial relative to the area enclosed.

Before the widespread application of radiocarbon dating, dating of hillforts in the Borders was reliant on very meagre material assemblages, from which tenuous comparisons were made with southern Britain, with due allowance for diffusionist 'time-lag'. Accordingly, most sites were cautiously assigned to the closing centuries of the pre-Roman Iron Age. On the Northumbrian side of the Cheviots, two adjacent sites in the Breamish valley were excavated by George Jobey (1971) with a view to obtaining radiocarbon dates for their construction. The single third-century BC date for material from beneath the double-faced stone rampart at Brough Law is strictly no more than a terminus post quem, but the absence of Roman material from the rampart cutting, by contrast to that recovered earlier from the stone-built roundhouses within the fort, would be consistent with an earlier construction of the defences. Broadly contemporary, if a single radiocarbon date is indicative, was an embanked palisaded settlement on nearby Ingram Hill, which itself overlay an earlier palisaded settlement. A fuller suite of radiocarbon dates from Wether Hill (Corbie Clough) has subsequently indicated occupation there from the second half of the first millennium BC (Topping and McOmish, 2001).

The older convention of late dating was similarly applied at Woden Law in Roxburghshire (Figure 3.6), a site that was undoubtedly occupied in the pre-Roman period, and probably at a much earlier date than the selective excavations of Richmond and St Joseph (RCAHMS, 1956: 169-72; Richmond and St. Joseph, 1982) suggested. No clear dating evidence was recovered from the single section through the fort's eastern defences, and the late dating offered was based in part on analogy with Hownam Rings, and in part on the assumption that the reduction of the second period earthworks was related to the Roman use of the site as a practice ground for artillery operations. Whether or not this needs to be assumed, the original ditchless wall could have been significantly earlier.

The most comprehensive excavation yet undertaken of a hillfort in southern Scotland was the total examination in advance of destruction of the site at Broxmouth, East Lothian, in 1977 and 1978. The site had originally been detected by air-photography, and initial trenching established that plough damage had been extensive, especially over the northern and eastern half of the site, with no surviving extant earthworks. In the south and west sectors preservation was better, especially where structures and deposits had accumulated in ditches and natural recesses. Nevertheless, in the circumstances, establishing the structural sequence was plainly problematic. The original excavator offered two different interpretations in successive interim





FIGURE 3.6 Woden Law, Roxburghshire, air-photographs, A, from the south showing cord-rig and linear earthworks W, X, Y and Z; B, at low level over north-east showing earthworks Z and cord-rig *Source:* Photographs by D. W. Harding.

statements (Hill, P., 1979, 1982b), and the final report (Armit and McKenzie, 2013) presents an alternative version, based upon Bayesian analysis of 158 radiocarbon dates obtained as far as practicable from the surviving stratigraphy. The key difference as far as the enclosure sequence is concerned is that the palisaded phase, assigned by Hill to an intermediate stage within the ditched sequence, has been promoted to Phase 1, in effect where the Hownam model might have expected it to be. The hillfort itself was maintained only for a limited period of the Iron Age occupation, in calibrated radiocarbon dates between 490/430 BC and 295/235 BC, though this span saw several significant episodes of construction from single to partially triple enclosure ditch and involving successive expansion and contraction. Virtually no evidence survived of the corresponding ramparts, nor any indication that they were elaborately built. In its initial layout, single and double-ditched, the hillfort's entrances were aligned east-west; the west entrance was then blocked, and a new south-west entrance created, which did display some degree of elaboration. The final phase of settlement of the hillfort from 100/60 cal BC was represented in the revised sequence by the series of stone and timber round-houses that Hill had divided between several phases. This raises one of several questions posed by the revised structural sequence: if these houses are all late, why is there no underlying evidence of earlier buildings that cannot have been erased by more recent plough erosion? Churning of the interior by stock and other such explanations (Armit and McKenzie, 2013: 492-4) sound like special pleading, and we may be forced to consider the possibility that the hillfort was not primarily residential. Some of the outstanding issues were raised by Sharples (2014), but not all the reviewer's alternative explanations carry any greater conviction or resolve contradictions in the evidence. The truth is that, as one of the pioneer excavations of the professional developerled archaeology era, Broxmouth was a difficult site, whose complex sequence may never be satisfactorily resolved, the casualty of a thirty-year delay in publication of the final report.

Whilst acknowledging therefore the skill of the excavator and the achievement of those who successfully brought the results to final publication, the net contribution of the Broxmouth excavation is disappointing. The final analysis leaves open the question whether the site was one of permanent occupation, or whether the hillfort was a place of periodic visitation and assembly. The material assemblage certainly argues for domestic and agricultural occupation, rather than for a special, ceremonial or related function. The animal bone assemblage was unusually well-preserved, indicating a cattle-based economy, but the palaeo-botanical samples have evidently been lost since excavation. Evidence from the small cemetery was unique and important, as indeed were the human remains from within the settlement. One important outcome, as we shall see, was the confirmation of the dating of the stone-built 'Votadinian' houses as beginning in the pre-Roman period. Some activity at Broxmouth in the early Roman period is indicated by samian and glass bangle fragments in a post-defensive context, but there can be no doubt that the main occupation lay within the pre-Roman Iron Age. The material assemblage from Broxmouth was unusually complete, notably in the preservation of bone artefacts such as the skeuomorphic ring-headed pin and yoke-shafted pins, as well as combs, needles and a range of domestic types. If a similar state of preservation existed on a comparable site where conceivably the structural traces had been less severely eroded, at the Chesters at Spott for example (Figure 3.3, 7), building on the achievement of Broxmouth the yield from research excavation could prove extremely rewarding.

In the south-west, the distinction between defended homesteads and small hillforts is as indistinct as it is in the south-eastern Borders, with a wide diversity of enclosed sites (Cowley, 2000). Among more prominent sites limited excavation at Burnswark (Jobey, 1978a) yielded



FIGURE 3.7 Chesters, Spott, East Lothian, air-photograph Source: Photograph by D. W. Harding.

evidence of a structural sequence from an early palisade through two phases of timber and stone-faced wall-ramparts, and whilst the radiocarbon dating was equivocal, there is every reason to suppose that the site's occupation began in the Early Iron Age at least. Its role in the Roman period is more equivocal, as we shall see in due course.

Mercer's field survey and selective excavation in the 1980s in Eskdale and the Scottish Royal Commission's fieldwork in the 1990s in eastern Dumfriesshire (RCAHMS, 1997) helped to redress an imbalance of research in southern Scotland. Contrary to expectations, Castle O'er and Bailliehill, whatever their origins, were evidently still in use in the early centuries of the first millennium AD as centres of a thriving pastoral community (Mercer, forthcoming). Accordingly, these sites will be considered in the context of the establishment of the Roman northern frontier. Some activity into the Roman Iron Age is also implied at Rispain Camp, near Whithorn (Haggarty and Haggarty, 1983) by a fragment of enamelled bronze plate of late first- or second-century date found in topsoil, but otherwise Roman material is conspicuous by its absence. In fact, the origins and initial occupation of this site can be confidently attributed on the basis of radiocarbon dates to the later pre-Roman Iron Age. Though its rectilinear plan would not be out of keeping with Iron Age homesteads in parts of Northern Britain, this site is unusual for the formidable scale of its enclosure earthworks, with ditch in excess of 4 metres in depth flanked by inner and outer banks, and with no sign of reduction or deliberate slighting. The two substantial timber-built round-houses, one nearly 14 metres in diameter with opposed entrances (Figure 2.12, 7), hardly endorse any suggestion of a diminution in house size on the eve of the Roman conquest.

84 The earlier Iron Age

For the great majority of enclosed sites in the south-west the problem, as in south-eastern Scotland, is to detect any meaningful sub-division at the morphological interface between small hillfort and protected homestead. Only a handful of sites exceed a hectare in extent, with rather more around 0.5 hectares, and the majority are smaller than that in enclosed area. In its survey of eastern Dumfriesshire, the Royal Commission devised the term 'smaller robustly enclosed settlements' to describe the latter group. Despite their small size, there can be little doubt about the defensive character of sites like Brieryshaw Hill in Ewesdale, or of Beattock Hill in upper Annandale. Though the date of these sites remains unconfirmed, the proximity of an unenclosed settlement including ring-ditch houses, and the presence of a stone-built house within the fort at Beattock Hill suggests a protracted if intermittent occupation through the first millennium BC. In some instances, like Minsca in the valley of the Milk, the defensive enclosure demonstrably forms one element within a sequence of construction that included a palisaded enclosure and possibly an unenclosed settlement before that. Among the cropmark sites of lower Annandale several are remarkable for their multivallate defences, in some cases like Greenhillhead probably resulting from composite construction over several periods. The impressive fourfold ditches of the hill-slope fort on Archwood Hill may reflect similar concerns to Wheeler's concept of defence in depth (Wheeler, 1943; RCAHMS, 1997: 134); alternatively, it may have been a mark of social status of the occupants or community that commissioned its construction.

One feature of the settlement pattern in eastern Dumfriesshire that is matched in the southeast is the occurrence of enclosed sites in close proximity to each other, in a manner which might seem to vitiate defensive effectiveness of both. Some distinction in function or in the identity of the communities that built and occupied them is presumably implied. In the case of Brieryshaw Hill, where a scooped settlement lies some 100 metres from the fort, there is no problem in regarding the two as belonging to different periods of occupation. But in the case of Newhall Hill two enclosures lying within a few metres of each other, even if constructed sequentially, can hardly have co-existed other than by design. Less extreme examples of the same phenomenon can be seen in the eastern Borders, for example, in the bivallate and multivallate cliff-edge enclosures at Ayton, Berwickshire (Figure 3.8). As we shall see in more extreme form north of the Forth, some of these promontory sites seem to be disproportionately elaborate in their defensive circuit relative to the area enclosed.

Relatively few of these smaller ditched or palisaded settlements in south-west Scotland have been excavated in modern times. At Hayknowes, west of the Annan on the coastal plain, a concentric double-ditched enclosure defines a compound around 75 metres across, within which a small cluster of buildings could have been contained. One was excavated (Figure 2.12, 6; Gregory, 2001), a ring-groove house 11 metres in diameter, again distinguished by having a second entrance opposite its more elaborate, south-east facing porched entrance. More unusual, however, was its large setting of four posts in its interior, perhaps a constructional device used subsequently for supporting a mezzanine floor or internal fittings, as has been argued earlier, rather than for providing roof support directly. Radiocarbon samples from the gateway structures and enclosure ditch terminals indicate an occupation in the later first millennium BC.

Air-photography (Cowley and Brophy, 2001) has revealed a similar double-ditched enclosure with traces of at least one internal ring-groove round-house at East Galdenoch, whilst complex, multi-period settlements are indicated by the density of crop-marks at Garphar, where the ring-groove houses extend well beyond the circuit of a double-palisaded enclosure. The ring-groove, however, as has long been recognized, is only a constructional technique and



FIGURE 3.8 Ayton, Berwickshire, multivallate cliff-edge enclosures, air-photograph Source: Photograph by D. W. Harding.

need not be indicative of any particular chronological or cultural horizon. In the south-west of Scotland, the site at Woodend, provides a salutary example of this lesson. Within its doublebanked enclosure, a complex of intersecting ring-groove buildings argued for a prolonged occupation of the site, while the total absence of material remains of the Roman period seemed to endorse a dating through the second half of the first millennium BC. Radiocarbon dates, however, from structural contexts of the buildings consistently point to a Roman native occupation, though the earliest, possibly unenclosed settlement on the site, could still be somewhat earlier. The absence of Roman material from a site in close proximity to a Roman road and military establishments must, if they are genuinely contemporary, indicate positive rejection of accord between native and Roman.

The very fact that archaeological classification has difficulty in drawing a dividing line between small hillforts and enclosed homesteads perhaps suggests that this was not a distinction that reflected the social order of later prehistoric settlement in the Borders. Some small hillforts were surely located with defensive considerations in mind. Sundhope Kipp in Roxburghshire, occupying a steep-sided spur at 420 metres OD and with triple ramparts barring access from its easiest northern approach, has all the hallmarks of a defensive site. The presence of ring-ditch houses within the enclosure may suggest a relatively early date for the defensive enclosure. Likewise Huntfold Hill, a little to the west, also occupies a steep spur to which the easiest access is blocked by multiple earthworks and strengthened by secondary outworks. In other instances, however, like the Chesters at Drem in East Lothian, the hillfort is actually

overlooked by higher ground to the south, giving an impression of almost wilful disregard for defensive advantage. Since considerations of defence seem not invariably to have been the dominant factor in choice of topographic location, it would be tempting to regard enclosure in these instances as reflecting other social factors of status or identity as much as the security of the community and its stock. Enclosure was evidently an aspect of later prehistoric settlement for the best part of a millennium before the Roman occupation, and it would be unwise to presume that, throughout that period or across the whole of southern Scotland, it signified the same thing or served the same purpose.

Equally, it might have been assumed that the presence of chevaux-de-frise indicated a defensive purpose, yet their local disposition often belies that purpose. Widely distributed in Atlantic Europe, and occasionally represented in Northern Britain, chevaux-de-frise are swathes of stones set on edge in front of a defensive wall with a view, as is generally inferred, to impeding a direct attack by cavalry (Harbison, 1971). In the case of the spectacular chevaux-de-frise at Dun Aengus in the Aran Islands off Galway Bay, the close-set, jagged stones would also frustrate an attack on foot, had they completely screened the perimeter of the fort. But here, as so often, they were restricted in extent, so that they could easily have been circumvented, giving the impression of a token, if dramatic, display, rather than an effective military device. At nearby Dun Dubh Cathair, the effect of the chevaux-de-frise might have been supplemented by the very fissured nature of the outcropping rock, whilst at Ballykinvarga in Co. Clare the swathe of stones was more extensive, showing more than one phase of construction. By contrast, the examples of chevaux-de-frise known from southern Scotland (Figure 3.9), from Kaimes hillfort on the edge of the Pentlands (Simpson, 1969) and from Dreva in Peeblesshire (RCAHMS, 1967: no. 275), amount to little more than scatters of small edge-set stones that can hardly have offered more than a token gesture of protection. The slightly more impressive series from Cademuir 2, Peeblesshire, are still located only along one flank of the hillfort. In effect, we might question to what extent any of these supposedly defensive works were ever put to the test in practice and how far they had become symbolic defences or status symbols of the social hierarchical infrastructure.

In south-eastern Scotland, the older conventional view of the 'trend towards enclosure' through the Iron Age saw its culmination in the major *oppida*, Eildon Hill on the Tweed (Plate 2A), Traprain Law in East Lothian (Plate 2B), Hownam Law (Figure 3.10) and Yeavering Bell in the Cheviots among other candidates. With enclosed areas variously between 8 and 16 hectares, and with evidence of house stances in great numbers within their walls, these were regarded as major community centres and the culmination of the progression towards enclosure on the eve of the Roman conquest. Accordingly, sites like Traprain and Eildon were inevitably linked with the tribal names of Votadini and Selgovae and were regarded as the native strongholds from which resistance to Rome might have been marshalled.

In fact, the excavated evidence from Traprain Law had always indicated a hiatus in the occupational sequence in the Iron Age, with more abundant evidence for activity in the later Bronze Age and again in the Roman period. More recent excavations have endorsed that impression, with indications of significant occupation in the Roman period. The excavations of Curle and Cree on the western shelf of the hillfort (Curle, 1915, 1920; Curle and Cree, 1916) produced considerable quantities of late Bronze Age metalwork. Structural evidence for later Bronze Age or Iron Age occupation beneath the complex pattern of later Roman occupation, however, was more equivocal. Nevertheless, from the more recent excavations a concentration of radiocarbon dates in the ninth century BC almost certainly confirms the existence

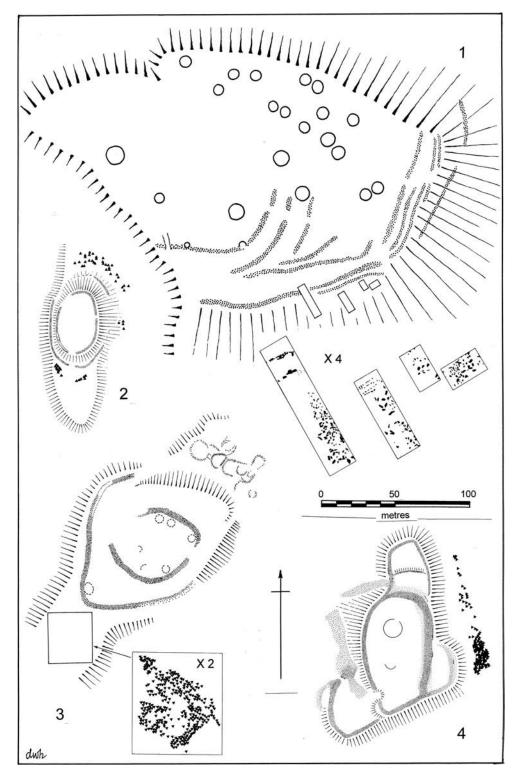


FIGURE 3.9 Hillforts with *chevaux-de-frise*, 1, Kaimes, Midlothian; 2, Fell of Barhullian, Wigtownshire; 3, Dreva, Peeblesshire; 4, Cademuir 2, Peeblesshire

Source: Drawings by D. W. Harding, adapted from Simpson (1969), Harbison (1971) and RCAHMS (1967).

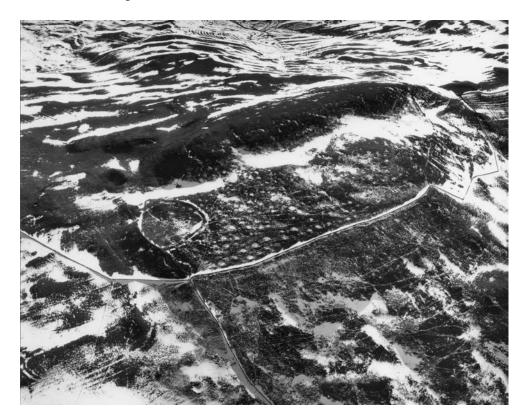


FIGURE 3.10 Hownam Law, Roxburghshire, air-photograph Source: Photograph by D. W. Harding.

of an important settlement on the hill at this time, though the extent, if any, of fortifications has yet to be established. Limited excavations in the 1980s at Eildon Hill North suggested a similar pattern of occupation (Owen, 1992). Later Bronze Age occupation was apparently represented by circular house foundations, and after an apparent lapse there was similar evidence of occupation in the Roman period. The date of the enclosing banks at Eildon remains uncertain, but there is no obvious reason why they should not have originated with the Bronze Age occupation. Mercer considered the possibility that the occupation of Hownam Law, at nearly 450 metres OD, might be re-assigned to the Middle Bronze Age (Mercer and Tipping, 1994: 5), while Halliday (1985: 238) had already suggested that Hownam Law, together with Cademuir at nearly 400 metres and White Meldon at 425 metres were improbable sites to have been occupied as late as the later Iron Age. Alternatively, Halliday saw the nucleated settlement pattern of an earlier period fragmenting in the Iron Age in south-east Scotland into a pattern of dispersed smaller forts and settlements.

In so far as enclosure served a purpose not required or met by unenclosed settlement, we might suppose that both forms could co-exist, depending upon the needs of the communities that occupied them. There need be no assumption that the one is superior or more desirable than the other, or that there should be any expectation of progression from one to the other. For Hingley (1992), open settlement was the norm, from which enclosure was a 'temporary

monumental elaboration'. If enclosed settlements are more in evidence at one period than another, this plainly requires explanation. But there need no longer be any expectation that this forms a regular, unilinear progression, culminating in multivallate hillforts or regional oppida on the eve of the Roman conquest. In general, unenclosed settlement is much more difficult to detect, even from air-photographic survey, than enclosed settlements, with some exceptions such as south-east Scotland (Halliday, 1985), where subsequent attrition of the landscape by agriculture has been minimal, and upland Northumberland, where unenclosed round-houses were detected in association with small field-systems (Gates, 1983).

Settlements and domestic structures

Palisaded enclosures were first recognized as a regular class of field monument in the Borders as a result of pioneer research by Anna Ritchie (1970). Confirmation of their early Iron Age origins had already been provided by artefact associations at Staple Howe and by a radiocarbon date from Huckhoe in Northumberland (Jobey, 1959, 1968). The regular occurrence together of palisaded enclosures, ring-ditch houses and cord-rig agriculture, sufficiently often in the absence of visible settlement of other periods in the locality to assume that they were elements within a contemporary and planned settlement system, was convincingly demonstrated by field research in south-east Scotland in the early 1980s. Evidence from Broxmouth (Hill, P., 1982b; Armit and McKenzie, 2013), Dryburn Bridge (Triscott, 1982), and Douglasmuir, Angus (Kendrick, 1995) confirmed that ring-ditch houses dated from at least the mid-first millennium BC in southern and eastern Scotland. Palisades, ring-ditch houses and cord-rigging may all individually occur later, but the combination of the three is a well-established, midfirst millennium phenomenon in the Borders. Ring-ditch houses also occur in open settlements, not only north of the Forth, as at the excavated settlement at Douglasmuir, but also in the Borders at Stirkfield and Huskie Rig in Peeblesshire or in Roxburghshire at Hangingshaw Hill above the Kale Water. In Dumfriesshire, several open settlements with ring-ditch houses have been located in the uplands between the Annan and the Esk (RCAHMS, 1997: 118) and regularly in proximity to tracts of cord-rig agriculture and palisaded enclosures.

Palisaded enclosures in the Borders take a variety of forms and sizes. They commonly represent the first phase of defensive enclosure, not just of hillforts, but of protected homesteads like Braidwood in Midlothian or Hayhope Knowe, Roxburghshire. Several, like Hayhope Knowe or High Knowes A, Alnham, Northumberland (Jobey and Tait, 1966), or certain phases of the Gibb's Hill, Dumfriesshire, sequence, have a double palisade, joined at the entrance in a continuous loop. This would plainly form a more effective barrier against intruders, human or animal, than a single palisade, and guard dogs could be left unleashed to patrol the enclosed circuit. This form of double palisade is in plan not unlike the framework of a simple, timber-framed box-rampart, however, and the suggestion has been made (Halliday, 1995; RCAHMS, 1997: 126; Gates, 2012: 74) that double palisades like those at Stanshiel Hill, Roxburghshire, and perhaps at Gibb's Hill, might have supported a timber-framed wall with fighting platform and breastwork, effectively being a timber box-rampart in which the timber framework remained unfilled. Such a rampart would have been extremely vulnerable to firing, however, though as a stage in the development of a more permanent perimeter it might make sense. It also may have been adopted where bedrock inhibited construction of a ditch and where material for the core filling was less readily available.

In terms of internal settlement, some palisaded settlements like Hayhope Knowe contain a number of houses in an ordered disposition along a central 'street', giving the appearance of a

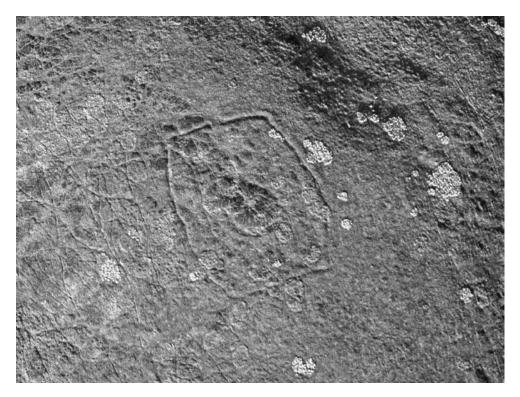


FIGURE 3.11 Greenbrough, Roxburghshire, air-photograph Source: Photograph by D. W. Harding.

small village. Others, like Greenbrough, Roxburghshire (Figure 3.11), contain just one large, central round-house and one subsidiary house and can have been no more than a single-family homestead. At High Knowes (Plate 3), two sites enclosed by double palisades both contain ring-ditch houses and were probably in broadly contemporaneous occupation, notwithstanding the later Romano-British round-house overlying the palisade of High Knowes B. High Knowes A (Figure 3.12), however, contained just two principal round-houses, each with subordinate lesser circular buildings. High Knowes B contained no less than sixteen houses, of which a number must have been occupied at any one time, and has the appearance of a small village community. The social distinction between homestead and hamlet, and the division of title to the surrounding landscape between the two communities, remains a matter of speculation.

Palisaded enclosures include rectilinear plans as well as the more common curvilinear variants. One group of rectilinear palisades in Northumberland, including Tower Knowe, Belling Law and Kennel Hall, is generally considered late, not because they have been independently dated, but because their plans are closely followed by later stone-built enclosures on the same site. On the other hand, as we have seen, there are good grounds for regarding the rectilinear, double-palisaded enclosure at West Brandon, Co. Durham, as relatively early, albeit largely on the grounds of the absence of later finds rather than the presence of diagnostically early associations. The fact remains that, as with rectilinear and curvilinear ditched enclosures in Northern Britain generally, there are no convincing grounds for ordering them into chronological sequence. The



FIGURE 3.12 High Knowes A, Alnham, Northumberland, air-photograph Source: Photograph by D. W. Harding.

earliest, nevertheless, whether representing the first stage of defensive enclosure as at Fenton Hill, Northumberland, or as a free-standing stockade like Dryburn Bridge (Figure 2.17, 3), must be assigned on the basis of radiocarbon dating to the first half of the first millennium BC.

Ring-ditch houses (Figure 3.13), though regularly referred to as such in the literature, have never been explained entirely satisfactorily as domestic houses. When Stevenson excavated at Braidwood, the assumption was that the house stood on the central platform, around which the ditch formed a sump for surface water and run-off from the eaves. Only with the realization from excavation, first at High Knowes A, where the outer wall was clearly bedded in a ringgroove foundation, and subsequently at Douglasmuir and Broxmouth, that the outer wall of the house enclosed the ring-ditch itself, came the necessity to explain exactly what was the purpose of the ditch within the building. The problem was compounded by the fact that the ring-ditch was often intermittent, effectively a series of scoops or twin scoops rather than a continuous ditch, and that these were often filled with stony rubble. One viewpoint (Reynolds, D., 1982), developing a suggestion proposed by Jobey for High Knowes, argued that these buildings could have been used for stalling cattle tethered radially, with fodder provided centrally or stored in the roof space. Armit (1997a: 32) developed this idea into the concept of a 'byre-house' with more

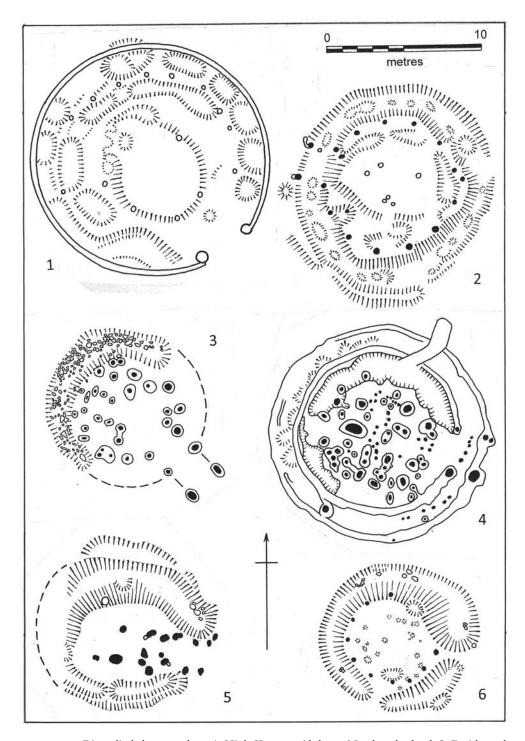


FIGURE 3.13 Ring-ditch houses: plans, 1, High Knowes, Alnham, Northumberland; 2, Braidwood, Midlothian; 3, Dryburn Bridge, East Lothian, House 8; 4, Dryburn Bridge, House 2; 5, Ironshill, Angus, House 2; 6, Douglasmuir, Angus, House 5

Source: Drawings by D. W. Harding, adapted from Jobey and Tait (1966), Stevenson (1949a), Triscott (1982) and Dunwell (2007), Pollock (1997), Kendrick (1995).

recent Highland analogies in mind. Stalling livestock need not have excluded human occupancy, particularly if an upper floor or mezzanine was provided. The absence of central hearths might be explained by this interpretation. Kendrick on the other hand (1995: 64) saw the deeper ring-ditches of the Angus examples as related to the function of souterrains. As regards dating, Dryburn Bridge afforded one of the earliest occurrences of the type. House 2 there yielded four dates: 2280 +/- 55 BP (GU-1283), 2450 +/- 50 BP (GU-1257), 2550 +/- 50 BP (GU-1287) and 2615 +/- 55 BP (GU-1284), all from structural contexts of the ring-ditch house. The houses from Douglasmuir produced an even more consistent series of dates, so that the existence of ring-ditch houses by the first half or middle of the first millennium BC could hardly be in doubt. More recent research, as we shall see, has suggested still earlier origins in eastern Scotland, though simplistic comparison based on structural typology could be misleading.

An important conclusion drawn from the Broxmouth evidence related to the introduction of stone-built houses, for many years in Northumberland and the Borders regarded as coincident with the Roman occupation. Reviewing the evidence for timber antecedents to stone-built round-houses at Kennel Hall and Belling Law, Hill (Hill, P., 1982a: 9) stressed continuity in architectural tradition. The key to this re-appraisal was House 4 at Broxmouth, which underwent a series of structural modifications in which the stone perimeter wall of the house, revetted into a scoop against the slope of ground, was successively refaced. The excavator particularly noted the absence of Roman material artefacts from the earlier levels of House 4, regarding the later introduction of a door sill with external paved porch as the first indication of the influence of Romano-British domestic architecture (Hill, P., 1982b: 175). The radiocarbon dates from House 4 were consistent with this interpretation, which appear now to have been endorsed by the site's final publication (Armit and McKenzie, 2013: 151). At Wether Hill, Northumberland (McOmish, 1999; Topping and McOmish, 2001), where surface survey indicated that at least one stone round-house had been built over the tail of the hillfort rampart, the excavators were surprised that radiocarbon dates suggested the possibility that stone houses and hillfort had been in contemporary use in the second half of the first millennium BC. In a long sequence within a relatively compact settlement, there is always the risk, of course, that residual material from earlier occupation may have been incorporated in the construction of later stone houses, distorting the radiocarbon dates. Alternatively, the stone house settlement may indeed have originated in an earlier period, expanding later to encroach upon the line of the rampart when the defences were no longer being maintained.

To distinguish this class of stone-built houses from those of the Roman period Hill coined the term Votadinian houses. Whether or not their introduction in south-east Scotland significantly preceded the Roman occupation, there are precedents enough elsewhere in northern England for believing that stone-built houses were current in the pre-Roman Iron Age. On the other hand, in Dumfriesshire and the south-west, the excavated evidence of Boonies and elsewhere suggested that timber construction continued to be the prevailing fashion into the Roman period. This was certainly also the case at Carronbridge, Dumfriesshire (Johnston, 1994), where both radiocarbon dates and artefacts indicate occupation from the late pre-Roman Iron Age into the later second century or beyond. Though the sequential squarewithin-a-square plan of the enclosure ditches is superficially comparable to Burradon and other Northumbrian settlements, there is no evidence for the adoption of stone building, nor convincingly of the internal layout of the Northumbrian farmsteads.

If stone-built or Votadinian houses date from the later pre-Roman Iron Age, it might imply that scooped settlements, within which they frequently are found in the south-eastern Borders at any rate, similarly began at an earlier date than hitherto supposed. Even if the origins of these sites are detached from the Roman horizon, there is no doubt that in the south-east and in Dumfriesshire they are commonly located overlying the ramparts of abandoned hillforts. From the south-east, Romano-British material of the first and second centuries AD has been recovered from scooped settlements. In the south-west the evidence is more equivocal, and the sequence of structural superimposition at Boonies could imply a much more protracted occupation. The probability is that scooped enclosures appeared in the later pre-Roman Iron Age, though they are still best documented as Roman native settlements.

From the evidence of air-photography, it would appear that one of the densest regions of settlement in southern Scotland is the Lothian plain, especially the area around Traprain Law, though of course we cannot know how many sites were in contemporary occupation. The Traprain Law Environs Project (TLEP) (Haselgrove, 2009) was designed to examine a sample of these sites in conjunction with the renewed investigation of the hilltop itself under the auspices of the National Museums of Scotland and coincident with a series of salvage excavations carried out along the line of major upgrading of the A1 between Haddington and Dunbar (Lelong and MacGregor, 2007). Any balanced evaluation of the research results was plainly dependent upon all three constituent elements. At first sight, the results of the TLEP excavations hardly look spectacular, in terms of either structural remains or material assemblages. To those who expect well-defined plans of post-built round-houses or of their stone counterparts, some of the amorphous scoops or spreads of cobbled paving may have seemed less than convincing as truncated remains of house stances. But increasingly, it has become evident that, for the middle and later phases of the Iron Age in Northern Britain especially, these ephemeral remains are widely representative of buildings. Equally, dating and cultural attribution has hitherto been hampered by the relatively limited survival of largely undiagnostic artefacts, a reality that has made field-walking a generally unrewarding occupation. Geomagnetic survey has likewise proved problematic in the past because of the intractable nature of the local geology. Improved instrumentation in this case resulted in some significant breakthroughs, though comparison of air-photographs and geomagnetic surveys still presented problem areas.

Ditched settlements not surprisingly are more amenable to registering as crop-marks than palisaded or unenclosed sites. Whilst the TLEP concentrated on enclosed sites, investigations on the line of the new A1 exposed predominantly open sites, archaeological input at the planning stage having encouraged the avoidance of known enclosures. Once identified and subject to excavation, of course, enclosed sites with complex occupational sequences may well include episodes of unenclosed settlement. Broxmouth and Dryburn Bridge both had phases of Early Iron Age open settlement, but more common are the later 'scooped' settlements like those from Knowes, Standingstone and Whittingehame Tower, as well as the open settlements from Phantassie and elsewhere on the line of the A1.

The basic classification of 'curvilinear' and 'rectilinear' enclosures, of course, has long been recognized. Conventionally most enclosed sites had been assigned to the Iron Age, so it is ironic that current research, to which the TLEP has very substantially contributed, has yielded relatively little evidence for Early Iron Age enclosures around Traprain, though various forms of enclosed and unenclosed settlement are represented elsewhere in the coastal plain. Several sites had evidence of enclosure in the later Bronze Age, that is, broadly contemporary with one period of intensive activity at Traprain itself. By contrast, the A1 project yielded virtually no evidence of later Bronze Age activity, perhaps because of a preference at this period for enclosed settlement, which the line of the A1 was designed to avoid, most of the unenclosed sites exposed

along its route being of the later pre-Roman Iron Age. In effect, there were very few settlements attributable to the Early Iron Age in either the TLEP or A1 areas of investigation, whilst Traprain Law has likewise produced little evidence of significant occupation at this time. Haselgrove (Lelong and MacGregor, 2007: 229) suggested that settlements of the Early Iron Age may have been fewer but larger and occupied for longer, concentrating on favourable locations at the expense of shorter-lived occupation of more marginal environments, a process which could have resulted in a disproportionate impact in terms of apparent site density in the archaeological record. At the same time we should recognize that dating in the absence of a diagnostic material assemblage is heavily dependent upon radiocarbon dating, for which, in some cases, notably the settlement at Standingstone, as Sharples (2011) pointed out, the samples were hardly from unequivocal contexts and could have been residual from the earlier occupation, leaving open the possibility that the enclosed settlement with round-houses was not middle Iron Age in date. In the later pre-Roman Iron Age there was initially a renewed emphasis on enclosure, including more rectilinear plans, before enclosure was generally abandoned in favour of open or 'scooped' settlements, coinciding with intensive re-occupation of Traprain Law itself.

Crannogs

The south-west of Scotland is one of the principal provinces in the crannog distribution (Henderson, Jon, 1998a), with Milton Loch 1 having long served as a type-site for the early regional series (Figure 3.14, 1). Excavated in 1953 (Piggott, C. M., 1953; Guido, M., 1974), before the

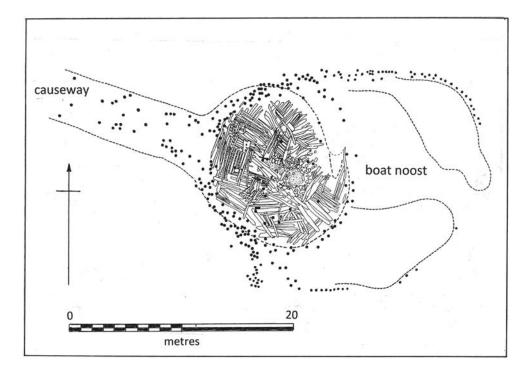


FIGURE 3.14 Milton Loch, Kirkcudbrightshire, crannog plan

Source: Drawing by D. W. Harding, adapted from Piggott (1953).

widespread application of radiocarbon dating, it also illustrates the problems of archaeological dating on the basis of isolated artefacts alone. A dress-fastener of the second century AD was among the few dateable objects from the site, and on this basis, the crannog was assigned to a Romano-British horizon. Subsequent radiocarbon dates, one from a vertical pile, the other from a plough stilt incorporated into the foundations, returned dates of 490 +/- 100 BC (K-2027) and 400 +/- 100 BC (K-1394) respectively, thus indicating beyond doubt initial construction and occupation of the site in the earlier Iron Age. There is no reason on that account, of course, to dismiss the possibility of continuing or renewed occupation of the building in the first or second centuries AD. In fact, Cavers' (2010: 99) review of the evidence concluded that, 'while often taken as the type-site for the prehistoric south-western crannog, Milton Loch 1 should also be considered as another example of a multiphase dwelling site'.

The platform, not much more than 10 metres in diameter, comprised carefully laid horizontal floor timbers retained within an outer perimeter of uprights, from which a timber causeway led to the shore. At the back of the island, away from the shore and sheltered by the house from the prevailing south-westerlies, was a boat-noost or small harbour. Subsequent research has confirmed the existence of at least two other crannogs in Milton Loch, one of late pre-Roman Iron Age date, the other certainly occupied in the early historic period, though not on present evidence earlier.

Crannog archaeology in Scotland has greatly advanced through the activities of the Scottish Wetland Archaeology Programme, and in the south-west in particular by fieldwork carried out since 2002 in the aftermath of the second phase of the South West Crannog Survey. Previous crannog surveys in the south-west had concentrated on drained sites, in the past because these were more accessible than underwater crannogs and more recently because they were assumed to be more vulnerable to accelerated organic degradation. A characteristic form of construction was the so-called Packwerk type, creating an artificial mound of timber, brushwood and peat, though a greater diversity of construction is now widely recognized (Henderson et al., 2006; Henderson, 2007b). Milton Loch 1 is indeed an example of the *Packwerk* type. But there is more stonework in the construction of Dorman's Island (2250 +/- 100 BP GU-10917) in Whitefield Loch, in the crannog in Barean Loch (2140 +/- 60 BP GU-2642) or in the pair of crannogs in Loch Heron near Glenluce (I: 2310 +/- 35 SUERC-6472 and II: 2390 +/- 35 SUERC-6473). The Iron Age mound of the Loch Arthur crannog (Henderson and Cavers, 2011) is largely of timber and brushwood (trench 1: 2240 +/- 35 BP GU-12173 and trench 2: 2275 +/- 35 BP GU-12174, endorsing a series of earlier dates), whereas the upper mound with its late Medieval structures is substantially stone (Henderson, 2007c). A log-boat found in Loch Arthur in 1874 is one of a limited number that have been radiocarbon dated to the Iron Age (Mowat, 1996: 50-4). Even the widely discredited free-standing pile-dwelling appears to be in evidence in Barhapple Loch (2130 +/- 50 BP GU-10920), where survey detected 144 vertical piles in the soft loch silts.

Much of this material, together with the accumulated evidence of older surveys and excavation dating from the nineteenth century was synthesized by Cavers (2010) in the broader context of terrestrial settlement in western and south-western Scotland, spanning the 'long Iron Age' of the first millennia BC and AD. For too long, crannog archaeology was seen as a specialist activity divorced from the complementary evidence of land-based fieldwork. The two come together at the loch margins, where at Cults Loch the survey exposed sixteen vertical piles around a promontory, apparently part of a loch-side site from which an oak stake dated to the early-middle Iron Age (2340 \pm 10 BP GU-12138), rather earlier than the nearby offshore crannog (1790 \pm 10 BP

GU-10919). Even more striking, however, have been recent finds from the Black Loch of Myrton at Glasserton (Cavers and Crone, 2013), since this site is not strictly a crannog but a lakeside village on a smaller scale but in the model of the 'lake-villages' of the Somerset levels. A small group of round-houses was evidently built directly on the loch-side peat, in a wetland environment in which the stakes of the outer walls survived, in one instance defining a house 11 metres in diameter. Alder and oak posts formed a framework round the central stone hearth, while reeds were laid over a floor of radial logs. Doorway timbers in particular showed evidence of sophisticated joinery. The domestic assemblage included saddle querns and hammer-stones, and the settlement has been provisionally dated to the mid-first millennium BC.

Agricultural economy

Identifying later prehistoric field-systems and agricultural patterns can be a frustrating exercise. Not only are such features seldom associated with dateable artefacts from stratified horizons, in many instances agricultural landscapes are manifestly composite and multi-period, such that disaggregating Bronze Age or Iron Age from Medieval or later features may be complicated in the extreme. Whilst periods of woodland clearance or arable extensification may have triggered major changes in the agricultural landscape, in other periods little change need have occurred over protracted periods of time. Much of our information is necessarily derived from landscapes that survive above the zone of later agricultural destruction. Yet this does not mean that earlier communities did not exploit the lower-lying slopes or valley bottoms, merely that the activity of later generations has there obscured the evidence for earlier usage. Basing our conclusions upon upland, often increasingly marginal locations, therefore, may distort our understanding of the nature of Iron Age agriculture. One basic tenet is now generally accepted, however, namely that Iron Age communities were capable of efficient agricultural practices, both arable and pastoral, and that, subject as ever to the vagaries of climate and related environmental factors, they were capable of managing an economic regime above bare subsistence level.

In the course of the Royal Commission's Roxburghshire survey, several sites were investigated where settlement was associated with a system of cultivation plots or lynchets that were compared to the 'Celtic' fields of the southern British Iron Age. These were generally assigned to the Roman period, however, once again on the basis of Roman material found in the related settlements, and in the absence of diagnostically earlier associations. In the case of the Tamshiel Rig complex (Figure 3.15), however, there are better grounds for suggesting that the fieldsystem had its origins in the pre-Roman Iron Age (Halliday, 1982). The settlement sequence at the core of the complex comprised three elements, an early fort enclosure, a later settlement, and several stone-built houses, which from their disposition could well have been later still. It was from these last that the evidence of Romano-British occupation was derived. The field-system displays at least one major addition, and there is every reason to suppose that it underwent lesser modifications over time, so that the fact that sections of field-bank over-ride the original fort earthworks need not in itself preclude an early beginning of the basic system. Within the outer enclosing banks an area of 12.5 hectares was divided into parallel strips, within which air-photographs revealed smaller cultivation plots. The perimeter bank with external ditch was evidently designed to be stock-proof, but the fact that the internal banks were similar led Halliday to conclude that the system was designed to be internally stock-proof as well, that is, to permit manuring of fallow plots by grazing animals. The Tamshiel system,

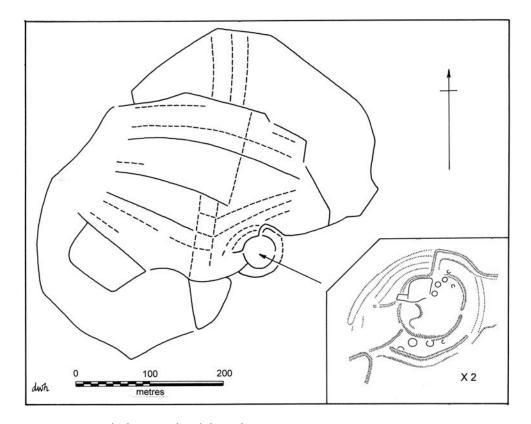


FIGURE 3.15 Tamshiel Rig, Roxburghshire: plan

Source: Drawing by D. W. Harding, adapted from RCAHMS (1956).

therefore, and others like it, suggests a mixed agricultural regime in which arable cultivation has in the past been an under-rated element. Even at Woden Law, where the hillfort is surrounded by cord-rig, it is possible that the outlying linear earthworks W, X and Y are related to the Iron Age agricultural system rather than to the supposed Roman siege-works, to which they seem entirely tangential.

Elsewhere in the Border uplands, there are linear earthworks which doubtless formed estate or agricultural land divisions, and though their dating remains uncertain some may have their origins in later prehistory. On the low-lying plains of East Lothian and Berwickshire there are other instances of land boundaries, sometimes in quite extensive and complex networks, which may well date from the Iron Age on the basis of their proximity and apparent relationship to hillforts. A good example is the system around the hillforts at the Chesters, Drem and Kae Heughs by Barney Mains (Figure 3.16). These linear boundaries may be made up variously of continuous ditches, pit-alignments and double pit-alignments, the first two on some airphotographs seeming to merge one into the other. Apart from the hillforts, other settlements of known Iron Age type, including several small ditched enclosures and at least one palisaded enclosure are known in close proximity, but the idea that these, together with the land divisions and focal hillforts, might have formed an integrated landscape system is still a matter of inference rather than demonstrated fact. At Castlesteads, Midlothian, a similar system of single and

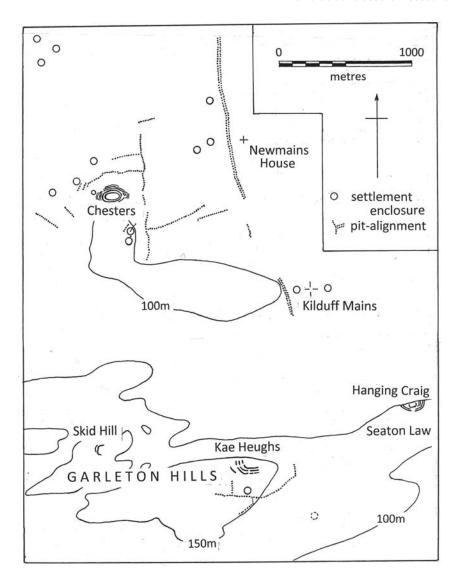


FIGURE 3.16 Settlements and land boundaries around Drem, East Lothian, A, Map of sites and pitalignments; B, air-photograph of fort and pit-alignments at Kae Heughs

Source: Drawing by D. W. Harding, adapted from Cook (1999), data from NMRS and DWH air-photographs; airphotograph by D. W. Harding.

double pit-alignments forms a network of land divisions by the lower Esk, with several ditched enclosures in close proximity (Figure 3.17).

That these pit-alignments and ditches formed land divisions is hardly in doubt, though how exactly the pit-alignments functioned in contrast to a continuous ditch is less obvious. Barber (1985) demonstrated that the Eskbank pit-alignment had never itself held posts. From MacKay's (1980) excavations at Drem, the individual pits were apparently relatively shallow and showed no trace of having held posts or any other structural feature. As quarry pits for

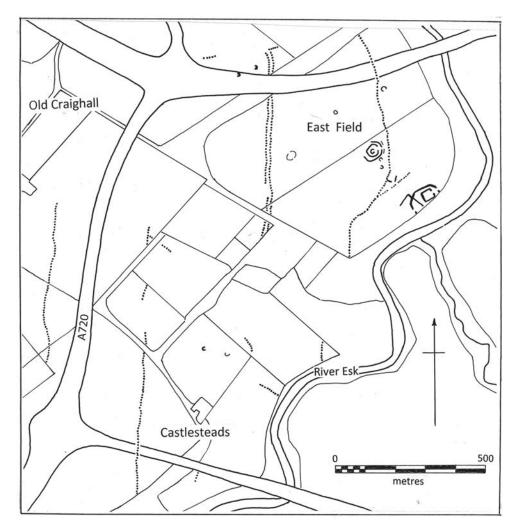


FIGURE 3.17 Castlesteads, Midlothian, A, map of enclosures and pit-alignments, B, air-photograph of enclosures and pit-alignments in East Field

Source: Drawing by D. W. Harding, adapted from Halliday (1982) with additions from DWH air-photographs; air-photograph by D. W. Harding.

an upstanding bank (Halliday et al., 1981: 60), they would have been not much less labourintensive than a continuous ditch, and less effective unless the bank was topped by a fence or hedge of which no trace has survived. What dating evidence is available suggests the possibility that these systems of land enclosure and division belong to the later first millennium BC, though it must be recognized that pit-alignments elsewhere have been dated from the Neolithic onwards. They may indeed represent a period of agricultural intensification and perhaps population growth towards the end of the Iron Age (Halliday, 1995: 35, 2002).



FIGURE 3.17 (Continued)

A major breakthrough of the late 1970s and early 1980s in south-eastern Scotland was the recognition that cord-rig, much narrower and slighter than later rig-and-furrow, being less than 1.5 metres apart, could be assigned to the first millennium BC. Demonstrably pre-Roman from its discovery beneath the Roman fort at Rudchester (Topping, 1989: Figure 3.2) and subsequently also at South Shields (Hodgson et al., 2001), it was plotted by air-survey over extensive tracts of the Roxburghshire Cheviots and in Peeblesshire and Lanarkshire. Its proximity to sites at heights over 400m OD like Arbory Hill or Woden Law, in areas where there was no evidence to associate it with later settlement, presented an a priori case for regarding it as Iron Age if not earlier. Whilst archaeological association was hard to demonstrate beyond doubt, the regular occurrence of cord-rig in proximity to palisaded settlements with ring-ditch houses made inevitable the eventual acknowledgement that these constituted complementary elements in a later prehistoric landscape. The fact that the rigging respected the very slight boundary trenches of palisaded sites like that east of Woden Law (Figure 3.18) would hardly be credible if it was the product of much later cultivation. Subsequent research has only qualified this conclusion by the recognition that cord-rig, like palisades and possibly ring-ditch houses, had a much longer currency and is by no means exclusive to the Early Iron Age. This is clear from the air-photographs themselves, for example at Hayhope Knowe, where the cord-rig apparently cuts across both palisade and subsequent earthwork enclosure (Plate 4A). In other

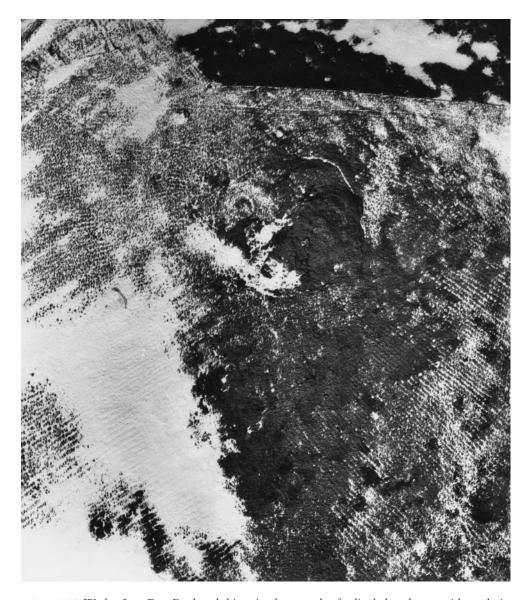


FIGURE 3.18 Woden Law East, Roxburghshire, air-photograph of palisaded enclosure with cord-rig Source: Photograph by D. W. Harding.

parts of Scotland, including Arran and Sutherland, radiocarbon dating has suggested that a similar form of cultivation may have continued in use until the Medieval period (Carter, 1994), but this should not detract from its later prehistoric origins in southern Scotland.

Much of the cord-rig in the Borders appears to be unenclosed but in close proximity to either palisaded settlements, as at Gibb's Hill, or to earthwork enclosures as at Orchard Rig in Peeblesshire. Hut Knowe, Hownam (Figure 3.19), is exceptional in its ordered system of field banks (Plate 4B), though even here in its final form the rigs appear to spill over the edges of those fields. Elsewhere, what might at first sight appear to be extensive swathes of rigging on closer examination prove to be much smaller plots, sometimes disposed in a patchwork of contrasting orientation and thus giving the appearance of small-scale cultivation in shifting plots. This may be indicative of the nature of cord-rig cultivation, or it may be a product of the fact that what survives for the field-archaeologist and airphotographer to record is necessarily what was left when the system went into decline and was abandoned.

In the south-west examples of cord-rig have been located by field survey or from airphotography in the upland zone of survival between Eskdale and Annandale, and some instances are recorded in Nithsdale. Though in most cases the surviving patches are relatively small, occasional tracts of rigging cover between 1 and 3 hectares, with the exceptional case of Crawthat Hill, where it attains as much as 8 hectares. Significantly, in Dumfriesshire, cord-rig is not found regularly in proximity to scooped settlements, which, with some qualifications regarding their beginnings, are commonly indicative of a late Iron Age or Romano-British date.

There is still some debate whether cord-rig actually was the product of ploughing or spade cultivation. Peter Hill's (1983) excavation of a section across the system at Hut Knowe North (Figure 3.19) revealed relatively steep-sided rigs, which the excavator was inclined to attribute to spade digging. Halliday (1993: 72) subsequently proposed a more complex practice, in which the initial tilth was created by ploughing ('sod busting' in Peter Reynolds' graphic phrase), after which relatively small areas would have been cultivated by hand. What was being grown is also subject to debate. It need not follow that cereals or legumes for human consumption were the sole objective of cultivation; growing foodstuffs for animals is also an option for communities engaged in stock rearing. In any event, given the presumed climatic deterioration around the turn of the first millennium, it is doubtful whether conditions at heights over 350 metres would have been conducive to cereal cultivation much after the middle Bronze Age.

Climatic deterioration would undoubtedly have had an impact on the land that was sustainable for occupation and cultivation, forcing down the upper limits of viable settlement. Jobey had presented this in the early '80s (Harding, 1982: 191) as a series of progressively reducing contour ceilings, from the high-water mark of second millennium cairnfields and unenclosed platform settlements (Feachem, 1961; Jobey, 1980a; 1980b), to the intermediate contours favoured for palisaded enclosures and eventually to the lowerlying scooped settlements of the Romano-British period. In reality of course, we must assume that earlier settlement also exploited the lower contours and that what survives is simply a series of progressively lowering high-tide marks. Hillforts and exceptional sites like Arbory Hill may be expected to transcend this contour model, which cannot therefore be applied too strictly as an indicator of a site's probable chronological horizon. Halliday (1999) subsequently developed the contour model with his concept of a dynamic 'hierarchy of environmental niches' in which settlement patterns were subject to dynamic change within their own core and periphery. In fact, the environmental evidence strongly suggests that a process of agricultural intensification was under way by the end of the first millennium BC, which may have manifest itself in a significantly re-ordered landscape at this time.

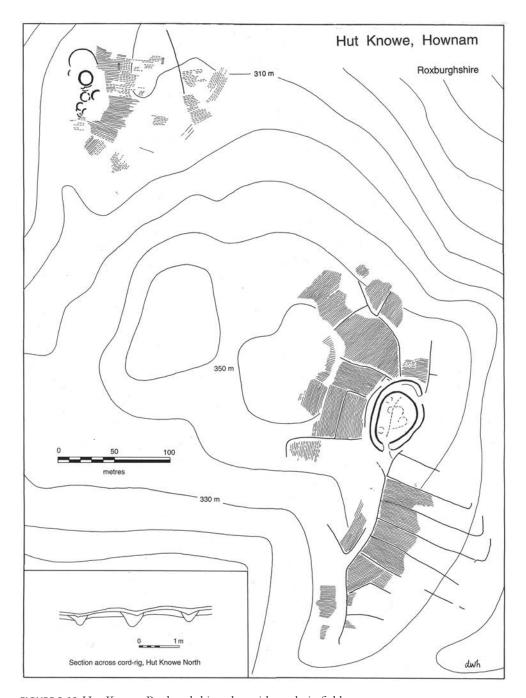


FIGURE 3.19 Hut Knowe, Roxburghshire: plan with cord-rig fields

Source: Drawing by D. W. Harding, adapted from Hill (1983), Halliday (1993) with additions from DWH air-photographs.

Burial and ritual

Along with large parts of Britain in the Iron Age, disposal of the dead in southern Scotland appears not to have resulted in a regular and recurrent burial type (Cook, M., 1999). In the south-east, there are examples of individual cist burials, including those from Torwoodlee, Selkirkshire and Burnmouth, Berwickshire, where artefactual associations suggested a later pre-Roman Iron Age date (Whimster, 1981), but dedicated cemeteries are almost nonexistent. The discovery of a small cemetery just outside the ramparts of the Broxmouth hillfort, therefore, together with the more scattered evidence of Iron Age burials from Dryburn Bridge, represented a significant advance in the database available for early Iron Age burial practices in the region. The radiocarbon dates from Broxmouth leave no doubt that the cemetery belonged to the second half of the first millennium BC. But the minimal number of burials - just nine graves in this group - compared with the scale of the site and the length of its occupation indicated by its structural sequence, points to use of the cemetery for a very limited time within the site's overall occupation. Despite its small size, the cemetery showed considerable diversity in the structure of the graves, including circular or oval pits, with and without capstones or lining stones, and rectangular or polygonal graves with cist-like slabs and capstones. The rite was nevertheless consistently flexed inhumation, with a predominantly NNE-SSW or diametrically reciprocal orientation. There were no grave-goods, underlining the problems of dating in the absence of radiocarbon dating.

Whilst the location of these burials just beyond the limits of the outer enclosure ditch of the fort looks like a classic choice of a liminal location for the cemetery, there were an additional four further formal burials within the fort, in graves that reflected similar rites, but more randomly distributed. In addition, there were fragments of human skeletal remains from middens, reflecting a pattern quite widely recorded in the British Iron Age. The inference from the Broxmouth evidence must be that formal disposal of the dead is not the primary purpose reflected by these burials, but some more selective ritual activity. Though it remains possible that disposal of the majority of the dead was by some means, such as cremation and scattering, which has left no permanent archaeological trace, it looks increasingly probable that Iron Age communities disposed of their dead within and around the settlements of the living, often in rites that involved the fragmentation and scattering of their remains (Harding, 2015).

At Dryburn Bridge (Figure 2.17, 3; Triscott, 1982; Dunwell, 2007), the ten burials that were contemporary with the later prehistoric occupation of the site were likewise too few in number and too spread out in date remotely to equate with more than a very small minority of the population. One group from the secondary phase of occupation was aligned along the former boundary of the palisaded enclosure. Another group in a line within the enclosed area may equally have reflected a former boundary of some sort, which has not left earth-fast traces. Flexed inhumation in pits was evidently one regular rite.

Among older finds the cairn cemetery at Gullane (Ewart and Curle, 1908) appears from apparently associated artefacts to have included Iron Age burials, but the standard of recovery left very inadequate record of its investigation. The massive cist burial from Lochend, Dunbar (Longworth, 1966) was an unusual example for the Iron Age of collective burial, containing the disarticulated and jumbled remains of no less than twenty-one individuals. There was some question whether these represented a single episode of collective burial or the result of cumulative deposition over time, the latter being the interpretation favoured by the excavators. Dating was assigned to a first century BC-first century AD horizon on the basis of fragments of penannular brooches.

A more recent discovery from Dunbar, by contrast, was that of a single 'warrior' burial (Roy, 2015), a flexed inhumation with sword and spear, that was in fact secondary in a cist in which the primary burial had been moved to one end to make room for it. Together with the burial with sword and scabbard with spear from Marshill, Alloa (Mills, 2004), the Dunbar burial extends the northern distribution of Iron Age 'warrior' burials that evidently constitute a special rite over and above whatever was locally the dominant means of disposal of the dead.

A trawl of the literature can certainly yield isolated instances of burial for which an Iron Age date can be inferred. At Alnham, for example (Jobey and Tait, 1966), the inclusion with one burial of a diagnostically Iron Age artefact – a cast bronze ring-headed pin of Irish type – in a possible Bronze Age cairnfield illustrates the problems of conventional dating and raises the possibility that earlier sites were re-used (but see Oswald *et al.*, 2006: 41, for an alternative view). Though most cairnfields and barrows in southern Scotland are unquestionably of Bronze Age date, there are occasional examples, like Broughton Knowe and Langlaw Hill in Peeblesshire or Toftcombs in Lanarkshire that do not altogether accord with the standard Bronze Age pattern. Re-use of older burial grounds by Iron Age graves may also be witnessed at Cairnpapple (Piggott, S., 1948; Barclay, 1999) though whether these secondary graves belong to the pre-Roman Iron Age or early historic period is still open to debate. And it remains possible that earlier burial traditions involving cremation in undistinguished ring-barrows that might pass for hut-circles continued well into the first millennium BC, as was suspected at Rullion Green in Midlothian (Watkins, 1984b, 1986; Watkins and Murray, 1990).

One distinctive deposit is the chariot burial from Newbridge, Midlothian (Carter and Hunter, 2003). Despite the poor condition of the assemblage, sufficient evidence survived to identify the wheel-rims and fittings of a two-wheeled vehicle, details of which suggested that it was not simply a northerly offshoot of the Yorkshire series. First of all, the vehicle had been buried intact, a practice not typical of the Yorkshire ritual, in which the chariot was normally dismantled for burial, but closer to continental models from the Champagne or middle Rhine. Second, the sub-keyhole outline of the burial pit itself was more closely paralleled in Germany than in eastern Yorkshire. Accordingly, the impulse for the Newbridge burial may have been a direct introduction from the Continent, rather than an extension of the eastern English connection. Unfortunately, excavation in the vicinity failed to yield any further burials to indicate that it was part of a more extensive cemetery. The Newbridge find therefore remains unique and anomalous, so that, beyond its intrinsic interest, it cannot cast much light upon the nature of Iron Age ritual or funerary practice in southern Scotland.

The fact that archaeologically some regions at certain periods display a dominant funerary rite need not lead to an expectation that there should have been a recurrent and regular form of disposal of the dead in all circumstances. Wait (1985: 121) suggested that there may have been several and variable mortuary practices in the British Iron Age, and warned against the assumption that any 'norm' should be archaeologically recognizable. The inference must be that, even where a distinctive mode of burial is archaeologically visible, we need not assume that it was the only rite being practised. In any event, the archaeological record only testifies to the final stage of deposition; two apparently contrasting cultural groups, one with a distinctive burial rite and the other with none, could in reality have followed much the same ritual formula until that final act of deposition. The disposal of the dead in a dedicated cemetery

may have been the exception rather than the rule, and the elusive burial ritual may have been much more closely integrated into the function of settlements.

Interpreting evidence for ritual was once regarded as being on the limits of archaeological inference (Hawkes, 1954). Currently, however, ritual has too often become an explanation of first, rather than last, resort, and what prehistoric societies believed or practised is presented as assertion rather than reasoned inference. For a society in which ritual and the mundane were doubtless inextricably interwoven, few sites can be regarded as expressly for ritual or ceremonial activities, though at a slightly later date the unusual 'amphitheatre' at Over Rig in Eskdale might lay claim as such (Mercer, 1985). Important ceremonials, like the inauguration of kings, on analogy with early historic models, might have taken place at major regional foci, perhaps like Traprain Law and Eildon Hill, or at Ingleborough or Carrock Fell in northern England.

Hoards are sometimes regarded as ritual deposits, along with a range of other explanations for depositing a collection of valuables in the ground. Those that are found in watery locations, like the early Roman hoards with later Iron Age cauldrons from Carlingwark Moss, Kircudbrightshire, and Blackburn Mill, Berwickshire (Piggott, 1953a), are particularly thought of as votive deposits, in a tradition that is widespread from Transylvania to Wales. At an earlier period, some late Bronze Age hoards, like the bronzes shields from Yetholm, Roxburghshire, may equally have been from a votive deposit. The fact that these finely wrought sheet-bronze shields, unless backed with wood or leather, would have been impractical for other than ceremonial purposes endorses this view. The resurgence of the practice of ritual deposition in the Roman Iron Age, when communities felt under threat from an alien culture, would be entirely consistent with the underlining of local identity.

Material culture

As in the case of northern England, the earlier Iron Age material culture of southern Scotland and the Borders is characterized by its comparative poverty and by the absence of clearly diagnostic types. Pottery in particular, elsewhere the staple of archaeological classification, is sparse in quantity and undistinguished in quality. Nevertheless, coarse ware jars with relatively thick walls and simple or inward-curving rim-profiles are known from a series of sites - Broxmouth, Kaimes and Hownam Rings, for example - so that some uniformity of style and perhaps concurrency of use may be inferred. At Broxmouth, Cool (1982) had distinguished type 1 wares, thick-walled with large, coarse tempering and type 2 with relatively finer fabric that she saw as earlier and later respectively, a conclusion that has been broadly endorsed by the more recent refined chronology for the site (MacSween, 2013: Ill. 10.9). But as in the Tyne-Tees region, considerable local variation is possible, and the southern Scottish ceramic assemblage, though considerably greater than it once was, is still insufficient to sustain a usable regional type series.

High-status metalworking in southern Scotland for the most part is also more evident in the later pre-Roman Iron Age than in the earlier. Swords and scabbards of Piggott's (Piggott, S., 1950) Group III in the south-east probably date from no earlier than the first century BC, whilst Group IV, like the example from Mortonhall, Edinburgh, belong to the early first century AD. These certainly resemble Brigantian types, and though conceivably introduced by refugees from further south, could equally have been diplomatic gifts or the product of social exchange. The production and display of conspicuous and portable symbols of identity is not surprisingly encouraged by the presence of an alien and threatening force, so that in the years following the

108 The earlier Iron Age

Roman invasion of Britain, some of the more spectacular items of La Tène-derived art are to be found in the frontier regions of the north and west.

Stevenson's analysis of Scottish Iron Age metalwork (Stevenson, R.B.K., 1966) was the product of a generation in which population movement was almost invariably regarded as the catalyst for cultural change or innovation. The model of diffusionism and the concept of time-lag, as we have seen, were also responsible for the retarded dating accorded to exotic imports into Northern Britain or to the local developments that they were assumed to have triggered. Nevertheless, the southern affinities and even origins of some items of prestigious metalworking are undeniable. The gold torc terminal from Cairnmuir, Peeblesshire (Netherud), for example, is so close to the south-eastern style of the first century BC, most splendidly exemplified at Snettisham, Norfolk, that it might have been the product of an Icenian workshop.

Other products from southern Scotland, however, indicate other external influences, notably the existence of an Hiberno-Scottish connection well before the period of historically recorded settlement of Dál Riata. Among the earliest high-status metalwork is the Torrs ponycap from Kircudbrightshire (Plate 5A), already evidently embellished with the pair of horns at the time of discovery and not simply a composite artefact of the nineteenth century, notwithstanding the contrasting techniques of engraved and repoussé ornament. In fact, engraved ornament appears on the repairs to the pony-cap, extending the design of one repair on the cap itself. The repoussé design shows more obvious influence from the Irish La Tène school that produced the Loughnashade trumpet than it does from eastern Yorkshire or from the Witham-Wandworth tradition with which it has been inextricably linked (Atkinson and Piggott, 1955; Harding, 2002). Cross-channel connections between Northern Ireland and southern Scotland seem probable from at least the third century BC. At a rather later pre-Roman Iron Age date, the scabbard from Bargany House in Ayrshire has been recognized as an Irish type, if not actually of Irish manufacture, while the sword from Steventon Sands (MacGregor, 1976: no 139) is also of Irish type. In this context, it is worth remarking that the pair of bronze spoons found in a cist burial at Burnmouth, Berwickshire, are of beaten bronze in the manner of Irish spoons, rather than cast like their southern British counterparts. We have already noted that the bronze-cast ring-headed pin from High Knowes, Alnham, was of a distinctively Irish type. By the opening centuries AD, as we shall see, the cross-channel connection is maintained over a wide area in the distribution of doorknob spear-butts and their moulds, so that the Hiberno-Scottish connection is well attested archaeologically long before documented history.

CENTRAL AND EASTERN SCOTLAND

In the generation following the Second World War, research into later prehistoric archaeology concentrated notably on south-eastern Scotland and the Atlantic north and west. Eastern and north-eastern Scotland did not benefit from field survey and research by the Royal Commission on the Ancient and Historical Monuments of Scotland, and perhaps for this reason, Piggott's (1966) North-Eastern Province was perhaps the least well documented of the four. The only field monuments that rated serious consideration were hillforts, notably those with timber-framed or vitrified ramparts. The regions of Strathearn, Strathtay, Strathspey and Cromarty/Moray were largely ignored, and the crannogs of the central Highland lochs, whose distribution (Henderson, Jon, 1998a) effectively corresponds to a fifth, central Highland province, were not included. In terms of material culture, the only significant distributions to be discussed were the late massive armlets and Donside terrets, being major highlights in the archaeological database. In the present generation, eastern Scotland north of the Forth has seen a great resurgence of fieldwork, which is transforming our understanding of settlement in the later prehistoric and early historic periods and greatly diversifying the database of known field monument types.

Forts and earthwork enclosures

In west-central Scotland, the complex, multi-period plan excavated at Braehead, Govan (Ellis, 2007), might have prompted comparison with the settlements of the south-eastern Borders, with its palisade trenches, ditched earthworks and ring-groove houses, but its structural sequence hardly follows a unilinear progression from simplest to most complex. In fact, six major phases of occupation were identified, spanning a period from the early Iron Age until the first century AD, but with undoubted episodes of abandonment, seasonal or for longer periods, between structural phases. Contrary to any expectation of progressive sequence, the initial palisaded enclosures were followed by a phase of unenclosed occupation, before the site was again enclosed by its most substantial triple ditches. This too was abandoned, and in due course, the site was re-occupied by several palisaded enclosures before the final phase represented by unenclosed round-houses. The relative paucity of structures in any one phase and

110 The earlier Iron Age

the fact that the site was prone to flooding, led to the conclusion that occupation was seasonal and episodic. This would also be consistent with the multiple occasions on which the enclosure was rebuilt, suggesting lack of maintenance through dereliction. But the triple-ditched enclosure, though hardly of defensive proportions, implies a measure of prestige or symbolic significance.

Hillforts are not nearly as numerous in central and eastern Scotland as they are in the Borders, but the distinction between hillfort and homestead is more obvious. Though hillforts are found around the Cromarty and Moray Firths, along the coast of Moray and Banff, on Donside and Deeside, and quite widely from Angus to the Forth, their distribution is not dense, and across quite extensive areas, they are hardly represented. Radiocarbon dating has made it clear that hillforts not only had their origins in the later Bronze Age, but that many were reoccupied, or even built anew in the early historic period. The Hownam model, which envisaged a progressive elaboration of defences from palisaded enclosure to wall-ramparts, and from simple, univallate works to more complex, multivallate constructions, was never presumed to apply to central or eastern Scotland.

Among more monumental hillforts, Childe in 1935 had identified two groups, which would no longer be regarded as discrete and different types, but which were particularly represented in eastern Scotland, 'Gallic' forts and vitrified forts (Childe, 1935a). 'Gallic' forts were characterized by timber-framed ramparts, at that time presumed to have been derived directly from the continental tradition described by Caesar at Avaricum as a murus gallicus; Burghead in Morayshire, Castle Law, Abernethy and Forgandenny in Perthshire were cited as examples. For the vitrified series, Finavon in Angus, excavated by Childe himself between 1933 and 1935, served as the model (Childe, 1935b). The defences at Burghead in Morayshire were subsequently recognized as belonging to the mid-first millennium AD, as are the defences of several other coastal promontory forts in the north-east. On the other hand, Abernethy, where excavations in the late nineteenth century exposed a substantial wall-face through which gaps indicated the positions of stout horizontal beams (Figure 4.1), remains firmly accepted as early Iron Age on the grounds of its material associations. Providing a wall-rampart with timberframing is a structural device for increased stability, bracing the front- and rear-facing walls or timber uprights into a rigid 'box'. It further enabled the builders to achieve a greater heightto-width ratio than would have been possible simply by heaping the rampart material into a dump and allowing it to assume its natural angle of rest. If timbers of sufficient length were used in a systematic structure, it could indeed have provided additional strength and stability to the wall, as Caesar reported during his Gallic campaigns. Various arrangements of internal timbers are known through Britain and Europe in the later prehistoric and early historic periods, which have inevitably been subject to archaeological classification. At Abernethy, section drawings also indicate the use of longitudinal timbers, creating a framework that was backed against the natural slope of the terrain. Whatever design was adopted, timber or timber-andstone techniques of construction are not exclusive to any one period or region and, as such, are not culturally or chronologically diagnostic. They certainly would no longer be widely regarded, as Childe (1935a) presumed, as evidence for invasion or colonization of Scotland, although the idea that the concept of timber-framing may have been introduced from continental Europe through Urnfield or later Hallstatt contacts has proved remarkably enduring (Cunliffe, 2005: 364).

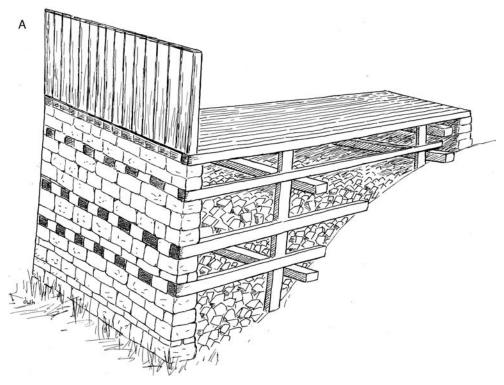




FIGURE 4.1 Abernethy, Perthshire, hillfort rampart, A, reconstruction drawing, B, wall-face exposed by excavation *c.* 1898

Source: Reconstruction drawing by D. W. Harding. Photograph courtesy of Historic Environment Scotland, copyright Society of Antiquaries of Scotland.

Vitrification and its purpose

Vitrified forts are likewise not a homogeneous regional or cultural group. Vitrification is in essence what happens under extreme heat to certain types of stone when a timber-framed rampart is fired. The technique of constructing wall-ramparts with rubble core and internal timber-lacing faced with dry-stone courses front and rear is characteristic of many regions of western Europe from the Bronze Age through to the early Medieval period. When a timber-framed wall is fired, the result will only be vitrification where the stone core is of appropriate rock; the effect on limestone, for example, as at Leckhampton in Gloucestershire, is not vitrification but reduction. In Scotland, the best-known examples occur in the east, but they are certainly not geographically exclusive, as the examples from Sheep Hill, Dunbartonshire (MacKie, 2015), Dunagoil on Bute (Harding, 2004) and Dun Lagaidh in Wester Ross (MacKie, 1976) amply demonstrate. The vitrification of the late Bronze Age fort at Sheep Hill is also one of the earlier archaeologically dated examples in Scotland.

Once regarded as a peculiarly Scottish device for solidifying and strengthening a rampart, current opinion now discounts vitrification as a construction technique for several very good reasons (MacKie, 1976). First, the technique is not uniformly applied throughout the defensive circuit of any recorded site. Second, its effect is not to provide a consolidated and strengthened wall; instead it distorts and thus weakens the wall. Third, the evidence for vitrification at Finavon included burnt debris found resting on the latest occupation levels, rather than being in evidence from the primary deposits, suggesting that it was indeed a destructive rather than constructive process. Finally, there are numerous examples of timber-laced stone or rubble walls where there is no evidence whatsoever of vitrification, so that, if we regard it as a constructional technique, we must ask why it was not applied more consistently.

Experimental firing to simulate the creation of a vitrified wall has been attempted on more than one occasion, by Childe and Thorneycroft (1938b) at Plean Colliery, Stirlingshire, and at Rahoy in Argyll, and at East Tullos, Aberdeenshire (Ralston, 1986). These exercises have demonstrated empirically that setting fire to a timber-laced wall is not a simple task, requiring preparation and patience, and even then, it is prone to frustration by the Scottish weather. It seems unlikely therefore that extensive vitrification could have resulted from a domestic accident. Equally, it is improbable that deliberate firing could have been successfully accomplished in the heat of battle as a practical means of attacking a hillfort rampart, though this is not to say that fire would not have been deployed against timber gateways. In consequence, it seems more plausible to think of the firing that caused vitrification as part of punitive reprisals against a hillfort after capture, intended to send an unmistakable signal of submission to the surrounding communities. The presence of sites in some numbers which display vitrification, therefore, must be regarded as a measure of political instability, though whether it should be taken as a sign of a widespread series of broadly contemporary episodes, or simply as an indication of inherent unrest between neighbouring communities, perhaps over a protracted period of time, remains a matter of debate. Though constructive vitrification seems to be conclusively discredited, the very varied character of vitrification could reflect a variety of causes, accidental and deliberate, over a very long chronological span.

The fact that it is commonly the core that is vitrified, rather than the wall-faces, as at Finavon and Dunagoil (Figure 5.20B), nevertheless requires explanation. It is sometimes suggested that this arises from the firing of timber structures along the wall parapet, encouraging the spread of burning to the internal timber framework of the wall from above. The possibility of

casemate construction in part of the walls encouraging internal firing has never been seriously investigated. But it is hard to imagine why the wall-faces should have been immune, except where the surviving courses were so low as to have been covered in accumulating occupational and vegetational deposits, as could have been the case at Dunagoil. Spontaneous internal burning, as in haystacks or coal-tips, though once proposed for Castle Hill, Almondbury, seems improbable. The answer in some cases could be that the wall-faces, of which often only the lowest courses survive for examination, were protected by the rubble of upper courses being deliberately torn down to give access to the flammable timber framework within the core.

Oblong enclosures

The oblong forts at Finavon (Alexander, 2002) and Forgandenny are representative of a class of enclosure (Figure 4.2) that affords perhaps the best case for recognizing a distinctive regional group in central and eastern Scotland. To these might be added the vitrified oblong fort on the summit of Tap o' Noth, Aberdeenshire (Plate 7A), and the smaller elongated enclosure on Turin Hill, Angus, among others. A striking aspect of these sites is their apparent lack of an entrance, which would have inhibited easy access, especially for stock or wheeled vehicles, even allowing for the use of ladders or timber ramps to surmount the walls. Any breach in a hillfort's enclosing ditch and rampart, such as an entrance causeway and passage, is an obvious weak point in the defensive circuit, but defensive integrity is generally compromised in the interests of functional utility. It seems improbable that entrances, even relatively narrow ones, would have been totally obscured to surface inspection through natural processes of deterioration and collapse, but it is possible that the decommissioning of a hillfort could have involved the deliberate blocking of its entrance as part of the closure episode, to the extent that it might be undetectable without excavation. It might be argued that evidence of external tracks or hollow ways would have betrayed the location of former entrances, had they existed, but the same could be said of other points of access, such as timber stairs over the wall. This perhaps suggests that access was not for a significant number on a daily basis, which might support the idea that oblong forts were for periodic assembly rather than everyday occupation.

So the question arises, what was the function of oblong enclosures? At Finavon, despite Childe's (1935b) claims, the domestic assemblage is actually quite limited, showing little evidence of the working of antler or bone, for example, despite the occurrence of animal bone in profusion. A primarily defensive purpose seems to be belied by the fact that its elongated, oblong plan pays little heed to the natural contours. The absence of a formal defensive ditch is perhaps less significant, as this may depend upon topography and geology. An alternative interpretation might see these oblong enclosures as ceremonial or otherwise special enclosures, places for periodic assembly rather than for everyday occupation. Demonstrating cult activities archaeologically is notoriously difficult in the absence of formal temple plans, altars, ritual dedications or votive deposits, but at Finavon, the fragments of human skull found within the filling of a dry, well-like shaft at the east end of the enclosure would not be inconsistent with evidence of ritual practices in cult enclosures from continental Europe.

Despite the material assemblage from Childe's excavation (1935b) and MacKie's radiocarbon dates (1976), the date of the construction and occupation of Finavon has remained contentious. The reliability of dates from the Gakushuin, Tokyo, laboratory (GaK) around this time was questioned (Ashmore, 1997: 240), though a later pre-Roman date had also been suggested by archaeomagnetic dating (Gentles, 1993). Thermoluminescent dates, on the other

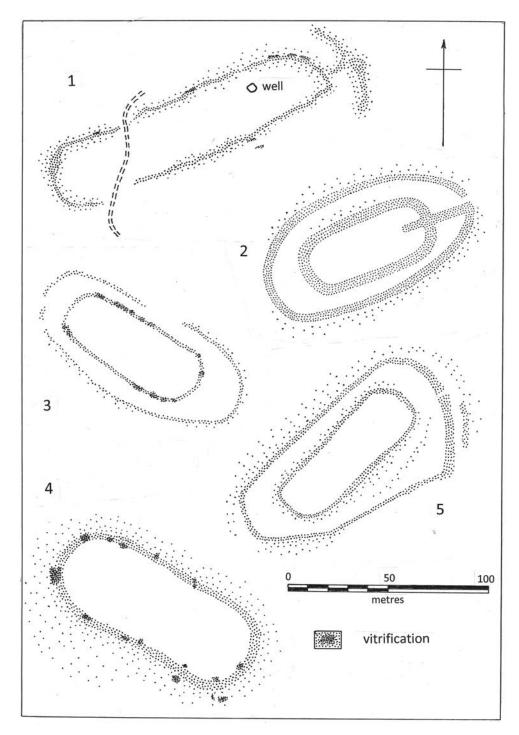


FIGURE 4.2 Oblong forts in eastern Scotland: plans, 1, Finavon, Angus; 2, Castle Law, Forgandenny, Perthshire; 3, Dunnideer, Aberdeenshire; 4, Tap o' Noth, Aberdeenshire; 5, Craig Phadrig, Inverness

Source: Drawings by D. W. Harding, adapted from Alexander (2002), Christison (1898), RCAHMS (2008) and Cook (2010), RCAHMS (2008), RCAHMS (2014).

hand (Sanderson et al., 1988) yielded the possibility of a mid-first millennium AD date, which led Ritchie (Ritchie, A, 1995) to argue for an important role of both Finavon and Turin Hill in the early historic period. A programme of dating of vitrified forts by thermoluminescence addressed technical problems with the technique (Strickertsson et al., 1987, 1988), and subsequent dates showed reasonably good accord with dating by other methods. Re-use in the later Iron Age, of course, need not be incompatible with initial construction and occupation in the later Bronze Age or early Iron Age. Sections through the ramparts at Finavon (Figure 4.3) could suggest two periods of wall construction, the first represented by the stone-faced wall, the second by the substantial dump of material above and behind it, which in any southern British

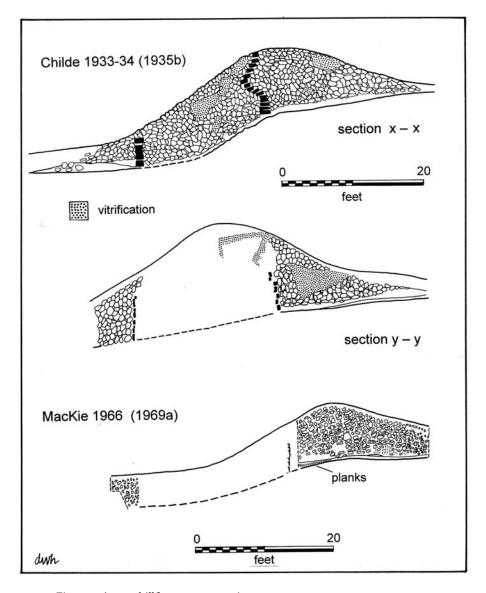


FIGURE 4.3 Finavon, Angus, hillfort rampart sections

Source: Drawings by D. W. Harding, adapted from Childe (1935b) and MacKie (1969a).

116 The earlier Iron Age

hillfort would invite a two-phase interpretation. The rear wall-face of 'box' ramparts was not invariably left exposed, but integral dumps, as reinforcement or for access to the wall-head, were seldom of these proportions. Whatever uncertainties persist regarding an early historic occupation or re-occupation of Finavon, the total absence of Roman material surely excludes its use during those periods when neighbouring sites show evidence of Roman contacts.

The same programme of thermoluminescence dating which yielded unexpectedly late dates for Finavon also produced a consistent set of remarkably early dates for the vitrified fort at Tap o' Noth in Grampian region, centring on a mean age of 4140 BP. Notwithstanding the issues raised by some thermoluminescence dates, the idea that vitrification might occur at any date presents no problem in principle, but the fact that the vitrified fort at Tap o' Noth is another apparently gateless oblong enclosure would lead to some expectation of concurrency with Finavon, Forgandenny and the other sites of this class. Below the summit is an outer wall, now recognizable as a line of substantial boulders (Plate 7A; Feachem, 1963: 105-6), enclosing a massive 21 hectares. More than a hundred platforms, which may have been quarry scoops but some of which at around 10 metres in diameter resemble house platforms, could be indicative of a much more extensive settlement. The summit of Tap o' Noth lies at 560 metres OD, still somewhat lower than Ben Griam Beg in Sutherland, which rises to 620m (Ralston and Smith, 1983). The high altitude of these sites has prompted the suggestion that their occupation, even if only seasonal, might have been more appropriate to a period preceding the climatic deterioration of the sub-Atlantic around the end of the second millennium BC. We have already seen, on the other hand, hillforts in northern England like Carrock Fell in Cumbria at similar heights, and most strikingly Ingleborough in west Yorkshire at over 700m. Eight miles to the east of Tap o' Noth, though at less extreme altitude, Dunnideer (Figure 4.4) replicates its structural layout, with an outer, though



FIGURE 4.4 Dunnideer, Aberdeenshire, from the east

Source: Photograph by D. W. Harding.

intermittent and perhaps unfinished enclosure, within which are some possible scooped hut platforms. The summit enclosure, in which vitrified material occurs in profusion, is again an oblong in plan with no clear entrance. Sample excavation (Cook, 2010) has shown, through radiocarbon dating of hazel charcoal associated with the site's vitrification and by thermoluminescent dating of the vitrified rampart material, that Dunnideer's destruction most probably occurred in the third quarter of the first millennium BC, a time when Cook argues for a significant, though as yet not fully explained, shift in settlement patterns in north-east Scotland. Oblong forts in eastern Scotland apparently represent the last phase of major enclosure before the post-Roman later Iron Age, when new sites were constructed and others re-occupied.

Further north, at Craig Phadrig, Inverness (Small and Cottam, 1972), another oblong fort dominated a summit which evidently attracted occupation in later prehistoric and early historic times. Both outer and inner ramparts were timber-framed, stone constructions, the inner much the more massive and showing signs of vitrification. Once again, no entrances are visible in the inner enclosure wall, so that the site appears to conform to type. Radiocarbon dating has indicated that these enclosure walls date from the mid-first millennium BC, but excavation within the interior yielded fragments of late Roman or sub-Roman pottery and a mould for a hangingbowl escutcheon, which plainly testify not only to later occupation, but to the site having been a residence of high status in the early historic period. The compelling impression is that, even if hillforts ceased to be built or occupied for prolonged periods, they nevertheless retained their status and significance as focal places for local or regional communities for more than a millennium.

In the west, at Craigmarloch Wood in Renfrewshire (Nisbet, 1996), overlooking the Clyde, a small, sub-oblong fort, this time with one certainly original entrance, also displayed extensive traces of vitrification, combined within a rubble wall that included earth and turf within its exterior stone facings. From cavities within the wall core and impressions on the underside of the vitrified material, the excavator inferred a framework of transverse, longitudinal and possibly vertical timbers. Here, as in the classic Hownam sequence, the fort was preceded by an earlier palisaded settlement, itself probably of more than one phase of construction. Its occupational material could be distinguished from that of the later fort by virtue of the fact that the palisaded enclosure extended beyond the limits of the vitrified fort and was effectively sealed stratigraphically by its foundations. The material assemblage included basic utilitarian types such as spindle-whorl, pounders and whetstones, together with pottery with incurving, barrel-shaped profiles in coarse, Dunagoil-style fabrics. But like Dunagoil, it also included a number of shale ring fragments, and the presence of crucibles and a clay mould for a decorative boss indicates bronzeworking for higher-status products. A single early radiocarbon date for the palisaded phase is entirely consistent with the dating of palisades elsewhere, but the fact that a single date from the vitrified wall is rather later than might have been expected prompts caution in placing too much weight upon either.

Causewayed enclosures

The diversity of types of field monument hitherto grouped under the umbrella heading of hillforts is further demonstrated by sites with multiple entrances, of which an example at the Barmekin of Echt in Aberdeenshire has its number of entrances reduced from five to just two in its later phase. The most extreme example, however, is the multi-phased enclosures on the Brown Caterthun in Angus, which have up to nine entrances (Figure 4.5). This number of breaches in the enclosing earthworks, reminiscent of southern British causewayed camps of

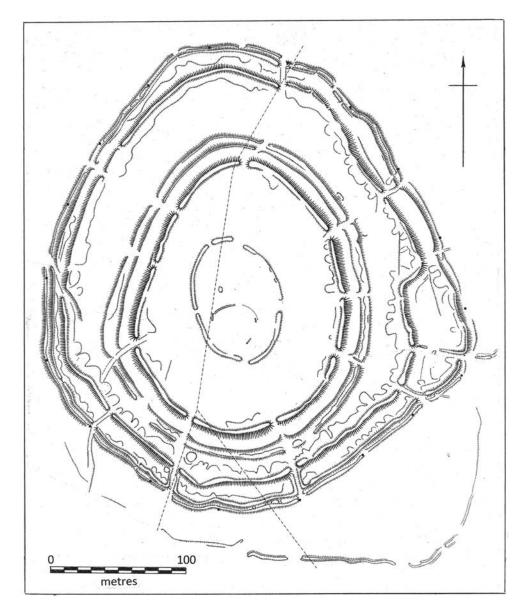


FIGURE 4.5 Brown Caterthun, Angus: plan

Source: Crown Copyright: Historic Environment Scotland.

the Neolithic period, can hardly have been compatible with effective defence and must have been designed to meet some other social or agricultural purpose. Systematic excavation of the Brown Caterthun in the mid-1990s (Dunwell and Strachan, 2007) not only revealed the character of these enclosing earthworks and their entrances, but also through radiocarbon dating afforded an indication of the chronological sequence, which broadly spanned the second half of the first millennium BC, with occupation potentially beginning as early as the second quarter of that millennium. The site thus belongs securely in the pre-Roman Iron Age, with

no evidence at present of occupation thereafter. Excavation revealed a considerable diversity of enclosure construction, including palisades and various wall-building styles, ranging from the use of a simple rubble core faced with boulders front and back or the same with transverse timbers within the core, to a dump or glacis technique with external quarry-ditch. These differences seem to accord with distinct episodes within the constructional sequence. Unlike the Hownam model, however, the palisades appear to be among the latest elements in the sequence. Common to all phases is an apparent concern with 'rites of passage' into the enclosures, with each of the excavated entrances showing some structural evidence for the creation of a flanking passageway. Not all the entrances of each sub-concentric set of enclosures were aligned, though no less than six did permit direct access to the interior through the successive enclosures. Structural evidence for occupation within the site, on the other hand, was limited.

The White Caterthun, less than a kilometre to the south-west, has been less extensively investigated. Though its chronology has not been definitively established, it would be hard to imagine that the two sites in prehistory were not complementary (Dunwell and Ralston, 2008: 78). The White Caterthun is dominated by the oval outline of a massive stone-built enclosure, within which there is no obvious entrance, which may be the latest in the structural sequence, probably obscuring the detailed complexity of the earlier enclosures. Its scale of construction and lack of visible points of access contrasts with the outer works, which consist of banks, quarry ditches and palisades with multiple entrances reminiscent of the Brown Caterthun. The existence of unenclosed ring-ditch houses and an extensive field-system in proximity to the White Caterthun would be consistent with settlement focused on the enclosure in the early to mid-first millennium BC. It is certainly likely that there was significant overlap in the occupation or use of the adjacent enclosures in the Iron Age, even if the ruins of the stone enclosure at the White Caterthun conceal a secondary and possibly early historic re-use of the site.

These complex and long-lived enclosures are hardly designed to be primarily defensive in function. The multiple entrances seem to connote social ordering of access for whatever communal activities took place within. There can be little doubt that such activities, seasonal or festive, legal, inaugural or ceremonial, could well have been an important aspect of the role of hillforts generally, but it is only when the structural elements of the site more obviously diverge from the expected character of a defensive stronghold that the archaeologist is disposed to consider alternative interpretations.

Promontory forts

The earliest of the coastal promontory forts of the north-eastern province is at Castle Point, Troup, otherwise known as Cullykhan (Greig, 1970, 1971, 1972). Here it appears that the earliest phase of fortification was represented by a palisade along the western, landward side of the promontory, which was subsequently replaced by a timber-framed wall with elaborate entrance passage. Radiocarbon dates based upon samples from structural timbers suggested a date in the mid-first millennium BC for these defences. Further east the remains of a vitrified wall, which was said to overlay the earlier occupation deposits, was thought to date around the end of the millennium. Once again, however, there is some artefactual evidence, supported by a single radiocarbon date, to suggest that the site may have been re-occupied in the later Iron Age. The importance of Cullykhan, however, lies as much in its evidence for domestic and industrial occupation as for its defensive sequence. The assemblage included a handled crucible for bronzeworking, as well as waste from ironworking. Domestic artefacts included beads, spindle-whorls and fragments of

120 The earlier Iron Age

jet bracelets. Among the bronzes was a tanged chisel or leatherworker's knife of a widespread Atlantic late Bronze Age type (Roth, 1974), sometimes found, as at Staple Howe, in association with imported Hallstatt C types. Cullykhan might thus be seen as a northerly manifestation of the introduction of Hallstatt C elements along the North Sea coastal route.

The practice of fortifying coastal promontories, which in the later Iron Age saw the construction or re-occupation of a chain of sites along the Moray, Buchan and Aberdeenshire coastline, seems to have been less common in the early Iron Age than in some other regions of Britain where the necessary topographical conditions were also available. Often far from practical for settlement or even as defensive sites, it is arguable that these sites were expressly selected as prominent landmarks of maritime communities, intended to make a territorial statement to sea-borne traders and traffic. Inland promontories too, like the Lower Greenyards fort at Bannockburn, Stirlingshire (Rideout, 1996), have obvious topographical advantages, though not so precipitous as some of the coastal sites. Here as elsewhere, it has been remarked that the multiple defences across the neck of the promontory are disproportionately elaborate relative to the area enclosed (Figure 4.6, 1), which might therefore be taken as an index of

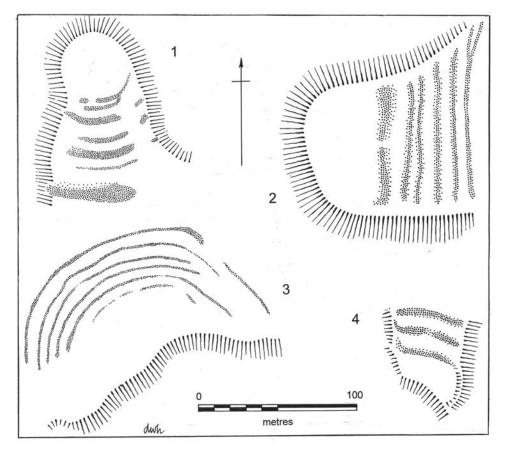


FIGURE 4.6 Small multivallate forts in central and eastern Scotland, 1, Bannockburn, Stirling; 2, Inchtuthill, Perthshire; 3, Rosemount, Perthshire; 4, Rait, Perthshire

Source: Drawings by D. W. Harding, adapted from Rideout (1996) and RCAHMS (1994).

social status. On the other hand, it was impossible through excavation to resolve the complexity of the sequence of ditches and palisades, which quite evidently represented a long period of activity, perhaps spanning a millennium or more from the late Bronze Age into the early historic period. Re-alignment of the entrance through one phase of ditch construction, together with external round-houses indicative of an element of unenclosed settlement, combine to endorse a protracted occupation of the site. Despite current fashion, however, there is nothing in the Lower Greenyards site that requires its interpretation as a ritual or ceremonial site, rather than as a domestic settlement, assuming that we can draw a distinction between the two.

Defensive earthworks disproportionate to the scale of area enclosed have also been remarked at Inchtuthil (Figure 4.6, 2), in the small, native promontory fort which lies at the west end of the plateau occupied by the Roman encampments. Once again the earthworks may not all have been in contemporary use, and the presence of ditch and palisade trench within the interior further argues a long structural sequence (Abercromby et al., 1902). An even more exaggerated example, in a cliff-edge rather than promontory location, is afforded by the crop-mark fort at Rosemount, north-east of Scone (Figure 4.6, 3), where no less than six lines of enclosure occupy a considerably greater area than the compound within. Notwithstanding arguments for defence in depth, it is improbable that this could have been a normal community settlement, and the possibility that multiple lines of enclosure were a measure of social status within a settlement hierarchy deserves consideration.

Finally, we may note that the broch site at Hurly Hawkin, Angus (Taylor, 1982), occupied an inland promontory that had been defended by a rampart and double ditch that most probably belongs to the pre-Roman Iron Age. The post-ring structure partially uncovered beneath the broch foundations cannot readily be assigned to a known house type, and was not directly associated with the occupation of the promontory fort, though clearly pre-broch. Nevertheless, the worn fragment of a three-link bridle-bit was evidently old in the context of the broch assemblage, and a Late Bronze Age disc-headed pin hints tantalizingly at still earlier activity on the site.

Homesteads and settlements

Until relatively recent years, the domestic settlements of the Iron Age north of the Forth were not nearly so well represented archaeologically as those of southern, and more especially southeastern Scotland. With modern field research has come the realization that houses are characterized by much greater structural diversity than was implied by the traditional archetypes. Among older excavations, West Plean, south of Stirling (Steer, 1956), had provided a regional type-site displaying much the same characteristics of an enclosed homestead containing a single large round-house, an Einzelhof in the tradition of Bersu's Little Woodbury. The enclosure was circular, and its shallow ditch had, in part of its circuit at least, an external bank, so that it was evidently not primarily defensive in function. The remains of a palisaded hornwork at its eastern entrance had been truncated by the ditch terminals, from which the excavator inferred that there had been an earlier, palisaded enclosure. This may have correlated broadly with the two principal phases of internal occupation, one represented by a simple post-ring house with central post, the other by a larger building based upon an external ring-groove with internal circle of roof-supporting postholes (Figures 4.7, 1). No radiocarbon dates were available at the time of excavation, but the material assemblage from West Plean, including notably a handled cup of sandstone, and several other artefacts of shale or stone, would be consistent with a date

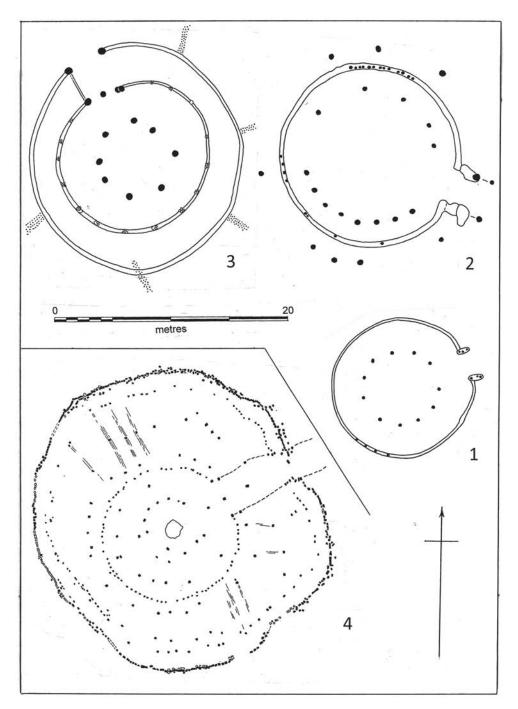


FIGURE 4.7 Round-houses in central Scotland and beyond, 1, West Plean, Stirlingshire; 2, Lower Greenyards, Bannockburn, Stirling; 3, Scotstarvit, Fife; 4, Ballacagen, Site A, Isle of Man, Phase 1 *Source*: Drawings by D. W. Harding, adapted from Steer (1956), Rideout (1996), Bersu (1948), Bersu (1977).

in the later Bronze Age or early Iron Age. A fragment of rotary quernstone from the cobbled 'yard', however, implies occupation at least into the post-quern transition phase.

Barely a mile from West Plean, a circular, palisaded homestead adjacent to the Bannockburn promontory fort (Figure 2.17, 5; Rideout, 1996) mirrored the form of the West Plean palisaded homestead. Significantly larger than the West Plean enclosure, its central round-house, the full extent of which was unfortunately not made available for investigation, appears to have been substantially larger. Evidently, two structural phases are represented in the two arcs of postholes and double arc of ring-groove construction. At 18.6 metres in diameter, the outermost postring might be thought to be beyond the normal limits of round-house construction, but more particularly, their substantial size and wide spacing is quite unlike the outermost walls of large timber round-houses. If, of course, cattle were also corralled in the enclosure, then a stoutly supported fence around the house might well have been necessary. Whatever the function of this post-ring, the ring-grooves at around 15 metres in diameter are perhaps more convincing as the line of the external wall, matching the dimensions and layout of House 1 within the fort (Figure 4.7, 2). In fact the large round-houses at Bannockburn, discounting the anomalous outer post-ring of the house in Homestead 1, shares the proportions of southern British round-house plans in the ratio between external and weight-bearing walls, and, contrary to any notion of a special function for the site, this itself suggests that they served as regular domestic buildings.

A further element in the Bannockburn sequence is the smaller round-house, itself showing secondary rebuilding, outwith the defensive enclosures and impeding or anticipating the line of access through its main entrance. This building was of a different scale and layout from the larger internal round-house. Its external ring-groove, just 10 metres in diameter contained a post-ring just 5.5 metres in diameter, and the entrance lacked the distinguishing projecting porch. Whether it was earlier or later than the fortified settlement is uncertain, but we evidently should not exclude the possibility of an unenclosed phase within the settlement sequence. The material assemblage at Bannockburn was pretty meagre, and radiocarbon dates from the Lower Greenyards fort were hardly conclusive, but a dating broadly in the second half of the first millennium BC seems probable.

More obviously anomalous among the older settlements was Scotstarvit Covert, overlooking the river Eden in Fife (Bersu, 1948). Here, a sub-circular ditched enclosure contained a single, large central building that had undergone reconstruction more than once. The plan seemingly comprised three concentric elements, at least in its first two phases (Figure 4.7, 3). The outermost consisted of a continuous ring-groove in which no specific post emplacements were recognized, the intermediate ring-groove contained posts set at regular intervals, and the innermost element was a ring of individual postholes. An entrance hall-way extended from the innermost ring of posts to the outermost ring-groove, raising interesting questions regarding the order of access to internal space. The excavated traces of gullies flanking access to the interior suggested that, as with brochs, the peripheral areas of the house could not be accessed directly from the entrance passage, which led straight to the central area. As to symmetry of plan, the outline of the ring-grooves was much less regular than in many Iron Age roundhouses. Furthermore, the rings were spaced at approximately equal distances from centre to perimeter, thus departing from the round-house geometry that is regularly associated with a conical roof with a pitch of 45 degrees. At its largest extent, the outermost ring-groove was around 19 metres in diameter, above the normal limit but not unique among Iron Age roundhouses in Northern Britain. The structure evidently also included an element of earthwork, surviving as surface traces of a low bank around an arc just within the outermost ring-groove, which Bersu interpreted as the basis of a raised platform for benches or beds.

Bersu's view of the site was evidently coloured by his experience in the Isle of Man (Bersu, 1977), where he had excavated multi-ringed houses that he believed were roofed in turf over much greater diameters than would be possible with a standard conical roof. It would be instructive to investigate experimentally the combination of turf roofing of the perimeter around a steeper central cone of thatch. In fact, Phases 1 and 2 at Ballacagen Site A might be better interpreted as free-standing round-houses within an enclosed compound. Phase 1 in particular (Figure 4.7, 4) displays radial plank decking between the house and the perimeter wall, which might be compared to the radial trenches detected by Bersu projecting in several places from the house at Scotstarvit. Pope's alternative interpretation (2003) of the Scotstarvit plan, therefore, as a round-house with external ring-groove wall around 13 metres in diameter and inner, roof-supporting post-ring, standing within a circular compound defined by the outer ring-groove, is persuasive, even though the compound ring-grooves and the round-house plans in successive phases are totally integrated.

Houses of ring-ditch type, first identified in the south-east, are now known widely north of the Forth. An early documented example from modern excavation was the open settlement at Douglasmuir in the Lunan valley in Angus (Kendrick, 1995). The fact that the Angus houses share structural characteristics in common with the ring-ditches houses of the Borders need not mean, of course, that they functioned in exactly the same way. Six houses were excavated, ranging in size from 10 to 13 metres in diameter, discounting the width of the external bank which must have been the product of their construction, and which in some cases probably served as the foundation for their roof rafters. Internal post settings did not always form regular patterns, but in Houses 3 and 5 (Figure 3.13, 6) at least, clear post-rings were detected around the inner lip of the ring-ditch on the edge of the central platform. In the case of House 3 alone, a further inner ring of posts may have been for furniture and fittings rather than being integral to the structure itself. In one instance, House 6, there was evidence for posts and paving in association with the entrance. Elsewhere, odd lengths of crescentic ditches and clusters of pits, possibly the truncated remains of further houses, suggest that the village could have had twice that number of houses in all. Differences from the Borders ring-ditch houses include the steeper profile of the ring-ditch at its external face and the relative lack of stony filling of the ditches, both possibly pointers to a different function. A series of radiocarbon dates from contexts associated with the houses was consistent in confirming that they belonged to the middle of the first millennium BC.

At Douglasmuir, it is impossible, in the absence of preservation of animal bone, to estimate the contribution, if any, of animal husbandry to the domestic economy. But the presence of more than fifty fragments of quernstone and samples of grain from the settlement is surely indicative of a significant component of cereal cultivation. Accordingly, it would be reasonable to regard the ring-ditch houses as being adapted in some measure to the storage of cereal products, in contrast to interpretations of the Borders houses in which stalling of livestock has been argued as one probable function. The fact that the ring-ditches at Douglasmuir survived up to a depth of 1.8 metres encouraged Kendrick's (1995: 64) view that this constituted a form of proto-souterrain, a storage vault contained beneath the floor of the house. The fact that there were other structures on the site, notably six-posters and related settings, at least one of which was associated with a cache of wheat grains, should not preclude the need for alternative storage for agricultural produce, matching the apparent use in southern Britain of upstanding granaries in tandem with underground pit storage.

A key issue in recent discussions of ring-ditch houses has been whether the ditch was a design feature or the product of activity within the house, in effect, the result of progressive wear and erosion rather than constructional. At Douglasmuir, at any rate, the depth of the ring-ditch can hardly be other than intended. As regards function, the penannular ditch could have been simply a device to compensate for lack of headroom near the perimeter of the building, but if so this does not explain the frequently irregular, segmented character of the ditch, where a continuous ditch would have been more efficient. If achieving headroom without the need for high external walls was the objective, then lowering the entire floor area, as in subterranean wheelhouses, might have been easier and more effective. Much the same purpose was achieved in the sub-rectangular Grubenhäuser of later prehistoric and early historic European settlements. Yet even in these, there is occasional evidence for suspended floors and therefore a capacity for under-floor storage, and this may well have been the practice in ring-ditch houses of the Northern British Iron Age. From this perspective, the penannular ring-ditch is simply another structural technique available to the Iron Age house-builder and, as such, need not be culturally, chronologically or functionally diagnostic any more than are ring-grooves, scooped platforms or any other practical constructional device. The absence of hearths or domestic bric-a-brac still leaves open the question whether ring-ditch houses were indeed dwellings in the conventional sense rather than primarily agricultural buildings, or perhaps buildings in which human occupation, stock and storage were combined. Armit (1997a: 32), as we have seen, developed the idea of the ring-ditch house as an Iron Age 'byre-house', with human occupation of an upper storey above the stock and storage at ground floor level. A 'barn-house' would make equally good sense in the context of an agricultural economy.

The ring-ditch house excavated at Culhawk Hill, Kirriemuir, Angus (Figure 4.8; Rees, 1998) is seemingly one of the largest known, with a low external bank around 20 metres in diameter. Within this, the ring-ditch itself was relatively slight, and around its inner lip a ring, 9.5 metres in diameter, of fifteen substantial posts provided the main support for the roof. A ring-groove around the outer edge of the ring-ditch was apparently a secondary feature, but must have accorded approximately to the position of the footings of the roof rafters of the main house. A building on this scale would almost certainly have required a two-stage roof around a central tower based on the inner post-ring and would have been a strikingly monumental structure on this exposed and open hillside, though there is no specific evidence to indicate that the site was other than domestic. Radiocarbon dates suggested an occupation between the fourth century BC and the second century AD, one of the first sites to suggest that the currency of the ring-ditch type was longer north of the Forth than it appears to have been on present evidence in the Borders. The dates from the settlement at Auchlishie, Kirriemuir, Angus (DES, 1999: 111) endorsed this conclusion. Both the ring-ditch house and the Dalladies-type souterrain there dated around the end of the first millennium BC, which would be consistent with the early first millennium AD dates and Roman material associations from the ensuing occupation.

Recognizing the great diversity of house types and the likely ephemeral character of some truncated remains is a far cry from the expectation of regular post-plans in the Southern British chalk lands. Reconstructing the original layout of a settlement like Dalladies, Kincardine (Watkins, 1980a), therefore, must necessarily be speculative. Several circular concentrations of postholes or post-pits indicated the presence of 'conventional' post-built round-houses, but it would also be possible to regard some of the short lengths of crescentic ditch as the truncated remains of ring-ditch houses. Most of the curvilinear ditches, however, including those that

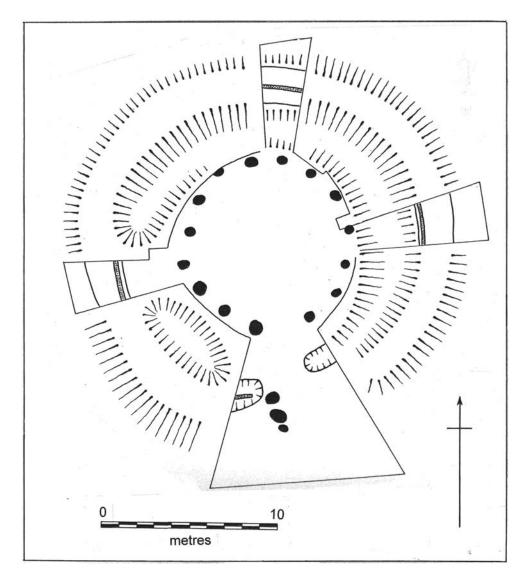


FIGURE 4.8 Culhawk, Angus, ring-ditch house plan

Source: Drawing by D. W. Harding, adapted from Rees (1998).

appeared to be associated with round-houses or phases of round-houses, had uniformly steep sides in which any timber revetment was evidently part of their souterrain function rather than structural components of a house. Nevertheless, it would be possible to regard Dalladies as a stage in the development of 'barn-houses' from one in which the ditch was integral to the penannular plan to one in which the storage facility had developed as a fully independent souterrain.

The proximity between souterrains and surface structures had long since been recognized from stone-built settlements like Ardestie and Carlungie, Angus, but it was only with the excavation at Newmill in Perthshire (Watkins, 1980b) that the possibility that souterrains had been accessed from the interior of timber-built houses was first seriously advanced on the grounds of archaeological evidence. In close proximity, an air-photograph suggested a souterrain emanating from a ring-ditch within a palisaded site (DES, 1992: 79). Air-survey in southeast Perthshire in the early 1990s identified a number of sites, like the south-eastern cluster at Pitroddie (Figure 4.9A), where a complex of souterrains may have been grouped in proximity to domestic buildings. One of the earliest dated examples of the association of round-house and souterrain was at Cyderhall, near Dornoch in Sutherland (Pollock, R., 1992). Here, a stone-walled souterrain and a smaller earth-cut 'gully', both with timber supports along their passages, led directly from the primary round-house, the foundations of which were likewise sunken into the ground. Carbonized grain and pits indicated barley storage on site, though not necessarily as the primary function of the souterrain. Radiocarbon dates for these structures indicate construction and use from the mid-first millennium BC.

Crop-marks of later prehistoric and early historic settlements detected by air-photography (Maxwell, 1992), including some potentially indicative of souterrains in proximity to domestic structures, were the focus of a field research programme in the Motray Water district of north-east Fife (Watkins and Selkirk, 1992). At North Straiton in 1987, three circular houses of an unenclosed settlement were investigated, including the largest, some 15 metres in overall diameter, from which led a curving ditch of the proto-souterrain type. In fact, the ring-ditch of the crop-mark concealed several phases of ring-groove construction, the deepest of which implied a foundation up to 75 centimetres deep. The souterrain too had been rebuilt on several occasions and, because of its relative lack of depth, was assumed only ever to have been partially subterranean. Subsequent seasons of excavation on the Leuchars crop-mark complex revealed structures of related type dating from the later Bronze Age to the early historic period, of which the later variant included a subterranean structure over a metre deep, the walls of which had been revetted with substantial boulders. What sort of superstructure was sustained on this foundation, and whether the sub-structure was intended for habitation or for storage, remains a matter for speculation.

Souterrains or proto-souterrains were a distinctive element of the crop-mark settlements detected by air-photography in Strathmore (RCAHMS, 1994: 59-62). The interrupted ringditches of south-east Perth have yet to be excavated and dated reliably, but the smaller examples, up to 17 metres in diameter, could well be domestic structures analogous to North Straiton, and potentially of the pre-Roman Iron Age. Some, on the other hand, including the largest of the multi-period crop-marks at Mudhall and Grangemount (Figure 4.9B), are too large to have been roofed structures, and some are more likely to represent enclosures within which a roofed building may have stood. This has prompted comparison (RCAHMS, 1994: 62) between the interrupted ring-ditch enclosures and the upstanding, stone-built double-walled enclosures of north-east Perth (RCAHMS, 1990: 3-4), in some of which the outer wall quite clearly functioned as an enclosure wall rather than as a double wall over which a unitary roof was pitched. Each of these variants, in timber or stone, could indicate a close integration of domestic and storage capabilities.

The use of a hollow, or a scoop with its sides stone-revetted into the slope of ground, is characteristic of several Iron Age habitation sites that were excavated in the Lunan valley of Angus. At Ironshill, Inverkeillor, Angus (Pollock, 1997), a house of rather irregular, post-built plan had been levelled into the slope, with a stone revetment built against the uphill side of the platform, in a manner reminiscent of some 'Votadinian' houses in the south-east. The Ironshill house yielded a radiocarbon date from one of the postholes of its porched entrance which,





 $\begin{tabular}{ll} \textbf{FIGURE 4.9} & Unenclosed crop-mark settlements with souterrains in Perthshire, A (above), Pitroddie; \\ B (below), Grangemount \\ \end{tabular}$

Source: Crown Copyright: Historic Environment Scotland.

together with a fragment of rotary quern, indicated a date around the end of the first millennium BC. Significantly earlier, on the evidence of a single radiocarbon date, was an adjacent house of ring-ditch construction (Figure 3.13, 5), pointing to the possibility that the stonerevetted Ironshill type of house was a genuinely late development of the pre-Roman Iron Age. A second site at Ironshill, a palisaded enclosure in which the large, central building was primarily post-built, may also prove to belong to an earlier Iron Age horizon. Essentially of the same class as the Ironshill stone-revetted round-house was the structure excavated in 1999 at nearby Hawkhill, where the revetment wall of an oval building some 10 by 12 metres across still survived with up to five courses of boulders intact (Rees, 2009). More elliptical than circular, there was no evidence for roof support, which could have rested on the ground surface in view of the structure's semi-subterranean foundations. The central hearth of the Hawkhill house gave radiocarbon dates that confirmed its likely use in the closing centuries of the first millennium BC or the first century AD. Nearby was a stone-lined souterrain, which from air-photographic evidence appeared to be related to another large round-house.

Upland stone-built settlements and ring-works

The upland regions of north-east Perthshire especially are characterized by stone settlements, the dating of which remains uncertain to a degree, in that they probably represent a long sequence of occupation from the later second millennium BC through the earlier Iron Age at least. They can occur up to the 450 metre contour and beyond, and though they occur in groups, it is probable that this represents a succession of occupational episodes rather than social groupings of several family units. The great majority of hut-circles are simple plans with low stone foundations, but disproportionate attention has focused on the minority of doublewalled houses, and some more complex units in which two or three hut-circles are enclosed within a single conjoined compound (Figure 4.10). Typological studies were founded on Thorneycroft's (1933, 1946) pioneer research at Dalruzion, developed by Harris (1984), but there is as yet no adequate basis for suggesting that the typology accords with any chronological order. Few sites have been dated conclusively, but radiocarbon dates from Carn Dudh, Moulin (Rideout, 1995) and at Tulloch Field, Enochdhu (RCAHMS, 1990: no. 159) indicate occupation from the later second millennium BC to the later pre-Roman Iron Age.

In terms of size, the stone houses of north-east Perthshire range from very small to a maximum around 15 metres in diameter. In the case of double-walled houses, the presumption must be that the house roof was founded on the inner wall-head, even if the outer yard was independently roofed for storage. In the case of paired houses, there is some evidence for one of the pair being secondary, but the basic idea of compound structures is known elsewhere and may imply joint control of land. Apart from hut-circles, clearance cairns and field banks are well preserved in upland Perthshire, and though it is hard to demonstrate contemporaneity, the exceptional relationship between fields, trackways and houses in the case of Drumturn Burn (RCAHMS, 1990: no. 124, Figure 124-10C) implies an integrated system, even if modified over time. In some instances moorland fire has exposed areas of cord-rig not unlike that generally recognized as later prehistoric in the Borders.

In contrast to the settlements of north-east Perthshire, the substantial stone round-houses or ring-works of north-west Perthshire had conventionally been assigned to the later Iron Age, based upon limited excavation and largely undiagnostic material assemblages. Among the earliest modern investigation was Watson's excavation at Borenich in Strathtummel (Figure 4.11,

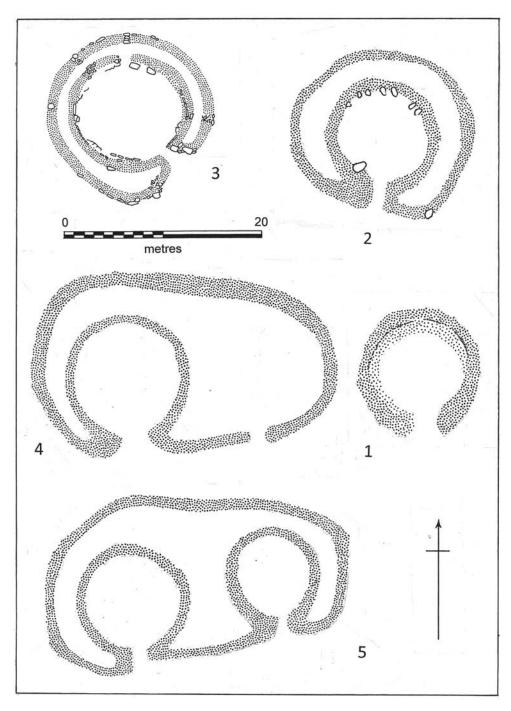


FIGURE 4.10 Stone round-houses in north-east Perthshire, 1, Muir of Gormack, 149–5; 2, Alyth Burn 103–7; 3, Dalruzion house F; 4, Pitcarmick North, 154–4; 5, Alyth Burn, 103–6

Source: Drawings by D. W. Harding, adapted from Thorneycroft (1933), RCAHMS (1990).

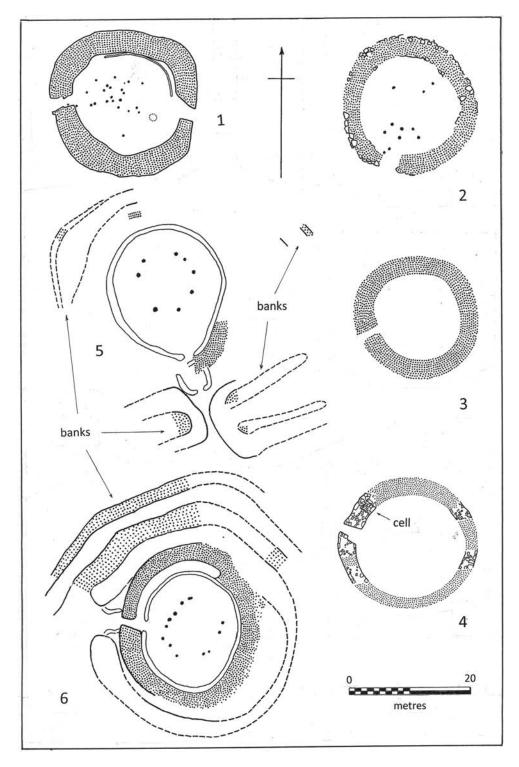


FIGURE 4.11 Ring-works of Perthshire, 1, Queen's View; 2, Litigan; 3, Borenich East; 4, Black Spout; Aldclune Site 2; 6, Aldclune Site 1

Source: Drawings by D. W. Harding, adapted from Taylor (1990), Watson (1915), Strachan (2013), Hingley et al. (1997).

3; Watson, 1915). Internally he found hearths and some paving, together with a spindle-whorl, bone implements and a fragment of quern. Subsequent work at two further sites was reported by Taylor (1990). At Litigan (Figure 4.11, 2) a small ring-work with stone wall 3 metres thick enclosed a circular area some 15 metres in diameter. Internally postholes and a hearth indicated domestic occupation, which, on the basis of a single radiocarbon date, was assigned to the later first millennium AD. The ring-work at the Queen's View (Figure 4.11, 1), was excavated by Dr Margaret Stewart (1969), a stalwart of Perthshire archaeology and the protégé of Gordon Childe at Edinburgh. Commanding an extensive outlook over Strathtummel, the stone enclosure was of comparable proportions to Litigan, but with two entrances, one seemingly blocked in a secondary phase of occupation. Two layers of paving through the surviving entrance, and three hearths within the interior, suggest that the site was occupied over successive periods. A scatter of postholes in the interior and an arc of ring-groove around the north-eastern perimeter of the enclosure are indicative of a roofed building. The material assemblage included fragments of rotary quern, a stone cup and a yellow, opaque glass bead, all dateable to the earlier first millennium AD, and possibly representative only of the site's later phases of occupation.

Both Stewart and Taylor questioned the utility of the older conventional term 'ring-fort', on the grounds that most sites were not obviously located or built with tactical defence in mind. It also of course suggested associations with Irish ring-forts with implications of origin and dating. In fact, Litigan and the Queen's View command extensive outlooks, and are well sited in relation to pasture, and to oversee the passage of traffic along these important routes. Stewart was surely right to stress the importance of ring-works in the context of a pastoral economy in which cattle-raiding was doubtless endemic.

More recent excavation at the Black Spout, Pitlochry (Figure 4.11, 4; Strachan, 2013) has certainly endorsed the probability that these sites had earlier origins. With an internal diameter in the order of 16.5 metres, the walls of the Black Spout were between 2 and 3 metres in breadth, being broader on the downslope side. At ground level, it apparently included a small intra-mural cell, which may have contributed to the collapse of the adjacent section of wall. A narrow scarcement around the wall foundations may have supported a suspended floor, while the offset rebate in the entrance passage likewise was an architectural feature common to the architectural repertory of complex Atlantic round-houses. Hazel charcoal from the base of the entrance orthostat gave a radiocarbon date of 180 cal BC—cal AD 30 (GU-24726, SUERC-35689), which, together with further dates from the interior led the excavator to conclude that the site's initial occupation was within the last two centuries BC. Here, too, much later secondary activity was dated to the late first millennium AD. Limited bone survival indicated a pastoral economy based on cattle and sheep, with grain probably imported from elsewhere for processing on site.

Earlier Iron Age occupation was also indicated for the site at Tombreck, investigated by the Ben Lawers Historic Landscape Project. Here a series of radiocarbon dates assigned successive round-houses to a span between the fourth and first centuries BC. More complex in their layout were two related fortified homesteads at Aldclune by Blair Atholl (Hingley, et al., 1997). The sites occupied a prominent ridge overlooking the river Garry, and appear to have had their origins in the late first millennium BC. By the opening centuries of the first millennium AD the dominant building was a circular house, set behind a double-ditched earthwork extending around its northern circuit where access was easiest (Figure 4.11, 6). The building itself was of unusual construction, involving a combination of stone walling, penannular ring-groove and post-ring. The sequence of structural episodes was not resolved beyond doubt by excavation.

Initial assessments of the dating of the site may have been prejudiced by the discovery in the post-occupational debris of a fine, ninth-century penannular brooch, and required radical review when radiocarbon dates indicated much earlier origins for the settlement. The earlier structure (Site 2) was probably built and occupied at the end of the first millennium BC; the later ring-work (Site 1) appears to have been constructed between the second and third centuries AD. Whilst it is possible to point to differences between Aldclune and other ring-works, it is clear that there is a long-standing tradition in this region of defended homesteads from later prehistoric into early historic times.

Settlements with associated agricultural traces are known from the later second millennium BC in Sutherland, though here the evidence for continued or renewed occupation in the Iron Age is attested by houses for which radiocarbon dating is available. At Lairg (McCullagh, 1992), there was a pattern of alternating settlement and agricultural horizons, ending with an Iron Age round-house. At Kilphedir in the Strath of Kildonan (Fairhurst and Taylor, 1971), stone-walled houses of circular or oval plan appear to have been occupied from the mid-first millennium BC intermittently if not continuously for several centuries, again with evidence of cultivation in proximity.

Loch-side and estuarine crannogs

Crannogs are a distinctive and important component of the Iron Age settlement distribution in Northern Britain, and it is therefore the more regrettable that they have too often been treated as a study separate from field research of terrestrial settlement in Scotland. Attempts to rehabilitate crannogs into Scottish Iron Age settlement studies (Henderson, Jon, 1998a; Harding, 2000a, 2007b) underlined the fact that Highland crannogs effectively constitute a fifth 'province' ignored by Piggott's 1966 scheme. Whilst their siting would have afforded a measure of protection, this alone would hardly have warranted the extra effort in construction and maintenance compared to that required by terrestrial settlements, so that we must infer that the communities that settled the loch margins exploited their resources to the full and used the waterways as natural arteries of communication through the Highlands.

Crannogs have a long chronology, from Neolithic to sixteenth century AD or later (Morrison, 1985), but they were particularly prevalent in the later Bronze and Iron Ages (Cavers, 2006). Archaeologically their dating is not always straightforward, as processes of erosion underwater may lead to complex stratigraphy. In the case of the crannog at Ederline pier at the western end of Loch Awe (Figure 4.12), for example, a single radiocarbon date from timbers protruding from the surface (Morrison, 1982) suggested early Iron Age occupation. Yet a basal layer sealed by boulder capping on the edge of the crannog mound yielded a sherd of later Iron Age 'E-ware', apparently inverting the expected stratigraphic sequence (Cavers and Henderson, 2005; Henderson, 2007c: 235-9). Seemingly, a phase of later Iron Age occupation had completely eroded from the surface of the crannog, being re-deposited at the base of the mound, and leaving exposed on the surface the remains of earlier Iron Age structures. Even so, a programme of sample dating for the crannogs of Loch Tay clearly demonstrates their use throughout the 'long Iron Age' (Dixon, 2007: Figure 4.4).

Crannogs in Highland lochs like Loch Tay (Dixon, 1982) and Loch Awe in general conform to expectations of a single domestic homestead, the lacustrine equivalent of the duns or rath-like enclosures that occupy the surrounding hillsides. A distributional relationship between crannogs and agricultural land was proposed by Morrison (1985) for Loch Awe and



FIGURE 4.12 Ederline Pier, Loch Awe, Argyll

Source: Photograph by D. W. Harding.

demonstrated by Henderson (1998b) for the lake of Menteith, so that crannogs and ring-works may well have been complementary elements in a contemporary settlement system.

Many crannogs appear to have been built on an artificial or reinforced natural island by building up composite foundations of timber and stone, the so-called *Packwerk* technique. An alternative was construction as pile-dwellings, as envisaged by the early investigators of the Swiss lakes on the basis of ethnographic parallels, or as reconstructed at Kenmore on Loch Tay on the basis of excavations at Oakbank crannog, but the form of reconstruction remains contentious. Nevertheless, by comparison, the foundations of the Late Bronze Age round-houses at Must Farm, Cambridgeshire, were uncharred by the conflagration that engulfed the village plainly because of its pile-construction over water. For crannogs there is the issue of fluctuating loch levels, in which the natural seasonal rise and fall can still be very substantial (setting aside the matter of modern water-level controls), and in which changes in mean level since prehistoric times are not easy to estimate with confidence.

Crannogs are generally sited in sheltered inlets, away from the full force of the prevailing wind and the fetch generated over exposed water. They are commonly located on a relatively shallow shelf at the furthest point before the loch bed drops away steeply, thereby affording a measure of protection from the shore, to which they may be linked by a timber walkway. Notwithstanding their secure location, there can be little doubt that sites like Oakbank were essentially domestic homesteads, occupied in the mid-first millennium BC, and engaged in a mixed agricultural economy in which the pastoral component, supplemented by the exploitation of hunting, fishing and wildfowling, would have been dominant. Individual crannogs doubtless housed a single, extended family unit, and there is no evidence as yet in the central





 $\begin{tabular}{ll} \textbf{FIGURE 4.13} & Paired crannogs of Loch Tay and Loch Lomond, A (above), Dall Bay, Loch Tay; B (below), Cameron Bay, Loch Lomond \\ \end{tabular}$

Source: Air-photographs by D. W. Harding.

Highlands of any significant clustering into village communities, though these dispersed sites were undoubtedly in visual contact along the shore line or across the loch. Occasionally, as at Dall Bay (Figure 4.13A) or Fearnan on Loch Tay, or in Cameron Bay (Figure 4.13B) on Loch Lomond, a couple of crannogs occur in close proximity, but the probability in these instances are that they are successive rather than contemporary neighbours. The dwellings are regularly assumed to have been circular, though the archaeological evidence is still far from sufficient to be certain that this was invariably the case. They generally occupied the greater part of the artificial island or raised platform, with perhaps an extension or annexe in some instances for ancillary structures or activities. The probability must be that other buildings or wharves were located along the shore-line in proximity to the crannog itself. Log-boats have been found in many locations, and may have been designed, constructed and used in different ways according to purpose (Mowat, 1996).

The study of crannogs in tidal estuaries or rivers, like that of inland lochs, dates from the pioneering days of underwater archaeology. Crannogs at Langbank and at Dumbuck on the Clyde were investigated at the end of the nineteenth century. At Dumbuck (Munro, 1905), the results were in part discredited by the 'discovery' of a number of fake antiquities (Bruce, 1900; Hale and Sands, 2005), which created great hostility between the local antiquarians and Robert Munro, the undisputed authority on Scottish and European crannogs. Nevertheless, the plan of a circular timber structure some 15 metres in diameter and defined by 27 oak piles with a floor of radial timbers has been shown to be authentic. A log-boat nearly 10 metres long was found nearby, in a boat-noost linked to the main crannog (Mowat, 1996: 26–7). Re-investigation not only confirmed the basic reliability of the excavators' plans, but established through radiocarbon dating that the site was occupied around the end of the first millennium BC (Hale, 2000; Sands and Hale, 2001). Langbank (Bruce, 1908) was excavated shortly afterwards, and was found to have similar structural remains. The finds, however, suggested a slightly later occupation, in the opening centuries of the first millennium AD, when its occupants must have been aware of and known to the Roman military presence in the area.

These inter-tidal crannogs certainly were sites of substantial structures. How they were affected by or coped with fluctuations in water level is once again hard to estimate in view of substantial modern controls over the water channels of the Clyde. Other estuarine crannogs, notably those investigated by Hale (1999, 2000) on the Beauly Firth, must have been even more susceptible to flooding, being nowadays accessible only for a few hours at low tide. Nevertheless, excavation at Redcastle revealed a number of structural timbers below the boulder capping of the crannog, with wattle-lined pits among the primary features. Radiocarbon dates point clearly to a later Bronze Age use of the site, which also yielded some quantities of butchered animal bones. It seems improbable that these sites were intended for permanent habitation, and thus their relationship to crannogs of inland lochs, or even those of the Clyde, seems limited beyond the circumstances of location and wetland preservation. Their location in proximity to low promontories or former shorelines suggested to Hale that their purpose was to afford access to navigable channels for the surrounding communities rather than being independent domestic sites.

Unenclosed settlements in north-east Scotland

A major advance in the understanding of Iron Age settlements in north-eastern Scotland came with the excavation of the open settlement at Forest Road, Kintore, Aberdeenshire (Cook and

Dunbar, 2008, forthcoming), where more than two dozen circular buildings were recorded, of which a significant number were radiocarbon dated and found to represent intermittent occupation from the Middle Bronze Age through to the later pre-Roman Iron Age. The houses were all variants on two principal forms, the ring-ditch variety and the simple postring building, mostly with east or south-east facing entrances, with or without evidence of a porch (Figure 4.14). Simple post-ring huts or houses are endemic in British prehistory, but the fact that the ring-ditch form apparently dates from the Middle Bronze Age may initially seem more surprising. We should remind ourselves, however, that these features, post-ring, ringgroove (absent at Kintore) and ring-ditch are structural techniques that need not be culturally or chronologically diagnostic, and could be used for buildings that did not necessarily even serve the same purpose. The Kintore ring-ditch houses of the Middle and Late Bronze Age are relatively small, with overall diameters between 7 and 11 metres, hardly in the same league as some of the monumental ring-ditch buildings of the Scottish Iron Age. Moreover, what they conspicuously lack is the inner ring of massive postholes that would have supported an upper floor, thereby transforming the building's functional capacity. Whilst they may well be related in terms of a developmental sequence, therefore, their real importance may be in highlighting their differences from their Iron Age successors rather than their similarities.

A key issue in the interpretation of ring-ditch houses remains the character and role of the ring-ditch. There is a difference of opinion, as we have seen, between those who see this element as a constructed feature and those who regard it as the result of erosion through whatever activity it represents. Some ring-ditches are indeed so shallow (at least as residually represented once a site has been mechanically stripped for development) that the latter seems a plausible explanation. Continuing erosion evidently was a factor, and may account for instances in which postholes or post-rings appear to be within the lip of the ring-ditch. But in some of the deeper examples it is more difficult to imagine the ditch as the product of wear alone. In many cases north of the Forth the ring-ditch is a limited annular feature only, evidently never intended to extend around the full circumference of the building, even allowing for truncation. It is possible that the simpler structures were designed as stock feeding-stations or stores, only in the later and larger buildings being combined with human occupancy as barn- or byre-houses. The presence at Forest Road of four-post and six-post structures indicates the existence of other types of storage buildings, so that we should avoid assigning exclusive roles to any particular form of structure.

The long time-span represented at Forest Road once again raised the question of the life expectancy of individual houses. Current fashion has favoured the view that Iron Age houses, terrestrial or loch-side, lasted no more than 15-30 years, the longer span requiring evidence of repair (Barber and Crone, 2001). This may well be a reasonable estimate for the Forest Road houses, though experimental research has shown that more substantial Iron Age houses could have had a much longer life-span. Maintenance and repair need not involve major replacements, and substantial repairs to the roof or superstructure would leave no archaeological trace at all. Nevertheless, it may be that social convention rather than structural necessity dictated the demise of a building, perhaps requiring its destruction or dismantling on the death of its principal occupant, for example, and there is certainly evidence at Birnie, Moray, for the decommissioning or closure episodes of major buildings. The same issue of longevity was raised by Halliday (2007: 109) in the context of hut-circle groups in Strathdon, in this instance in the context of a dynamic settlement regime in which locations shifted locally after relatively short periods.

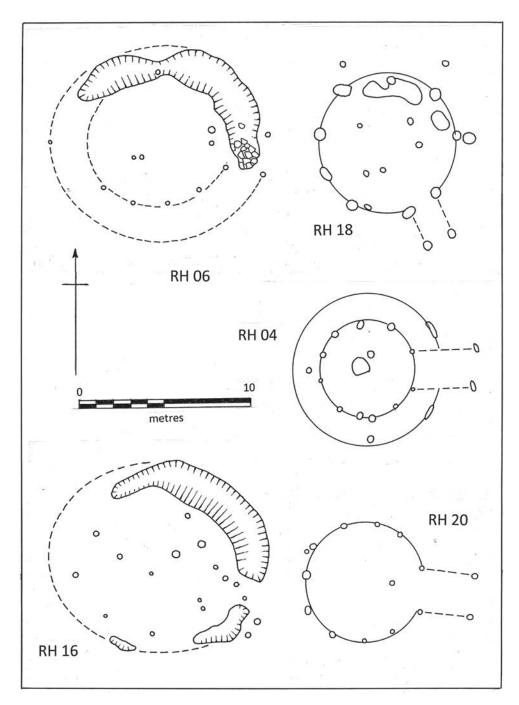


FIGURE 4.14 Kintore, Aberdeenshire: post-ring and ring-ditch round-houses *Source*: Drawings by D. W. Harding, adapted from Cook and Dunbar (2008).

Excavations in the past ten years have certainly suggested that ring-ditch houses may embrace a considerable diversity of form, function and date. Among the more striking ground-plans is that inferred from the 2010 excavations at Grantown Road, Forres, Morayshire (Cook, 2016), the outer ring-groove of which would have described a circle 23 metres in diameter, if indeed it was part of the same structure. Even if this was the product of erosion from dripping eaves, rather than constructional, the building it implies would have exceeded normal round-house limits by a considerable margin, stretching even the capacity of a split-roof design. The main weight-bearing circle, 18 metres in diameter, was of massive post-pits, some up to a metre in diameter. The ring-ditch, detected in the northern and south-eastern sectors, lay between the two, thereby forming an established ring-ditch house plan, but on a much larger than usual scale. It too was seen by the excavators as more probably the result of erosion than constructional design, though one must thereby consider what different activities were allotted to the interior to create this differential effect. By contrast, other ring-ditch houses in the vicinity were much smaller, and doubtless represent normal domestic settlement (Cook, 2006b).

A few miles to the east excavations at Birnie (Hunter, 2008, 2009a, 2010) uncovered a settlement of ring-ditch and ring-groove round-houses, which, though unquestionably in occupation in the first and second centuries AD, may well have had its origins much earlier in the first millennium BC. Archaeologically the settlement at Birnie is represented by a series of substantial round-houses in an unenclosed settlement. Whatever the settlement's origins - and the site was certainly a focus for prestigious bronzeworking in the later Bronze Age - ringditch houses were still being constructed and occupied in the para-Roman Iron Age. These houses, around 15 metres in diameter with one as much as 18-19 metres overall, are among the largest known in Northern Britain, and almost certainly boasted an upper storey, and were most probably roofed in two stages accordingly. The extensive survival of charred timbers indicated that substantial beams had been squared and were secured with mortice and tenon joints, a level of sophistication in carpentry that has been well attested elsewhere in Iron Age Britain and Europe. Evidence survived of complex timber doors and radial floor timbers, whilst collapsed turf indicated its use both for walls and roofing. Where foundation slots survived, these were sometimes disposed in straight sections, as noted on earlier Iron Age sites elsewhere, suggesting that wattling panels may have been prefabricated. An unusual feature of several houses was a central post, perhaps for supporting an upper floor.

A striking aspect of the Birnie settlement was the number of houses that had been burnt, in the view of forensic experts not as a result of accidental firing. The digging of pits across entrances in at least one instance with evidence of structured deposits suggests the possibility of ritual decommissioning of buildings, perhaps occasioned by the death of an important occupant. Such rituals are occasionally suspected, though archaeologically not easily demonstrated, and in the case of Birnie it would certainly be consistent with the evidence for the site's high social status within a wider community.

The more substantial versions of both ring-ditch and post-ring houses are well represented further north-west at Culduthel (Figure 4.15; Murray, 2007). The site of Culduthel, occupying an elevated position overlooking Inverness but not apparently an enclosed settlement, was evidently a long-lived settlement, with more than a dozen major round-houses, some intersecting in a palimpsest of successive building episodes. The excavator posited a later Bronze Age date for one possible ring-ditch house, but the material remains indicated that the site continued to flourish up to the second century AD, with the predominance of diagnostic artefacts assigned to this later occupation. In particular, evidence for ironworking and non-ferrous metalworking

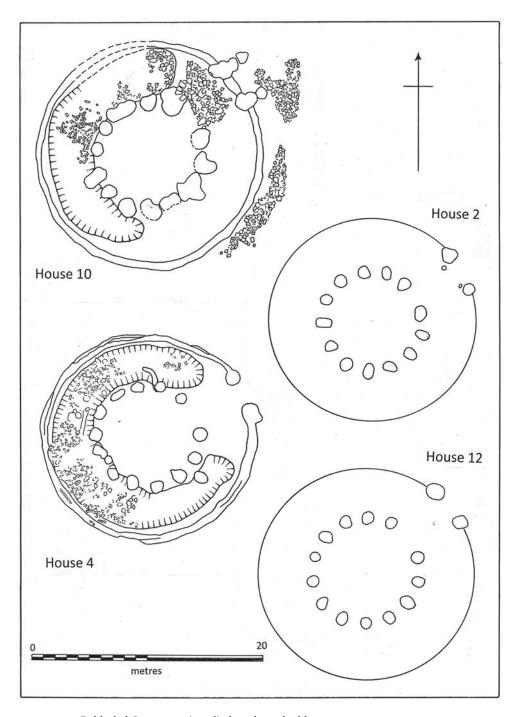


FIGURE 4.15 Culduthel, Inverness, ring-ditch and porched houses

Source: Drawings by D. W. Harding, adapted from Murray (2007).

on a significant scale included a number of iron smelting furnaces, located in and among the round-houses in a manner that suggests successive rather than contemporary episodes. The inclusion of metalworking debris in structural postholes could easily have resulted from industrial activity in the shelter of the roofless shells of derelict buildings from which major structural timbers had been salvaged. At Forest Road, Kintore, the fire risk to standing buildings in similar circumstances was stressed as one reason for inferring successive rather than contemporary activity, whilst at Seafield West, Inverness (Cressey and Anderson, 2011), a smithing hearth was demonstrably secondary to round-house G, within which it was located.

The Culduthel ring-ditch houses are remarkable even among known examples of their type for their monumental proportions (Figure 4.15). Their main weight-bearing circle of uprights certainly is of sufficient proportions to have sustained an upper floor, the 'massive' posts of House 10 being estimated in the order of 50 centimetres across on the basis of posthole profiles. With overall diameters in excess of 16 metres it seems almost certain that these houses were roofed in two stages, a technique that has been proposed elsewhere (Gregory, 1991: Figure 152), but not widely acknowledged as a practical option (Figure 4.16). What dictates the exceptional height of the main post-circle is not just the greater diameter, but the fact that, unlike the proportions of Southern British round-houses (Harding, 2009), the Culduthel post-circles are almost exactly at the half-way point on the radius between centre and outer ring-groove, to accommodate the ring-ditch, and thereby raising the point at which

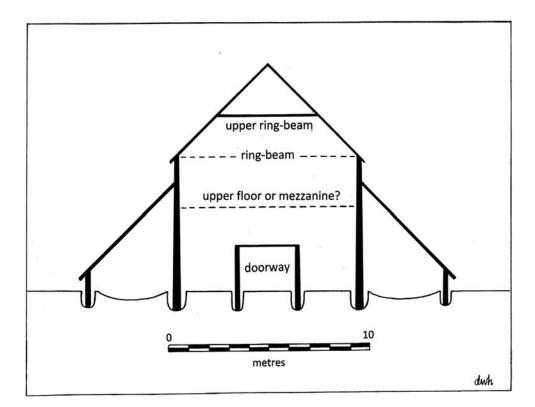


FIGURE 4.16 Elevation drawing of split-roof round-house, based on Culduthel ring-ditch House 4 Source: Drawing by D. W. Harding.

the lower roof meets the central tower. Other circular buildings at Culduthel were not of ringditch type, but probably retained similar proportions with a substantial weight-bearing circle of uprights, together with substantial porch-posts. Evidence from Iron Age houses elsewhere has indicated that the outer wall of these houses commonly aligned with the porch-posts (or inner pair of a projecting porch), so that structures 2, 12 and 15 at Culduthel would have had an overall diameter in the order of 16 metres or more. A similar inference was drawn for the post-ring round-house with porch at Thainstone, Inverurie (Murray and Murray, 2006). Whether the outer wall was of turf, or whether its postholes, earth-fast but less substantial, have not survived ploughing and stripping, is unclear. The late survival of these monumental round-houses suggests that the round-house was itself a symbol of native identity, asserted in the face of advancing Romanization in much the same way as the lowland brochs may have done in the first century AD.

Seafield West (Cressey and Anderson, 2011) was situated on the edge of the floodplain by the Moray Firth, where it evidently enjoyed the diversity of wetland resources as well as exploiting the optimum environmental conditions of the first century AD for agricultural production. In addition its wealth in the Iron Age is attested by a flourishing ironworking industry, and the presence of Roman goods attests to external contacts, most probably sea-borne. The structures at Seafield West include one convincing post-ring plan in structure G, 9.5 metres in diameter, though if it had an external wall aligned on a projecting porch the overall diameter would have been in the order of 13 metres. Casting some doubt on this interpretation, however, is the fact that the postholes of the presumptive porch, which would have projected to the north-west, are more of the proportions and spacing of the adjacent building F, which the excavator inferred belonged to the later Bronze Age phase of occupation, which also appears to have been associated with high-status metalworking. The other principal Iron Age house type, the ring-ditch house, may be represented in structure C. The principal building on the site, however, is also the most enigmatic. Structure B was defined by a circular ring-trench 24 metres in diameter, with a narrow entrance to the east. Apart from entrance posts, there was no evidence that the trench had supported timbers of a house wall, though it is assumed that it must have supported an enclosure fence of some kind. Within the enclosure two rather irregular circles of postholes are presumed to have been the foundations of the house. One other structure, A, was also defined by a substantially eroded ring-trench that would have described a circle some 16-17 metres in diameter, on the upper threshold of larger Iron Age houses. But structure B is surely too large to have supported a roof on such an irregular base of internal posts, and in consequence should probably be interpreted as an open compound. Comparison with the sub-circular palisade at Balloan Park, Inverness (Wordsworth, 1999) may suggest the local use of palisaded compounds within essentially unenclosed settlements, but since this example was neither excavated internally nor dated the evidence is of limited value.

Most of these sites appear to have had their heyday in the earlier Iron Age, with occupation ending around the first century AD. At Birnie, Moray, by contrast, the evidence points to the site's flourishing in the para-Roman Iron Age, though the predominance of Roman period artefacts may have obscured the site's earlier origins.

Ritual activity and the Sculptor's Cave

Ritual activity in later prehistory is notoriously difficult to demonstrate convincingly, in the absence of a recognized structural form for sacred buildings or other accessories such as altars or

sculptural dedications. In practice, recognition of ritual often depends upon an assemblage being simply 'abnormal' in domestic terms on a significant scale. No site in Northern Britain qualifies on these grounds better than the Sculptor's Cave at Covesea in Moray (Benton, 1931; Shepherd and Shepherd, 1995; Shepherd, 2007). A programme of osteological analyses and AMS (accelerator mass spectrometry) dating showed that the principal periods of ritual activity were in the Late Bronze Age and again in the para-Roman Iron Age (Armit et al., 2011), though a further suite of dates now suggests activity into the Iron Age, and continuing use of the cave in the intervening period is not discounted. A high proportion of the human remains were those of juveniles (not infants), whose heads may have been curated and displayed. The evidence for decapitation derived from adult remains, and from the later, Roman Iron Age phase of activity. A key result from more recent investigations, however, is that the Sculptor's Cave was not alone in its ritual functions in later prehistory; at least two of the nearby caves have yielded human remains from the Late Bronze Age, suggesting their use for funerary processing of the dead.

Formal burial in the earlier Iron Age was evidently the exception rather than the rule, but radiocarbon samples from the excavation of a kerbed ring-cairn at Laikenbuie, Auldearn in the Highlands indicated an early Iron Age date (Scott and Jack, 2008), comparable to the dating obtained by Bradley for a similar cairn at Balnuaren of Clava 5 (Bradley, 2000). Both ring-cairns had previously been regarded as hut-circles, raising the possibility that a significant number of burials may hitherto have been mis-identified, together with the possibility of confusion of Iron Age burials among earlier cairnfields.

Material culture

As elsewhere in Northern Britain, the material culture of the early Iron Age in central and eastern Scotland, prior to the first century AD, is largely undiagnostic, comprising a range of utilitarian stone artefacts, hammer-stones, whetstones and polishers, spindle-whorls, and pottery that is sparse in quantity and undistinguished in character. Childe (1935a) had identified three metal types that he associated with his Abernethy culture, the safety-pin form of brooch, the ring-headed pin, and the spiral bronze ring. The first two are hardly prolific, while spiral bronzes rings are known from the middle Bronze Age to the early historic period, and from a wide European distribution zone, and so are of little value as a chronological or cultural indicator. Childe attributed these types to immigrants from the south in accordance with prevailing diffusionist models. All would now be regarded as local products, especially the distinctively Scottish projecting-headed version of the ring-headed pin.

Unquestionably exotic, on the other hand, is the fragmentary beaded torc from the Blair Drummond, Stirling, hoard (Plate 6; Joy, 2015), which closely resembles the regional Plastic Style of south-western France (Harding, 2007a: 191-2). The gold of which it is made, however, is claimed as native, raising the interesting prospect of a continental or continentally trained craftsman working in the patronage of a Scottish laird. Two of the Blair Drummond torcs are of the ribbon variety known from the Iron Age in Ireland. Together these three would be consistent with a third or second century BC date. The fourth was altogether more exotic, but suggests a craftsman familiar with Mediterranean styles, and again indicative of long-distance trade or diplomatic connections. Subsequent excavation on the find-spot revealed a circular timber building, leading to speculation that the site may have had votive significance.

Plain glass beads almost certainly date from the early Iron Age, though reliable associations from this period are mostly lacking in Northern Britain. Whilst we may not in general

144 The earlier Iron Age

subscribe to the 'reliquary theory', imagining that scraps of exotic artefacts were treasured as keepsakes long after the end of their usable currency, beads are perhaps the one type that might remain in circulation long after manufacture. Small, annular, opaque yellow beads of Guido's (1978) Class 8 date from the third century BC at Meare in Somerset, and there is no reason to suppose that examples from the west and north of Scotland are much later, though those from the vicinity of Hadrian's Wall may represent a later survival of the type. Culbin Sands in Morayshire yielded more than 250 beads of this class and may well have been a production centre (Henderson, 1991). Chemical analysis suggests that beads or necklaces from Culbin Sands found their way to the Orkneys, Western Isles and south-west Scotland, but the principal concentration was local to the north-east. Small blue glass beads may likewise have a long currency, perhaps from the fourth century BC in Southern Britain, through to the later Iron Age. Their distribution again is widespread though not especially dense in the north. Types that have a distinctly north-eastern Scottish distribution are rather later, dating to the first and second centuries AD. These include Guido's Class 13 spiral-ornamented beads, and the rather amorphous Class 14, both of which are densely concentrated between the Dee and the Moray Firth. Their dating would therefore overlap that of the production of massive metalwork, including massive armlets and spiral snake armlets as well as massive terrets, all of which have a wider eastern Scottish distribution. In fact, Class 13 beads may conceivably have been in circulation by the first century BC, if the evidence from Dun Bharabhat in west Lewis is indicative, but the north-eastern associations, such as they are, appear to be later.

Bone and antler artefacts are occasionally in evidence in the early Iron Age, though pins and awls are of the simplest forms. Combs of the ubiquitous long-handled variety are found in eastern Scotland, but are more common in the Northern and Western Isles. Bracelets and rings of jet or lignite were in evidence, as at Finavon, and again almost certainly date from the early Iron Age, continuing into the early historic period. Finally, pottery is very seldom represented in the material assemblage, and then only in coarse, undecorated wares. Childe recovered a range of simple-rimmed and flat-bottomed jars from Finavon, Angus, but the ceramic assemblage from central and eastern Scotland remains very limited. In sum it represents the recurrent problem of the early Iron Age, that the material assemblage for the most part comprises basic utilitarian types that are not amenable to close characterization and dating.

ARGYLL AND ATLANTIC SCOTLAND

The early Iron Age in Atlantic Scotland is dominated by field monuments, essentially brochs, duns and island duns, and forts. Wheelhouses too may have been part of the range of settlement types in use by the end of the first millennium BC but, since they evidently continued to be constructed and occupied well into the first millennium AD, consideration of them will be deferred until Chapter 10. This emphasis upon field monuments, as opposed to material culture, has sometimes been criticized as prejudicing a proper understanding of the social and economic aspects of early Iron Age society. The fact is, however, that the field monuments are quite exceptional in their surviving number and monumentality of construction, which rightly require attention and explanation. The potential for establishing regional sequences in material culture from long occupational sequences, however, has not been fully realized, and other aspects of artefact studies, not simply typology and chronology, but their social or cognitive aspects, have only more recently been addressed.

Atlantic round-houses: context, classification and chronology

With around a thousand brochs and duns known in northern and western Scotland, their distribution is plainly indicative of a considerable population, even allowing for the fact that not all would have been in contemporary occupation. The distinction between brochs and duns, even if tenable in principle, is obscured without excavation by their similarity as surviving mounds of tumbled masonry. Sites conventionally defined as brochs certainly predominate in Caithness and the Northern Isles, with significant numbers in Skye and the Western Isles (MacKie, 2002, 2007); duns in variable forms are more characteristic of Argyll and the Inner Hebrides, with again a significant group of island-based duns in the Western Isles. These variant forms of monumental stone-built round-houses should be seen as potentially contemporary regional manifestations of a widespread cultural continuum across Atlantic Scotland. For that reason, the term *Atlantic round-house* (Armit, 1990b) has been widely adopted archaeologically to serve as an inclusive term for this overall class of Iron Age monument. The broch tower, even if it warrants singling out as a distinct sub-group, is simply a conspicuously monumental type of *complex Atlantic round-house*; in reality they may be just better-preserved

examples, perhaps because the latest survivals, of a longer tradition of building tall on massive foundations. The term broch still remains convenient shorthand for the class.

A broch or complex Atlantic round-house, like Carloway in Lewis (Figure 5.1; Tabraham, 1977), is a circular or sub-circular, dry-stone building with cells or galleries contained within the thickness of the double wall. As Romankiewicz (2009, 2011) has made clear, the two walls are functionally independent, the inner carrying the weight and thrust of the roof, the outer bearing the force of wind and weather. Cells and galleries are of very different size, implying various functions. External windows are never in evidence. Access to the interior of the broch was through a single entrance, the low lintel and capstones of which, combined with long, low passage, requires the physical and symbolic obeisance of anyone entering the building and implies strict control of access to the interior, within which we may suppose that progression to various levels was likewise restricted (Foster, 1989). Where very occasionally a second entrance has been recorded, it is invariably secondary, following substantial structural rebuilding. The door was commonly supported against a rebate in the stone lining of the passage and barred by timbers lodged in bar-holes on either side. 'Guard cells' commonly flank one side of the entrance passage, though exactly how these functioned is not clear: their opening on to the passage is extremely constricted, and in most cases, there is no alternative access from the guard cell into the gallery or interior of the broch. The staircase to upper levels invariably rises clockwise within the wall cavity, perhaps indicative of a measure of conventional cosmology in the design of the building.

In addition to entrances at various levels from the interior into the intra-mural galleries, tall slots are found in the inner face of the inner wall, with their cross-ties resembling a stack of vertical pigeon-holes. The function of these is unclear, but they may have been stress-relieving rather than related to the use of the galleries. A key feature of brochs, depending upon their surviving height, is an interior ledge, or scarcement, around the inner face of the inner wall. This may be achieved by a single course of stonework projecting up to 30 centimetres from the face of the wall, or more substantially by offsetting the wall up to the required level of the scarcement. It is generally supposed that the purpose of the scarcement was to sustain an interior floor. It need not follow, however, that the floor was at the level of the scarcement, since it could have been sprung from a framework based on the scarcement ledge but supporting a floor at a higher level. In fact, the interior of the stone shell was probably lined with a framework of timber, to provide the basis for timber stairs and upper floors. Stone staircases commonly survive within the wall cavity at ground floor level, and in some cases, the flight of stairs continues up through the next floor level. But ultimately, with the sole exception among surviving examples of Mousa, Shetland, the intra-mural gallery (Figure 5.2B) becomes too constricted to accommodate a stairway, as the walls converge with greater height, and at this point, access to the wall-head (Figure 5.2A) must have been gained by means of internal stairs or ladders. That access to the wall-head was desirable must be assumed, not simply for defensive purposes, but also in order to service and maintain the building and its roof. In the case of Mousa, however, it would appear that direct access to the wall-head was paramount, even though this meant a wider wall-base constricting internal space, perhaps a factor of its potential role as a look-out tower (Smith, forthcoming).

Internal fixtures and fittings are known within brochs, but the problem invariably arises whether these belong to the original internal design or whether they are from secondary occupation. Early excavators generally did not appreciate the depth of secondary occupation and may easily have conflated structures and material assemblages from successive phases of occupation. Hearths and stone-lined troughs, for example, are common to successive phases of occupation, though their design may change through time, but it is doubtful whether the hearth of a broch tower's primary occupation would have been on the ground floor.

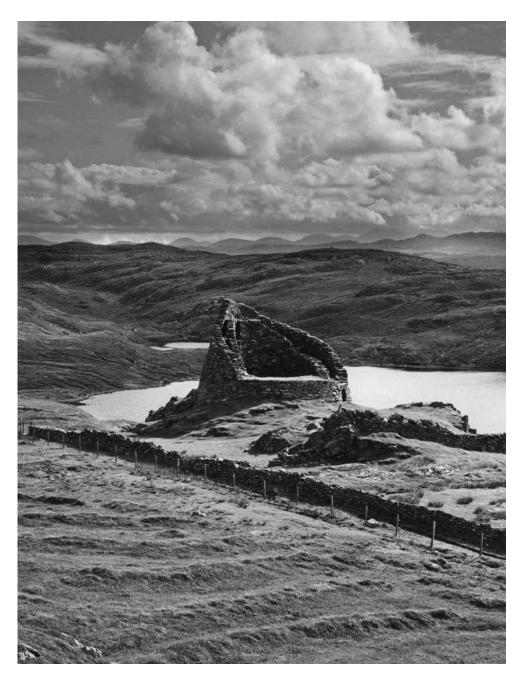


FIGURE 5.1 Carloway, Lewis, complex Atlantic round-house *Source:* Photograph by D. W. Harding.





FIGURE 5.2 Mousa, Shetland, A (above), wall-head and parapet, B (below), intra-mural gallery *Source:* Photographs by D. W. Harding.

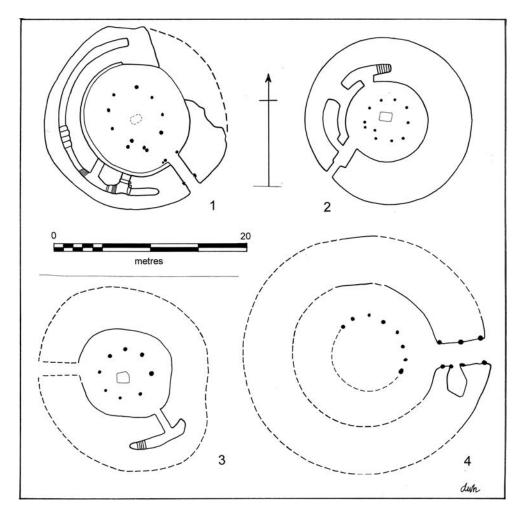


FIGURE 5.3 Atlantic round-houses with internal post-rings, 1, Dun an Ruigh Ruaidh, Wester Ross; 2, Dun Troddan, Inverness-shire; 3, Leckie, Stirlingshire; 4, Langwell dun, Sutherland

Source: Drawings by D. W. Harding, adapted from MacKie (1980), Curle (1921), MacKie (1982), Nisbet (1994).

Controversy in the past focused on whether brochs were completely roofed and whether they had intermediate floor levels within the tower. Relatively few sites have produced evidence for internal upright supports (Figure 5.3), and where these are recorded, as at Dun Troddan, Glenelg (Curle, 1921), there can be no assurance that they represent an original feature, rather than a secondary round-house built within the broch shell (Romankiewicz and Ralston, 2012). At Langwell in Sutherland (Nisbet, 1994), a circle of timber posts probably supported a conical roof, the burnt rafters from which were found collapsed in a radial pattern. Timber round-houses required no additional roof support to span comparable internal diameters, so that internal supports would not have been essential. Setting aside the important issue of timber supplies and the quantities required to build a multi-floored roofed building, there can hardly be any doubt as to the capability of Iron Age communities to achieve a comparable level of technical proficiency in timber to that which the broch structure itself manifestly demonstrates in stone. J.R.C. Hamilton in his early post-war investigations in Shetland advanced

the theory that brochs had developed from stone-walled forts, taking the tenuous evidence from Clickhimin for timber ranges behind the stone 'ringwall' and imagining a model in which such a structure was compressed to the scale of a broch (Hamilton, 1968). The outcome was a broch in which a relatively low circle of timber-built, lean-to sheds was ranged around an open court in the centre of the broch, through which light might be admitted and smoke from the fire might be emitted. Lighting within a broch tower by means of a central light-well, even at the height of summer, would have been problematic, and archaeological evidence indicates the use of openwick stone lamps. Furthermore, a light-well would have allowed wind and rain to penetrate the fabric of the structure beyond probable levels of tolerability. A vent for the smoke from an internal fire is simply not necessary; smoke may hang in the roof but otherwise filters naturally through it. The principal objection to the lean-to shed theory, however, was simply that it was absurdly disproportionate to the grandeur and resource demonstrated by the stone structure itself. In consequence, most recent models of broch reconstruction have envisaged intermediate floors or mezzanine-floors and a totally roofed apex to the building. How exactly this was achieved must remain a matter for speculation, though the feasibility of various methods could be tested experimentally. It is nevertheless worth bearing in mind Fairhurst's (1984:68) qualification, that not all brochs need have been roofed or internally equipped in exactly the same manner.

The shortage of suitable timber for roofing large round-houses has been much emphasized, particularly in regions like the Western Isles where the absence of natural woodland is a feature of the modern landscape. Even allowing for environmental change, and for the depredations inflicted by the introduction of sheep, it is difficult to imagine that the landscape of the Western Isles in the Iron Age included more than limited areas of woodland, perhaps in more sheltered locations along the eastern side of the islands, away from the prevailing westerly winds. There is some evidence for the use of driftwood (Church, 2002), some of which may have attained sizeable proportions, and which could have been stockpiled to afford a useful supplement to local resources. We should certainly not underestimate the capacity of Iron Age communities to manage their limited resources and, indeed, to initiate and control an effective system of timber regeneration. Such has long been inferred of prehistoric communities from the Neolithic onwards elsewhere in Britain, and there is no reason to suppose that the population of the Hebridean Iron Age was any more backward in husbanding such a basic resource. What needs could not be satisfied locally might have been acquired from the mainland. It is one of the ironies of the older diffusionist view of Scottish prehistory that settlers who were credited with overland or sea-going colonization from Land's End to Sumburgh Head were not thought capable of importing timber across the Minch.

An aspect of broch construction that is seldom discussed is the question of the technical skills involved, and what archaeological evidence might be adduced for the builders' toolkits. A specific question is the extent to which stonework was dressed. Occasionally the term 'roughly dressed' is used; dry-stone masons of course have an eye for which side of a stone will present the best face, and minimal striking off of unwanted nodes can simulate dressed stonework. The stone facing of the ground gallery containing the staircase at Dun Troddan, for example (Figure 5.4), is much more regular than that in the gallery immediately above, where the cavity is too narrow for normal access, and where the sharply projecting stonework could have inflicted severe injury. Instances of deliberate embellishment include the massive triangular stones for the entrance lintels at Dun Dornadilla in Sutherland, or at Culswick in Shetland (Figure 5.5). The triangular stone from Old Scatness, Shetland, is so thin relative to its size that it can have been no more than an ornamental façade (Figure 5.5, 3).

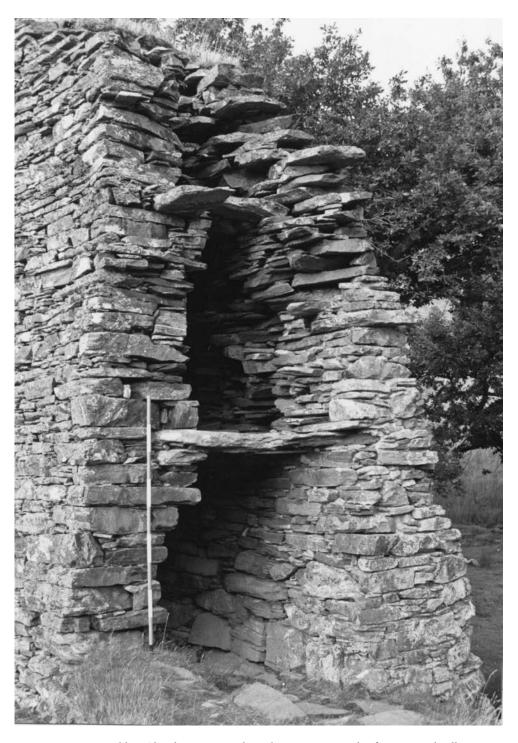


FIGURE 5.4 Dun Troddan, Glenelg, Inverness-shire, showing stonework of intra-mural gallery *Source:* Photograph by D. W. Harding.



FIGURE 5.5 Complex Atlantic round-houses with triangular entrance lintels, 1, Culswick, Shetland; 2, Dun Dornadilla, Sutherland; 3, Old Scatness, Shetland

Source: Photographs by D. W. Harding and I. M. Blake.

The methods deployed in construction are also instructive. The way in which outcropping rock is straddled and incorporated into the structure, as at Carloway in Lewis, is a measure of the resourcefulness of Iron Age structural engineers. Even so, the number of cracked slabs on the same site, and the need for relieving gaps in the inner wall circuit, is indicative of the structural stresses of such massive buildings, and there can be no doubt that on occasion buildings became structurally unsafe or collapsed. Different techniques are used in raising the walls, some having their outer stones tilted back to create a continuous slope on the outer face, others having the courses marginally stepped inwards to achieve the progressive narrowing of the walls (Suddaby, 1995). Though not immediately apparent, the inner face of the outer wall of the Carloway broch at its apex is almost vertically over the outer face of the inner wall's foundation, so that the whole construction must have been dependent upon maintaining the integrity of its circular geometry.

Sites like Carloway evidently stood in isolation, but others, including Mousa, were enclosed, with evidence of external settlement in their secondary phases at least. The most conspicuous examples of brochs within a nuclear settlement are those of Orkney (Figure 5.6), such as Gurness, Midhowe and Lingro, though even here the question of contemporaneity of broch and external settlement is much debated. Hedges (1987) argued that the nucleated layout at Gurness was essentially original; MacKie (1987) countered that the 'village' was manifestly secondary, following much the same view as had been advanced in the Royal Commission's Inventory of 1946. The crucial factor is surely the substantial enclosure, and the alignment of its main entrance towards the broch entrance, which implies a unitary layout (Plate 8A). The surviving external buildings may be secondary, but the compound around the broch was evidently integral to the settlement concept from the start. At the Howe, Orkney, at least, there is some evidence for external structures within a rampart enclosure from a relatively early stage (Smith, B. B., 1994). In the Phase 7 enclosure, they are well preserved, but the basic layout seems to have been established by Phase 5, which lacks the definitive criteria of a complex Atlantic round-house, but possibly only because it is so severely truncated by later occupation.

In the west, nucleated villages of the Orcadian variety are unknown, but outworks and possibly external occupation are not (Figure 5.7). At Dun Mor Vaul on Tiree (MacKie, 1974, 1997), the enclosure wall may well have been original, even if the ephemeral structures external to the broch were more probably secondary. Similar enclosed brochs are known on Skye. Closely related must be both simple and galleried duns on Tiree, Mull and Islay, which have enclosures surrounding or attached to them (Harding, 1997: 134-5) or, in some examples in mainland Argyll, cutting off access on either side of a narrow ridge (Figure 5.8). In the Western Isles, the extension of island dun sites to include an annexe behind the principal structure must imply some external activity, though not necessarily involving contemporary outbuildings, and in some cases, like Loch an Duna at Bragar in Lewis, an enclosure wall may be part of the original layout (Figure 5.9). The walls flanking the entrance approach were evidently replaced more than once, and again may have been part of the original defensive design. At Beirgh, Lewis, (Harding and Gilmour, 2000) there were certainly external buildings close by the broch wall; though relatively early in the sequence, they cannot yet be shown to have been primary.

Island duns are a particular sub-group of Atlantic round-house found in the shallow lochs of the Western Isles. The natural or reinforced natural islands on which they stand are dominated by a single Atlantic round-house, sometimes with limited room for external

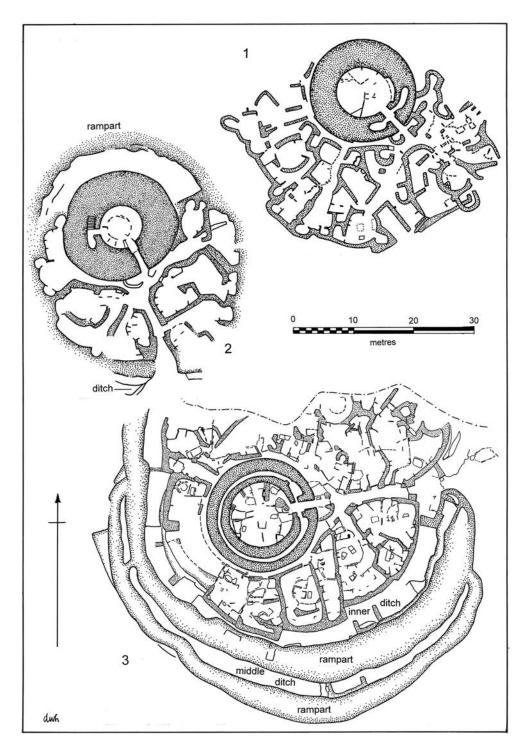


FIGURE 5.6 Complex Atlantic round-house 'villages' in Orkney, 1, Lingro; 2, Howe; 3, Gurness *Source*: Drawings by D. W. Harding, adapted from RCAMS (1946) and Smith, B. B. (1994).

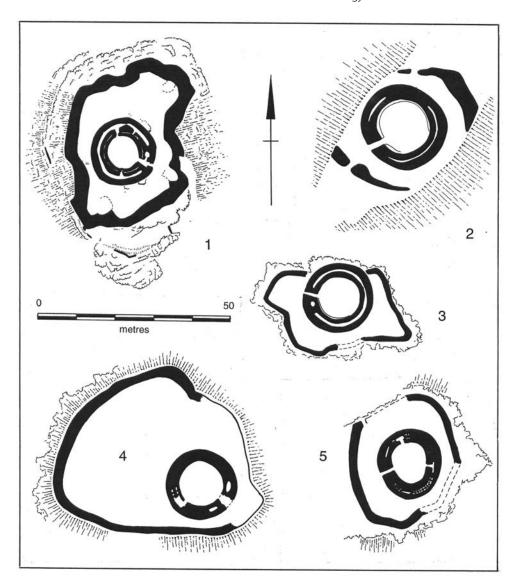


FIGURE 5.7 Brochs with outworks in the west, 1, Dun Mor, Vaul, Tiree; 2, Tirefour Castle, Lismore; 3, Dun Boreraig, Skye; 4, Dun Hallin, Skye; 5, Dun Colbost, Skye

Source: Drawings by G. D. Thomas for the author, adapted from RCAHMS (1928, 1974, 1980).

structures, and they are invariably approached from the shore by a stone causeway, as at Dun Torcuill (Figure 5.10A) in North Uist. Apart from Dun Bharabhat, Cnip, in west Lewis, none has been excavated in modern times, but the probability is that their ruined stone heaps conceal similar structural complexities to the land-based brochs. Loch an Duin at Shader (Figure 5.11) on the northern coastal belt of Lewis would be a strong candidate for excavation, now that the village has been connected to the main drainage system, so that visibility for underwater excavation has improved. Apart from the upstanding remains, an adjacent

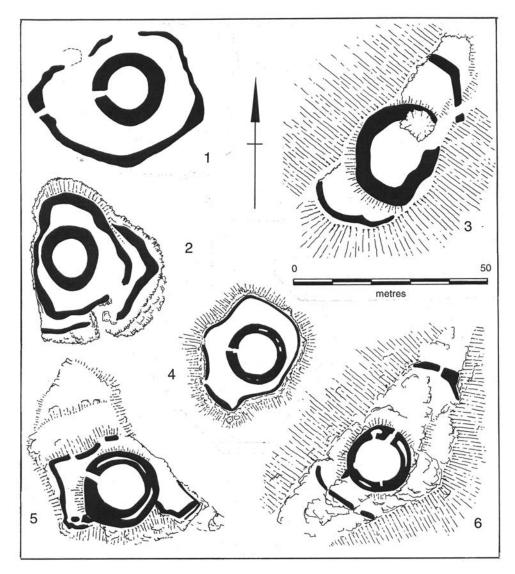


FIGURE 5.8 Duns with outworks in the west, 1, Dun Hanais, Tiree; 2, Dun Heanais, Tiree; 3, Camaslaich, Seil; 4, Dun Aisgain, Mull; 5, Dun Chroisprig, Islay; 6, Dun Rostan, Mid-Argyll

Source: Drawings by G. D. Thomas for the author, adapted from RCAHMS (1975, 1980, 1984, 1988a).

'halo' is probably indicative of an immediately preceding structure, whilst to the west traces of stonework breaking the loch surface probably represent a still earlier island dun, perhaps dating from the early Iron Age. Some sites were evidently re-used in Medieval times and later, as at Dun an Sticer in North Uist (Figure 5.10B), where a network of causeways suggests a hierarchy of access to the focal dun.

The standard classification of brochs for much of the later twentieth century identified a fundamental distinction between *solid-based* brochs and *ground-galleried* brochs. The solid-based type, as its name implied, had no intra-mural galleries or cells at ground floor or foundation level, other than that which was necessary to contain the staircase. The ground-galleried brochs,



FIGURE 5.9 Island dun in Loch an Duna, Bragar, Lewis: air-photograph Source: Photograph by D. W. Harding.

by contrast, did display additional galleries or cells, in some cases like Beirgh up to six or seven. In general, it was noted that the ground-galleried brochs were found in the west, whereas solidbased brochs were characteristic of Caithness and the Northern Isles. In fact, the classification is not nearly as clear-cut as is sometimes implied (Romankiewicz, 2011), and its significance should therefore not be over-rated. Other aspects of the ground-plan of brochs showed contrasting regional traditions, including the position of the door rebate within the entrance passage, and the ratio of the wall thickness to the overall diameter of the broch (MacKie, 1965: 105-7). Making such comparative observations of broch typology, of course, depends crucially upon their state of preservation, and the availability of reliable plans. Modern technology such as laser scanning offers the prospect of survey that avoids pre-interpretation by the surveyor and is amenable to re-interpretation (Cavers, Barber and Ritchie, 2015). In reality, the great majority of field monuments survive only as substantial heaps of stone, so that the recognition of key structural features, such as galleries, scarcements and rebates, is quite impossible.

The emphasis on broch typology was inevitably linked to a diffusionist view of the origin and development of broch culture. Some, like J.R.C. Hamilton, believed they originated in the north, where the distribution of brochs was certainly densest. Others, notably Euan MacKie (1965, 1969b, but see also MacKie, 2008, 2010), favoured an origin in the west, where he believed brochs had developed from a local prototype termed a semi-broch. The term was originally used by Beveridge (1903) to describe the duns of Tiree, including Dun Mor Vaul, that he thought were essentially single-storeyed buildings rather than fully developed broch towers and, thus, intermediate between forts and brochs. It was adopted by MacKie (1965, 1991) to embrace two rather distinct and divergent groups of field monument not considered by





FIGURE 5.10 Island duns of North Uist, A (above), Dun Torcuill; B (below), Dun an Sticer Source: Photographs by D. W. Harding.

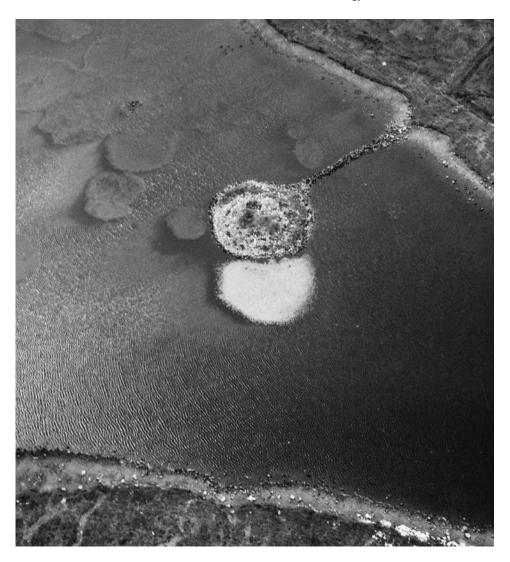


FIGURE 5.11 Island duns in Loch an Duin, Shader, Lewis: air-photograph Source: Photograph by D. W. Harding.

Beveridge under this heading. 'Promontory semi-brochs', like Rubh' an Dunain on Skye (RCAHMS, 1928: no. 483), are variants on the widespread Atlantic tradition of promontory forts. Apart from their inclusion of intra-mural galleries and related structural features, which may or may not imply contemporaneity, they otherwise have no obvious relationship in size, plan or function with brochs and are therefore hardly relevant as a typological antecedent. Cliff-edge or 'D-shaped semi-brochs', like Dun Ardtreck on Skye (MacKie, 2000), on the other hand, are of comparable size and plan to Atlantic round-houses and should be considered as part of that series. Current opinion, however, would no longer regard semi-brochs as convincing prototypes for the Atlantic round-house series, nor even as an independent design as opposed to conventional round-houses that had suffered cliff-edge erosion.

160 The earlier Iron Age

Both Hamilton and MacKie essentially followed Childe and Sir Lindsay Scott (1947) in seeking a southern or south-western origin for the Atlantic Iron Age. MacKie (1971) had originally attributed the introduction of broch architecture to refugees from Belgic invasions into south-eastern Britain in the first century BC, resulting in a late *terminus post quem* for the series. He had also argued that guard chambers and some artefact types including pottery had been introduced by migrants from southern England, though their rather diverse sources of origin and disparate dating made a less than convincing case (Clarke, 1970; Harding, 2005b).

Despite accumulating evidence, notably from Old Scatness, Shetland, for earlier broch origins, Parker Pearson and Sharples (1999) defended the case for late dating on the basis of their work at Dun Vulan in the southern Hebrides, though the site might equally sustain the case for earlier origins, since its primary occupation was never conclusively sampled (Armit, 2000).

The case against a longer sequence of development too often reverted to the circular argument of typology, in which only late broch towers were 'true brochs', so that any structure with broch characteristics that was earlier by definition was not yet a 'true broch' (Gilmour, 2005). The structure at Bu, in Orkney (Hedges, 1987), therefore, with radiocarbon dates assigning its occupation to the mid-first millennium BC or earlier, could not be accepted by traditionalists as a true broch, not only because it was too early, but also because it apparently lacked intramural galleries. In fact, the excavation of Bu was selective, with trenches disposed cross-wise over its circular outline, so that the full circuit of its enclosing walls was not uncovered. To argue that it might have contained a gallery within the unexcavated segments could of course be dismissed as special pleading. But if the ground-plan of its nearest neighbour at the Howe is superimposed upon the Bu plan, coinciding the alignment of their respective entrances, then the gallery falls exactly within one of Bu's unexcavated sectors (Figure 5.12). It is also

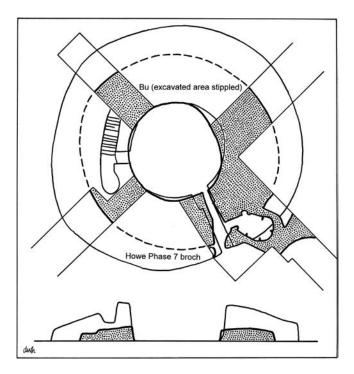


FIGURE 5.12 Bu and Howe, Orkney: comparative layout with entrances aligned *Source*: Drawing by D. W. Harding, adapted from Hedges (1987) and Smith, B. B. (1994).

the case that the foundations at Bu did not survive to the height of the 'ground floor' galleries at the Howe, which, as in other Orcadian brochs, were raised several courses and presumably therefore accessed by timber steps or from a suspended floor. Internally, it displayed evidence for radial divisions of space, which is also characteristic of Orcadian brochs, so that it certainly belongs within the tradition of monumental Atlantic round-house construction, even if it has to be classified as a proto-broch to satisfy typological pedantry.

The definition of a complex Atlantic round-house, of course, carries with it the implication that there should be a category of simple Atlantic round-house. This would effectively parallel Feachem's (1963) categories of galleried duns and simple duns. In the Armit model, Bu could be accommodated as a simple Atlantic round-house. More substantial than some of the early Orcadian round-houses, like Quanterness, Pierowall Quarry or the Calf of Eday, it could have been a mid-first millennium BC prototype from which complex Atlantic round-houses developed, without the need for diffusionist explanations. Simple Atlantic round-houses of the Late Bronze Age and earlier Iron Age at Toft's Ness, Sanday (Dockrill et al., 2007), were interpreted as representing a lower social order.

Caithness and the Northern Isles

Jarlshof on the southern tip of Shetland is quite exceptional in the longevity of its occupational sequence, extending over two millennia from Bronze Age to the Norse settlements. The site had been subject to a succession of exploratory excavations, notably by the landowner, John Bruce, at the end of the nineteenth century, and by Curle and Childe in the 1930s, before J.R.C. Hamilton attempted to clarify and consolidate the results of these investigations just after the Second World War (Hamilton, 1956). Hamilton's synthesis of Jarlshof was obviously constrained by the reliability of the earlier excavators' records, but in general, his sequence seems sound. It begins with a later Bronze Age settlement (Figure 5.13, 5), comprising courtyard houses, in which a central area with hearth was surrounded by a series of sub-circular cells. The dating of this phase is attested by fragments of moulds for casting bronzes, some of which could be identified as for socketed axes and for swords. This form of building has been shown by subsequent research to have a long ancestry in Shetland, with notable parallels at Sumburgh Airport and elsewhere (Figure 5.13, 1-4). Hamilton's late Bronze Age village 2, however, is not necessarily so early. Apart from the accumulation of wind-blown sand and the apparently higher level at which they were built, these structures included truncated radial piers and souterrains, in one of which a fragment of iron slag proclaims its later date. The largest of these buildings could well belong to the simple Atlantic round-house class of the early Iron Age, broadly comparable to Calf of Eday. Elsewhere, nevertheless, as at Kebister (Owen and Lowe, 1999), broadly contemporary Iron Age structures were more ephemeral.

The broch itself at Jarlshof had been severely eroded by the sea, but some important features survive. Within the wall thickness of its surviving segment are two cells. The sill of one is fully a metre above the floor of the interior, so that its presence would have been undetected had the structural remains been more drastically reduced like Bu. The other principal feature of the broch is its well, dug 4 metres into the rock and accessed by a short flight of steps. Construction of the broch can only be broadly assigned to the later first millennium BC (Fojut, 1998, 19).

The site at Clickhimin, located in a loch separated from the sea by a narrow rocky isthmus in the suburbs of Lerwick, was investigated by Hamilton in the 1950s as a sequel to his study of Jarlshof. Hamilton's (1968) published sequence has been debated ever since, notably in

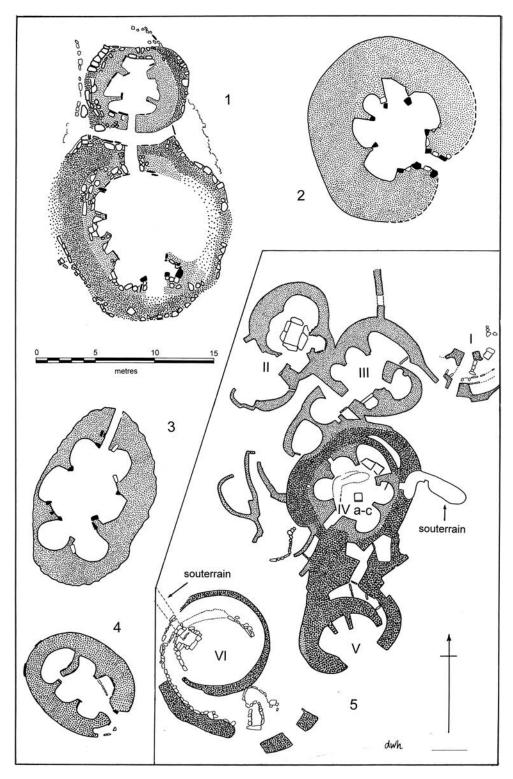


FIGURE 5.13 Bronze Age and Iron Age cellular structures in Shetland, 1, Sumburgh Airport; 2, Sulma Water; 3, Gravlaba; 4, Wiltrow; 5, Jarlshof

Source: Drawings by D. W. Harding, adapted from Downes and Lamb (2000), Calder (1963) and Hamilton (1956).

a cogent critique by Fojut (1998). The problem, however, as Smith (2013) has conclusively shown, is that depredations of the ruins in the late nineteenth century and restoration work in 1910 so totally rebuilt the site that further excavation would be unlikely to resolve outstanding issues. A cluster of cellular structures was assigned by Hamilton to the Late Bronze Age, not on the basis of associated artefacts but by analogy with the Late Bronze Age 'courtyard' houses from Jarlshof. Their proximity to the broch makes it improbable that they would have survived the latter's construction, and it is more likely that they were part of the wider postbroch external settlement. The blockhouse in Hamilton's sequence was an integral part of the early Iron Age defensive enclosure, and hence pre-broch; in Fojut's sequence, it may have been subsequent to the broch construction rather than pre-broch. Earlier investigators had simply assumed that the principal components were part of a unitary construction.

By far, the most informative site sequence of broch and later occupation is that from Old Scatness (Dockrill et al., 2010, 2015), by the northern perimeter of Sumburgh airport. From the application of several different dating techniques, it is clear that the broch was most likely constructed shortly after the mid-first millennium BC, and that an aisled round-house had been added by the later centuries of the first millennium BC. The Old Scatness broch in effect is not far removed in date from the Bu round-house, but unlike Bu, its credentials as a complex Atlantic round-house cannot be challenged. Not only has it a gallery containing the staircase adjacent to the entrance, but at least one other gallery within the wall core.

The Old Scatness broch tower would undoubtedly itself have been an impressive statement of status and authority. But its enclosing rampart and ditch clearly added a defensive dimension to the site. Its economic wealth was based upon the surrounding agricultural fields, with evidence for barley cultivation and cattle rearing for beef. In such a northerly environment, power apparently was based on the site's capacity for storing agricultural surplus and for controlling and protecting the local community through its management of the land and resources (Dockrill et al., 2015). Fojut (1982) had examined Shetland brochs in their landscape setting, but Old Scatness afforded the opportunity from modern excavation of reconstructing the site's social and economic role in detail.

For the dating of Orcadian brochs, the significance of Bu with its early radiocarbon dates has already been stressed. The Howe sequence is equally important, even though the earliest substantial building on the site (Phase 5) was so severely damaged by subsequent building that it can hardly be described as more than a thick-walled round-house. Nevertheless, the Phase 6 building, which should certainly qualify as a complex Atlantic round-house, was the immediate forerunner of an undisputed broch tower. Unfortunately, the radiocarbon dates for the Howe sequence provide mainly a series of terminus post quem and terminus ante quem values for the various structural phases, rather than unequivocal dates for the construction and occupation of those structures. The excavator suggested on this basis a date-span for Phases 5 and 6, including the development of the early broch, between the fourth century BC and the first century AD. The later broch, Phase 7, was attributed to a similar span from first to fourth centuries AD. A review of the evidence (Gilmour, 2000) suggested a slightly earlier beginning for the Atlantic round-houses between the fifth and third centuries BC. A problem in using the radiocarbon evidence has been the plateau in the calibration graph around the mid-first millennium BC, where increasingly it seems likely that the complex Atlantic round-house tradition had its origins. At the Cairns on South Ronaldsay, a succession of floors and occupation levels offers the prospect of establishing a well-dated sequence, with saddle querns from the lower deposits and metalworking debris including moulds for projecting ring-headed pins from the later (Carruthers, 2015).

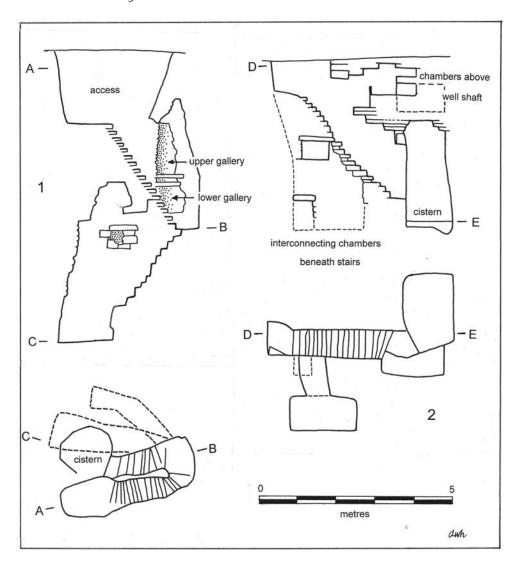


FIGURE 5.14 Wells at Mine Howe and Gurness, Orkney

Source: Drawings by D. W. Harding, adapted from Hedges (1987) and RCAHMS (2000).

Research in Orkney has also focused attention upon the anomalous role of wells within broch sites (Figure 5.14). The well at Gurness, as Armit (2003: 108–10) has argued, involved an extraordinary degree of elaboration for what must have been a very inadequate water supply. Much the same could be said of the Jarlshof broch in Shetland, like Gurness, located so close to the sea that infiltration of salt water would surely have contaminated the supply. The well recently opened at Swandro on Rousay, Orkney, however, still filled with spring water (Dockrill et al., 2014, 2015). At the Cairns, steps within the broch led down to a chamber that was partly rock-cut and partly corbelled. Re-opening of the unique site at Mine Howe (RCAHMS, 2000; Card and Downes, 2003) raised the possibility that such wells and underground cisterns were

for cult activities akin to those inferred for ritual shafts and wells throughout the 'Celtic' world. A long-standing tradition of ritual wells and springs might even be implied by the presence of similar remains on the later Iron Age site at Burghead in Morayshire.

On the north-east mainland, one of the first broch excavations to take advantage of radiocarbon dating was Crosskirk in Caithness (Fairhurst, 1984), where again a sequence of broch and post-broch occupation was distinguished through careful stratigraphic investigation. The broch itself was not the earliest structure on the site, and a sample centring on the mid-fifth century BC from immediately beneath its primary paving was cautiously regarded by the excavator as potentially residual from the earlier fortified phase. The remaining dates nevertheless would certainly allow the broch to have been constructed by 200 BC, as the excavator estimated, if not somewhat earlier. Re-examination of the brochs excavated in the nineteenth century by Sir Francis Tress-Barry (Heald and Jackson, 2001) promised new insights into a very important local distribution in coastal Caithness, but evidence of other early foundations has so far proved elusive. An even earlier date, in the fourth century BC, was obtained from another variant of complex Atlantic round-house in the northern mainland of Scotland, at the vitrified, galleried dun at Langwell in Sutherland (Nisbet, 1994).

Field research in the Western Isles

In the Western Isles, two modern excavation programmes focused on the northern and southern islands respectively. In west Lewis, the University of Edinburgh's Calanais-based research programme was a long-term investigation of the Iron Age in Lewis (Harding, 2000b), including the excavation of two complex Atlantic round-houses, at Dun Bharabhat, Cnip (Harding and Dixon, 2000), and Beirgh, Riof (Harding and Gilmour, 2000), both on the Bhaltos peninsula. Bharabhat would be classified conventionally as an island dun. It had intra-mural cells and galleries, one with intra-mural staircase, together with door rebate and bar-holes. It did not survive to a sufficient height to show whether it had a scarcement, though this would be a reasonable corollary if the staircase led to an upper floor rather than simply to the wallhead. The overall diameter of the building, some 10 metres by 11 externally, was hardly of broch tower proportions, however, by comparison with the neighbouring site at Beirgh. The main occupation of Bharabhat may not have been very long, since it appears to have collapsed through the subsidence of its foundations along one side of the reinforced natural island on which it was built. It was, however, modified and rebuilt in more than one phase of secondary occupation, probably only at ground floor level. It was the burning of the roofing materials of the first of these secondary occupations that yielded radiocarbon dates centred on the first and second centuries BC. A single radiocarbon date from the foundations of the island dun, possibly from an immediately pre-dun occupational deposit, provided a terminus post quem centred on the sixth century BC. The primary or main occupation of the dun or complex Atlantic roundhouse is therefore assigned to the second half of the first millennium BC.

The primary levels of the Beirgh sequence have yet to be examined. Excavations came to an end in 1995 when funding for the project was exhausted, despite the fact that the lowest, waterlogged deposits had the potential for revealing the most complete remains of primary broch occupation available anywhere in Atlantic Scotland. It seems at present unlikely that the project can be resumed, and the half-exposed deposits will certainly have deteriorated in the past twenty-odd years. The site was occupied from at least the earlier Iron Age through a succession of post-broch occupations down to the immediately pre-Norse period. Dating the

origins of the broch therefore is tentative to the extent that it involves projecting backwards from the dates available for the post-broch occupation. These, when calibrated at two sigma, fall between the early third and the end of the sixth centuries AD. Between this later occupation and the abandonment of the broch itself lies a succession of secondary round-houses or possible wheelhouses, represented stratigraphically by up to a metre of archaeological deposits. By any reasonable reckoning, therefore, the very end of the use of the broch building itself might belong around the turn of the millennium or perhaps earlier, so that the origins of the broch should, like Bharabhat, lie in the second half of the first millennium BC. Admittedly, the number of radiocarbon dates available for Bharabhat and Beirgh is fewer than would be desirable, but an earlier dating for the origin of brochs generally now seems reasonably well established.

That conclusion could be argued on the basis of the dates from the University of Sheffield's excavations at Dun Vulan, South Uist, as easily as the later reading offered by the excavators (Gilmour and Cook, 1998). Like Beirgh, Dun Vulan was so intensively re-occupied that it might be difficult to isolate primary contexts uncontaminated by later intrusions. The primary broch levels within the building were never examined, so that the radiocarbon dates on which the assessment of its construction was made were from secondary contexts, one within an intra-mural chamber, the other under a secondary revetment of the outer broch wall. The excavators inferred that this revetment was necessitated by subsidence shortly after the construction of the broch and therefore should not be too far removed from it in time (Parker Pearson and Sharples, 1999: 39–40 and Figure 5.2). Even allowing this arguable point, a two sigma range would still admit of a considerably earlier construction than the excavators were prepared to allow (Armit, 2000).

On current evidence, it would seem that complex Atlantic round-houses developed in the Western Isles relatively early in the Iron Age, with at present few signs of a simple Atlantic round-house antecedent or prototype, or indeed of settlements of lesser-order structures. The surviving piles of stone that are all that commonly remain of brochs or duns could, of course, conceal solid-walled duns or simple Atlantic round-houses. To surface survey, Dun Bharabhat certainly so appeared and was recorded as such in the Royal Commission's 1926 Inventory. In the event, Bharabhat proved within a few hours of surplus boulder removal to be a galleried structure, and this experience seems likely to be repeated elsewhere, were selective investigation to be undertaken. Subsequent fieldwork and radiocarbon sampling has identified some sites that could fill the category of antecedent round-houses, dating from the late Bronze Age and early Iron Age (Gilmour, 2002). A substantial oval building at Eilean Olabhat in North Uist (Armit et al., 2008) was in occupation from the fourth century cal BC, though its structural details were largely obscured by later activity in the early historic period. In the Uig district of west Lewis, the domestic structures at Guinnerso could have their origins in the later Bronze Age beneath a long sequence of later occupation. Not all of these sites need have been for permanent occupation, and their marginal location in some instances may argue a seasonal role, rather than as antecedents to, or lower-order contemporaries of, Atlantic round-houses. The best prospect for locating contemporary, lower-order settlements is ironically from survey and excavation of salvage sites, like those that evidently spanned the Bronze Age and 'long' Iron Age in the Barvas machair (MacLeod Rivett, forthcoming), where vernacular building traditions probably left only very ephemeral foundations.

Sheffield University's SEARCH programme identified several sites in the vicinity of Dun Vulan from which evidence of earlier Iron Age occupation was recovered (Parker Pearson,

2012). At Cladh Hallan in South Uist (Marshall et al., 1999), occupation is attested from the later Bronze Age by the presence of metalworking debris, as well as from absolute dating. The round-houses themselves are unusual in their conjoined, cellular layout, with perhaps a chain of six or seven units flanking the principal building with its forecourt. Both human and animal burials suggest that a highly complex set of cult practices were in vogue, perhaps indicating that the site's origins and function were not exclusively domestic.

A cult purpose has also been inferred for the site in the causewayed tidal inlet at An Dunan in west Lewis (Church et al., 2013), dated to the earlier Iron Age. The structure itself was unlike any of the known Atlantic series, being sub-rectangular with a wide entrance in its first phase, with several subsequent episodes of structural modification. It also lacked a typical domestic assemblage, its principal characteristic being accumulations of ash that apparently had not been burnt in situ, reminiscent of midden accumulations on a larger scale in southern Britain. An imported shale bracelet against one wall appeared to have been a deliberate deposit. The site is currently unique to the Western Isles later prehistoric landscape.

Material assemblages of Atlantic round-houses

Compared to the domestic assemblages of southern and eastern Scotland, and of mainland Argyll, settlements in the Atlantic North and West have yielded a more extensive material assemblage, though earlier Iron Age pottery is not nearly as distinctive in form or decoration as later varieties (Topping, 1987) and has not proved amenable to scientific analysis (Topping, 1986). Furthermore, other associated types, like spindle-whorls or hammer-stones, are hardly chronologically diagnostic, unlike later Iron Age types, such as penannular brooches and composite bone combs, pin types in bronze or bone (Foster, 1990) and types of crucible of the first millennium AD. Assemblages from broch occupation include some non-ceramic types that, whilst certainly current in the opening centuries of the first millennium AD, could have been in circulation much earlier. Prior to the widespread application of radiocarbon dating, the lack of diagnostically earlier types thus constrained a true assessment of the potential longevity of broch occupation. Basic, utilitarian artefacts as spindle-whorls, hammer-stones, thatch- or net-weights, polishing stones and simple bone needles did not change significantly over hundreds of years, and material from early contexts therefore could easily be subsumed within a mixed assemblage resulting from long-term occupation of the same site, where the stratigraphic sequence was insufficiently distinct.

In marked contrast to western, central, southern and eastern Scotland, and northern England, in which the surviving pottery assemblages are minimal in quantity and extremely limited in range and quality, the ceramic assemblage of the earlier Iron Age in Atlantic Scotland is distinguished by a range of vessel forms and decorative styles, with some apparent similarities in detail to the Iron Age ceramics of Southern Britain (Harding, 2005b). Perhaps the most striking similarity is the use of incised geometric ornament, with a combination of geometric rectilinear and simple curvilinear motifs, as exemplified in the pre-Cellular phases at Beirgh (Figure 5.15) or from Dun Bharabhat (Figure 5.16). These are certainly also characteristic of the latest Bronze Age or earliest Iron Age in Wessex, as exemplified at sites like All Cannings Cross and Longbridge Deverill in Wiltshire. There are important differences, notably in the absence from Atlantic Scotland of the white infilling of the decorative design and the use of a highly burnished haematite slip that distinguishes the finer Wessex wares. Plastic ornament in the form of applied cabled bands or finger-tip impressions also characterize both regions,

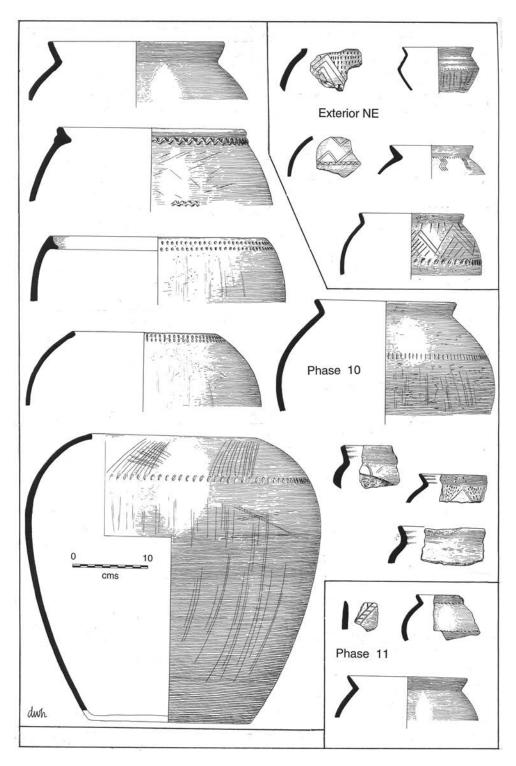


FIGURE 5.15 Beirgh, Riof, Lewis: pottery from post-complex Atlantic round-house, pre-cellular phases *Source*: Drawings by D. W. Harding.

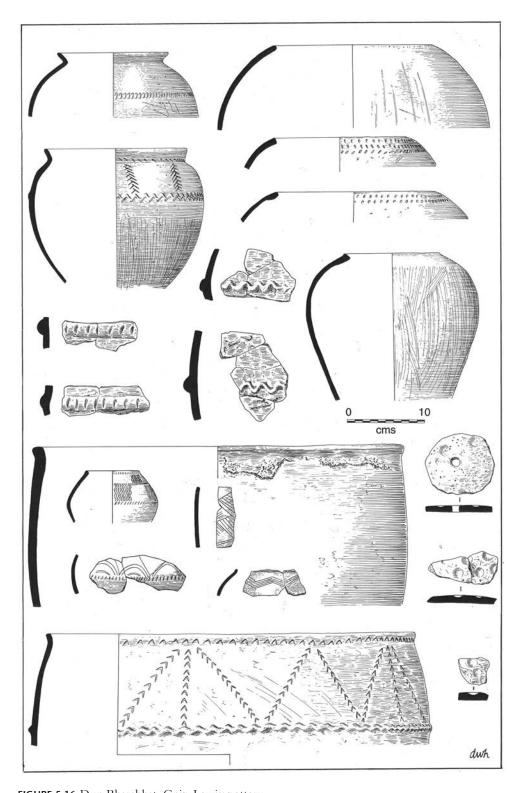


FIGURE 5.16 Dun Bharabhat, Cnip, Lewis: pottery

Source: Drawings by D. W. Harding.

170 The earlier Iron Age

though in Wessex the two styles are not combined on the same vessel as they are in Atlantic Scotland. If these two groups were in any way related, the implication would have to be that the Atlantic Scotlish tradition had its origins somewhere in the later Bronze Age, from around the mid-first millennium BC at latest. As we have noted, an early ceramic horizon has long been recognized at Dun Mor Vaul (MacKie, 1974), which included not only the distinctive coarse 'Vaul ware' jars but also some examples of incised geometric ornament. The fact that this style of ornament apparently continues through the broch period in Atlantic Scotland, lasting much longer than its currency in Wessex, need occasion no surprise or concern. In fact, the pottery from early contexts at Dun Mor, Vaul (Figure 5.17), is not unlike some material from Dun Bharabhat and may well be representative of the elusive early Iron Age styles of the Atlantic west.

Equally distinctive in the north-west is a style of pottery distinguished by shallow-tooled or finger-impressed arcades, generally known as Clettraval ware, which cannot at present be shown to have such early origins. But undecorated versions of short, everted-rim vessels on which that style is commonly applied may well prove to have a longer currency. Overall, given the striking contrast between the pottery of Atlantic Scotland, and more particularly that of the Western Isles and the remainder of Northern Britain or Ireland, it is certainly possible that maritime contacts via the western seaways provided a stimulus in its regional development.

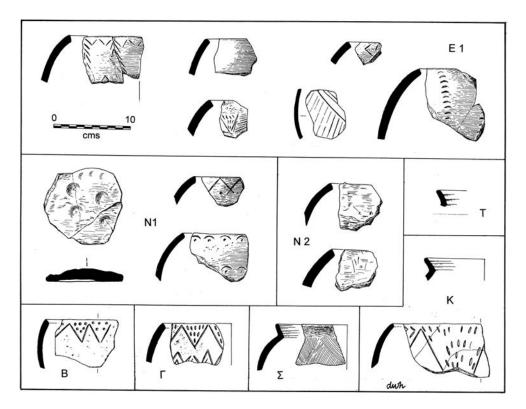


FIGURE 5.17 Dun Mor, Vaul, Tiree: pottery from early contexts

Source: Drawings by D. W. Harding, courtesy of the Hunterian Museum, Glasgow.

But the absence of any clear imports, by contrast to the imported continental wares of the early historic period, for example, and the distinctively regional combinations of pottery forms and decorative motifs, makes it unlikely that any significant cultural movement was involved.

The ceramic sequence in the Northern Isles is far from parallel to that in the West, but here too sites with a long sequence of occupation may be expected in due course to yield a type-sequence based upon stratigraphic and absolute dating. Research based on excavations at Sumburgh airport (Downes and Lamb, 2000) and at Old Scatness (Dockrill et al., 2015), may help to clarify the local Shetland sequence.

Atlantic Scotland shares several non-ceramic types with other regions, but there is no reason to regard them as imports rather than local products (Clarke, 1971; Lane, 1987). Ring-headed pins are essentially an insular (British and Irish) type, not characteristic of La Tène continental Europe. Atlantic Scottish examples are a distinctive group, characterized by having a projecting ring-head turned at 90 degrees from the stem, and are apparently rather later than their Southern British counterparts, dating as yet no earlier than the first century AD. Supposed impressions of such pins on earlier pottery could easily have been made using a bone tool. Spiral finger-rings have frequently been invoked as evidence of contact with Southern Britain in the early Iron Age. But this is a type that has a wide distribution and an even wider chronological currency from at least the middle Bronze Age until the mid-first millennium AD. Glass beads occur widely through the British Isles, as in continental Europe, in a great variety of forms. Establishing a close chronology for individual types on the basis of site associations or a limited number of absolute dates has proved inconclusive, since some of the simpler basic types of translucent blue and yellow beads appear to have had a long life-span. More distinctive variants have inlaid spiral ornament and may be amenable to closer dating. Long-handled combs are characteristic of the insular Iron Age (Tuohy, 1999), though the Scottish examples again are noticeably distinct from their Southern British counterparts. Traditionally regarded as an adjunct to weaving (for compressing the strands in a loom), their true function still generates debate. Querns of the discoid rotary variety which characterizes Atlantic Scotland are generally regarded as quite separate and distinct from the La Tène tradition of England or Southern Scotland, having instead Atlantic connections with Ireland, Brittany and possibly the Iberian peninsula. Their chronology has yet to be clarified, but they evidently post-date the 'quern transition' (from saddle quern to rotary), generally assigned, perhaps too conservatively, to around the second century BC (Caulfield, 1978). As in the case of mainland crannogs, the island settlements of the Outer Hebrides have a considerable potential for the preservation of organic artefacts. From Dun Bharabhat in West Lewis, wooden vessels, a wicker peat creel and fragments of heather rope were preserved from the Iron Age occupation levels.

'Brochs': an interim update

The role of brochs in Iron Age society continues to be a subject of rigorous review. The older conventional view, as articulated by Childe and Piggott, that they were defensive towers comparable to Medieval castles or later pele houses has now been discredited among archaeologists, which is not to say that Iron Age society was egalitarian rather than hierarchical or that feuding and raiding were not endemic. Many brochs were evidently occupied by locally prominent family groups engaged in productive mixed agriculture for whom the broch itself was a physical statement of identity and authority, doubtless with dependent kin whose settlements in the Atlantic west remain largely elusive archaeologically, but which in the Northern Isles see their

clearest expression in the subordinate buildings of broch 'villages'. At Old Scatness, the hierarchy appears to have been based upon the control and storage of agricultural resources. Here the broch itself was designed to be secure rather than defensive, the primary defence being provided by the surrounding rampart and ditch. Access nevertheless was strictly controlled, through surrounding fields, across the enclosure works, through the village and only finally into the broch itself. This regime may now be seen as entirely indigenous in origins, from at least the second half of the first millennium BC, and with possible antecedents earlier still.

Persuasive though the Old Scatness model may be, we should not assume that all brochs functioned in the same way, any more than all hillforts in the rest of Britain served the same purpose or, indeed, that all timber round-houses reflect a uniform social or economic role, simply because they share common structural or architectural features. Even within the Northern Isles, there could have been marked differences in function and economic base between brochs. It is hard to believe, for example, that brochs sited prominently along the coast were not intended primarily to command sea-borne approaches rather than for access to agricultural potential. The broch villages of the north cannot reflect the same social order as the isolated brochs of the west, though both could have been elements in a hierarchical system of settlement. The disparate and ephemeral nature of non-broch settlement in the west has perhaps contributed to its under-recognition and encouraged archaeologists to seek other formal classes of field monument like wheelhouses for the role of lesser-order settlements. In fact, there may well have been a hierarchy within brochs that were in contemporary occupation that is not reflected in architectural differences or even in significant differences in their associated material assemblages, since these are criteria of contemporary consumer society that have no automatic relevance to Iron Age communities.

Atlantic round-houses in the Inner Hebrides and Argyll

Among earlier broch excavations in the west, Dun Mor Vaul on Tiree (MacKie, 1974) was one of the first to yield radiocarbon dates, which themselves have prompted vexed debate. The stratigraphy within the broch occupation is complex, raising questions in matters of significant detail, but the main sequence seems reasonably clear. The earliest levels apparently produced some evidence of timber structures, together with pottery of the distinctive 'Vaul ware', which the excavator regarded as preceding the occupation of the broch itself. Dating of this phase derived from two radiocarbon dates (GaK 1092, 400+/– 110 BC from context Epsilon 2 and GaK 1098, 445+/– 90 BC from context Eta 2), which would be consistent with an initial occupation as early as the mid-first millennium BC. The construction of the broch itself was assigned by the excavator to the first century BC or AD on account of the associated material assemblage, which included pottery of Clettraval style, and by inference from radiocarbon dates derived from various contexts in the broch and post-broch sequence. In retrospect, we might question whether the supposed pre-broch levels at Dun Mor Vaul were not in fact of the primary broch occupation, and subsequent levels, including the diagnostic three-sided hearth, were not instead part of the later broch and secondary occupation.

Dun Mor Vaul is one of the few brochs, conventionally defined, in Argyll and the Inner Hebrides. This region is characterized by a bewildering range of duns, doubtless including variants of quite disparate date and function. Those that warrant consideration within the Atlantic round-house series, like Rahoy (Childe and Thorneycroft, 1938a), conform broadly to the size and proportions which would permit their use as roofed dwellings (Figure 5.18)

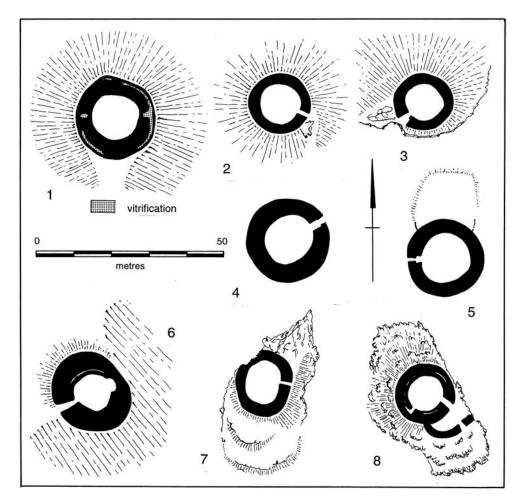


FIGURE 5.18 Dun houses in Argyll, 1, Rahoy, Morvern; 2, Tom a Chaisteil, Lorn; 3, Dun Leigh, Lorn; 4, Caisteal Suidhe, Cheannaidh; 5, Borgadel Water, Kintyre; 6, Dun Ballymeanoch, Mid-Argyll; 7, Cnoc a' Chaisteal, Lergychoniebeag, Mid-Argyll; 8, An Sean Dun, Mull

Source: Drawings by G. D. Thomas for the author, adapted from RCAHMS (1971, 1975, 1980, 1988a).

and may display some architectural features analogous to brochs. On the evidence of Rahoy itself, some of these 'dun houses' should certainly be of early Iron Age date, though a number probably had secondary occupation too. Notwithstanding the occurrence of intra-mural features, such as median wall-faces, many of these structures could be described as simple Atlantic round-houses. Yet they cannot offer a direct antecedent for complex Atlantic round-houses, even if their origins could be dated securely, because their distribution in the west is complementary to, rather than coincident with that of brochs. Equally, there is at present insufficient evidence to suggest a sequential relationship between simple and galleried duns in Argyll, parallel to the assumed progression in the Northern Isles from simple to complex Atlantic round-houses.

174 The earlier Iron Age

In fact, the dating of duns in Argyll has excited as much controversy as broch studies, with one school of thought arguing an early historic, first millennium AD horizon for the majority of sites. Hence Alcock and Alcock (1987: 131) were adamant that of the dozen excavated dun sites, all but Rahoy were late, a view reiterated by Nieke (1990). There is no need to counter this statement, since the class of duns being considered is so diverse and heterogeneous that no-one would reasonably expect some of the sites in question to have later prehistoric origins. At Kildonan in Kintyre, both the site's sub-triangular plan and its location, overlooked by higher ground on the landward side, would hardly be typical of earlier Iron Age Atlantic round-houses. Dun Fhinn, also in Kintyre, is a stack site of sub-rectangular plan and, as such, stands in total contrast to the predominant circularity of building tradition which is the hallmark of later prehistoric settlement throughout the British Isles. The conventional inclusion of these sites confusingly into a single portmanteau class of duns has been the principal hindrance to progress in settlement studies in Argyll. One modern excavation at least has endorsed the earlier Iron Age dating of Argyll duns, at Dun Glashan (Henderson and Gilmour, 2011). Here, a large 'dun house' or simple Atlantic round-house enclosed an area 19 metres in diameter with walls 4-5 metres thick. It showed no evidence of intra-mural cells or galleries, though it did have at least one median wall-face, and its entrance was rebated for a door. Four radiocarbon dates returned a consistent set of results in the second half of the first millennium BC, a span that would be entirely compatible with the sparse and undiagnostic material assemblage, comprising principally a hammer-stone, a polished stone and yellow glass bead.

The Royal Commission's former division between duns and forts, based upon the areal threshold of 4,000 square feet (375 square metres), was understandable in the 1960s as a simple expedient of classification for the purposes of the *Inventories*. It has nevertheless compounded the problem by including within the dun category enclosures that are self-evidently different from smaller, circular or sub-circular buildings that could have functioned as roofed dwellings analogous to brochs. Roofability is admittedly a subjective concept and should probably not be used as the sole basis for classification; but in the initial stages of sorting out structures of such manifest diversity, it is one criterion among others that deserves consideration. Even within the more limited group of 'dun houses' (Harding, 1984a), there are examples with evidence of secondary occupation, in some cases into the early historic period.

For the present Rahoy (Figure 5.18, 1), enclosing an area some 12 metres in diameter with a wall 3 metres thick, remains the type-site for simple Atlantic round-houses in Argyll. It was assigned to the early Iron Age, perhaps as early as the fourth century BC, on the basis of a La Tène 1c brooch and an iron socketed and looped axe of a type reckoned to be an early Iron Age imitation of a late Bronze Age model. It is significant that Childe did not apparently recover artefactual evidence of later occupation, since his description of internal features leaves little doubt that there were secondary structures, albeit of an ephemeral nature. A significant element at Rahoy was the vitrified character of the stonework, indicative of the fact that the wall originally had a timber framework. Timber-lacing is, of course, more commonly associated with hillfort construction, and vitrification is the outcome of violent destruction of such sites. Though not diagnostically early Iron Age, it would be consistent with the generally acknowledged early date for Rahoy. The early example of a timber-laced and vitrified dun at Langwell in Sutherland currently affords the best comparison with Rahoy in terms of chronology, assuming the Langwell radiocarbon dates are more reliable than subsequent thermoluminescent and archaeomagnetic results (Sanderson *et al.*, 1988; Gentles, 1993).

The Argyll Inventories proposed a model of site development, exemplified by sites like Dun Skeig (RCAHMS, 1971: no. 165) and Dun Mac Sniachan, Benderloch (RCAHMS, 1975: no. 136), in which there was a progressive contraction in area, from larger enclosures to smaller, thick-walled duns that would probably have been assigned a dating in the late first millennium BC or early first millennium AD. This model has hardly been tested by modern excavation, and the evidence from Balloch Hill (Peltenburg, 1982) demonstrated that it was not universally applicable.

Forts in Argyll and the west

In Atlantic Scotland, forts and allied enclosures are primarily concentrated in Argyll and the Inner Hebrides, but they are by no means absent elsewhere. Promontory forts in particular have a wide distribution throughout the Atlantic north and west, wherever topography lends itself to their construction. In the north, in particular, distinctive forms of fort construction include 'blockhouses', the function of which remains far from clear but which may have served a ceremonial as much as a defensive role. In considering later prehistoric and early historic forts, therefore, we should recognize that the term is used for a great diversity of sites without prejudice to the primary function or multiple functions that any of them might have served.

For the purpose of site classification in the *Inventories* of Argyll, the Royal Commission, as we have noted, distinguished between duns and forts, based on the threshold of 375 square metres or 4000 square feet enclosed, a distinction that resulted in sites of the Atlantic roundhouse class being grouped together with less regular dun enclosures (Figure 5.19; Harding, 1984a). It also meant that dun enclosures and forts of very similar plan might fall on either side of the areal threshold. The system nevertheless reflected the problems of classification where, as in the south-eastern Borders, small enclosures merge progressively with larger sites for which eventually the term fort would not be disputed. In fact, the Commission's threshold, though artificial, was not entirely arbitrary nor without social implications. Duns thus defined 'would . . . normally hold only a single family group' (RCAHMS, 1971: 18; see also Maxwell, 1969), so that forts enclosing a larger area might be supposed to have been used as larger 'community' sites.

Unlike brochs, duns and crannogs, there has been general agreement among archaeologists regarding the early Iron Age dating of hillforts in Argyll and the west, based upon the material assemblages recovered from early excavation, such as the thirty-odd saddle querns from Duntroon, and occasionally upon radiocarbon dating, as at Balloch Hill. In some cases, notably at the Torr, Shielfoot, Dun Skeig and Dun Mac Sniachan, Benderloch, the larger enclosures were apparently the earliest, with smaller, stone-built sub-circular duns representing later occupation in the model of relative diminution.

Not surprisingly, the majority of later prehistoric and early historic sites in Argyll are located in the coastal lowlands, often on locally defensible or even precipitous sites, but seldom above the 200 metre contour. Whatever climatic variables may have affected the periods in question, the warmer, wet coastal lowlands would doubtless have been preferable for settlement to the cooler, wet uplands, at the same time offering the benefits of proximity to better agricultural land and the resources of a marine environment. Nevertheless, contrasting the distributions of forts and duns in Kintyre, no less than 30 per cent of the forts are located at heights above the highest of the duns. These include those very few forts that occupy locations above the 200 metre contour, such as Knock Scalbert (RCAHMS, 1971: no. 170), Ballywilline (RCAHMS,

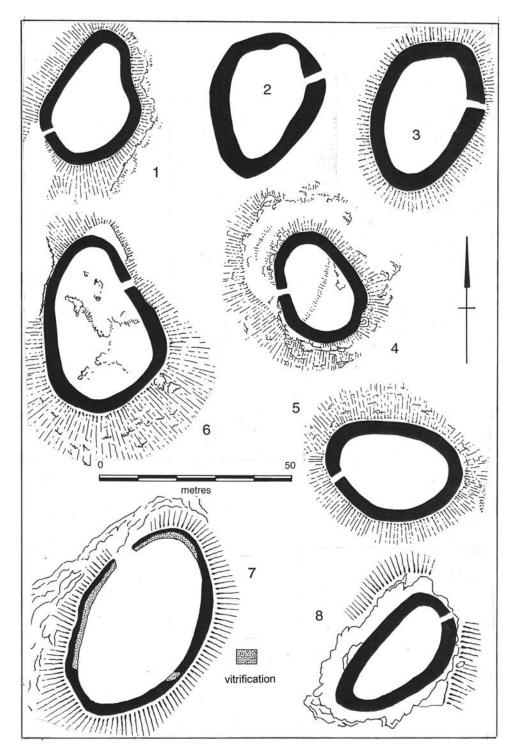


FIGURE 5.19 Dun enclosures and small forts in Argyll, 1, Dunan an t-Seasgain, Gigha, dun; 2, Barr Mor, Lorn, dun; 3, Ballycastle, Luing, dun; 4, Barr Iola, Cowal, dun; 5, Cnoc na Sroine, Mull, inner enclosure, dun; 6, Dun Breac, Ardvergnish, fort; 7, Duntroon, inner enclosure, fort; 8, Dunadd, summit citadel

Source: Drawings by G. D. Thomas for the author, adapted from RCAHMS (1971, 1975, 1980, 1988a).

1971: no. 156) and Ranachan Hill (RCAHMS, 1971: no. 173), which dominate a series of summits on the north side of the Laggan in Kintyre. It may seem surprising that Knock Scalbert and Largiemore (RCAHMS, 1971: no. 171), in the same chain of Laggan forts, are among those few sites in Argyll in which there is any surface trace of hut emplacements, though it need not follow that these were for permanent, rather than seasonal occupation. The absence of surface traces elsewhere may indicate the use of timber rather than stone for internal buildings.

In terms of area enclosed, all these sites are of very modest proportions in comparison with hillforts of Southern Britain, or even some of those in the Borders. Dun Ormidale in Lorn (RCAHMS, 1975: no. 137) and Cnoc Araich in Kintyre (RCAHMS, 1971: no. 161) rank among the largest at 3 and 2.5 hectares respectively, whilst the majority measure less than a hundred metres across, with even multivallate examples seldom exceeding 150 metres in their maximum axis. In such circumstances, and without other evidence of function, the former use of the term 'minor oppidum' (strictly meaning a town, but widely applied archaeologically for community sites of presumed proto-urban character) seems a trifle extravagant. There are, however, sites like Beinn a Chaistel (RCAHMS, 1984: no. 130) in which short lengths of walling are deployed across a wider topographical area to achieve a measure of territorial enclosure, on a much smaller scale comparable to the territorial oppida of the later pre-Roman Iron Age in Southern Britain.

In their wall construction, the stone-walled forts are relatively simple, with little evidence for intra-mural features, entrance guard chambers or other complexities. The walls themselves are either of simple, dry-stone construction, or they may include an interior framework of timbers, which provided strength and stability that would be lacking in stone-faced walls with uncoursed, rubble filling, 'Median' walls are known, which in some cases may be the residual traces of intra-mural galleries or cells, where the wall thickness was sufficient to accommodate such features. But for the most part, this is not the case, and more probably median walls were a device for internal strengthening of the wall. This technique is also found in the dun houses of Argyll, some of which, notably those on the islands of the Inner Hebrides, also had intramural chambers comparable to those of complex Atlantic round-houses. Distinguishing the two kinds of median wall might be problematic from surface inspection alone, but where there are double revetments an internal cell might be suspected, except where both wall-faces are outward-facing, as at Allt Cill Chriosd, Mull (RCAHMS, 1980: no. 171). At Dun Mhadaidh, Mull (RCAHMS, 1980: no. 211), an outward-facing revetment appears to have been included to stabilize the wall on a steep slope, whereas other median walls on dun houses on Mull and Tiree are more probably indicative of intra-mural cells.

The fact that there were two distinct wall-construction traditions, the solid dry-stone technique and the timber-framed, is implied by the occurrence of vitrification on Argyll forts and duns, since firing walls would only have been feasible where there was a timber-framework. It is significant therefore that there is no evidence of median walls on sites that display vitrification. Without a timber framework to provide stability, some other technique would have been needed to counter the stress that a rubble core would exert upon the front and rear faces of the wall. This problem may have been addressed by the concentric laying of stones through the wall, as at Ballymeanoch, Mid-Argyll, (RCAHMS, 1988a: 173). Median walls, dividing the wall into sections or boxes, would be a less labour-intensive solution. They could at the same time be used to create a stable, tiered rampart, comparable to the murus duplex technique of rampart construction. Occasionally elsewhere quasi-casemate construction, in which a stone box-construction, filled with rubble rather than left open as an intra-mural magazine, provided

sectional solidity to the wall. Sectional construction, perhaps involving separate gangs of builders, has sometimes been suggested in hillfort construction. In some cases, the appearance of median walls may also result from secondary re-facing or buttressing, but this seems an inadequate explanation for such a recurrent feature of the Argyll forts.

Hillfort entrances in Argyll and the west are relatively simple in design and seldom show features such as guard chambers or even a rebate within the passage for a door. Exceptionally, Knock Scalbert has a door-check in the entrance passage, and at Dun na Maraig in Mid-Argyll (RCAHMS, 1988a: no. 256), the entrance included bar-holes. Portable barriers could have been inserted into the entrance passage, as Peltenburg suggested for Balloch Hill, particularly as many are built with their walls converging slightly towards one end. The width of the entrance passage seldom averages more than 1.5 metres, however, and hardly ever exceeds 2 metres. Access therefore would have been severely constrained by comparison with Southern British or continental hillforts, in which wide carriageways through the entrance permitted wheeled traffic and livestock to enter the enclosure. Together with the small size and topographical inaccessibility of some of these small forts, this underlines the fact that the function of such sites must have been very different from the proto-urban hillforts of Southern Britain or Europe.

Apart from some limited rescue excavation, Balloch Hill remains the only hillfort in Argyll to have been subject to a programme of modern research excavation (Peltenburg, 1982). It demonstrated archaeologically that the Feachem model (1966: 87–8) that regarded smaller duns as later than larger hillforts, was not universally applicable. The *Inventory* entry (RCAHMS, 1971: no. 158) had argued that the inner dun wall was 'patently of later date' since it lay within the larger enclosure and was better preserved. Peltenburg believed that the differential state of preservation was misleading, and resulted from the soil mechanics of the steeper slope on which the outer wall was built. He thus regarded the two as part of a contemporary, bivallate enclosure, in which the inner wall, seemingly lacking a gate in its entrance, was a monumental statement rather than a defensive work. Given the number of sites of similar character and proportions in Kintyre, he did not regard it as of particularly high status, notwithstanding evidence for bronzeworking, which some have regarded as evidence of social status. In the site's final phase of occupation, the inner wall was reduced or fell into disrepair, and three sub-circular stone houses overlying the debris represented a period of open or undefended settlement.

The occupation of the bivallate fort at Balloch Hill was assigned on the basis of radiocarbon dates to the second half of the first millennium BC, and the open settlement, the house foundations of which stood directly upon earlier timber round-houses, need not have been later than the opening centuries of the first millennium AD. This assessment would be consistent with the material remains from the site, notably an elaborate bronze brooch with elements of Plastic Style ornament, which should date from around the third century BC. The opaque blue glass beads need not be later than the turn of the millennium and could easily be earlier, while the presence of only saddle querns likewise argues for an earlier Iron Age occupation of the site.

A significant number of forts in Argyll and the west show traces of vitrification of their walls, sometimes as at Carradale Point (RCAHMS, 1971: no. 160) and Dunagoil, Bute, along extensive lengths of walling, but by no means all of the enclosing circuit. Dunagoil (Figure 5.20) is one of the most important site complexes in the west. At its centre is a small fort of somewhat irregular, rectangular plan (with two entrances certainly not a typical 'oblong' fort), the timber-framed walls of which in substantial sections had been destroyed by fire, resulting in vitrification. An unusual wealth of material finds recovered from limited excavation in the





FIGURE 5.20 Dunagoil, Bute, A (above), general view from east, with the citadel visible directly behind Little Dunagoil; B (below), vitrified wall of citadel.

Photographs by D. W. Harding

earlier twentieth century has been reviewed in detail elsewhere (Harding, 2004). There is evidence on the site for bronzeworking, in the shape of crucibles, moulds and slag, and possibly for the working of iron. Lignite, whether local or imported, was manufactured into bracelets in quantity, and there is evidence too for the more usual Iron Age industries of bone- and ant-lerworking. Pottery, by contrast, was crude in the extreme, represented by thick-walled vessels of poorly fired fabric that stands in marked contrast to the highly developed bronzeworking or lignite industries. Mainland Argyll is effectively aceramic during the Iron Age, however, with the more sophisticated styles of the Western Isles manifesting themselves only on sites in the Inner Hebrides such as Dun Mor Vaul on Tiree or Dun Cul Bhuirg on Iona (Ritchie and Lane, 1980; Topping, 1985). Other media, such as leather and wood, were presumably used for normal domestic vessels and implements, so that the few coarse sherds recovered from Dunagoil may have served some other industrial or agricultural purpose.

The principal outcome of survey in 1994 of Dunagoil (Figure 5.21), however, was the recognition that the vitrified fort may have been just the citadel within a much larger territorial enclosure. The citadel fort, though well defended both by precipitous cliffs to north and east and by its enclosing rampart, is nevertheless screened from the east by a parallel ridge, which would have afforded cover for any assailant approaching the site from the landward side. It therefore makes sense to include this prominent feature, itself naturally defended by a steep cliff face on its eastern side, within the defensive perimeter. This would also effectively control the lesser inlet from the sea, Port Dubh, which would have provided a landing when the prevailing winds precluded use of the principal anchorage of Dunagoil Bay. Between the citadel fort and the parallel ridge to the east is a lower-lying and more sheltered 'bailey', in which later agriculture has unfortunately obliterated most of the area where Iron Age settlement might have been located. At the northern and southern limits of the 'bailey', lengths of walling link steeper natural defences, effectively enclosing the two ridges into a single unit. The north-western sector of walling included evidence of vitrification of the outcropping rock itself (not obvious to the casual observer), which must therefore represent in situ firing rather than the spread or re-use of vitrified debris from earlier occupation of the citadel fort. Between the citadel and the sea similar evidence suggested that this area was probably also part of the original defensive network. Whether Little Dunagoil, which was shown by excavations of the late 1950s (Marshall, 1964) to have been occupied in the later Iron Age, was also part of the later prehistoric defensive circuit is certainly arguable, not least because of the discovery during that excavation of fragments of a late Bronze Age axe mould under the later walls.

It seems possible that from the late Bronze Age or early Iron Age Dunagoil was effectively a 'terrain fort' or 'terrain *oppidum*', not limited to the defended enclosure of the citadel fort alone, but including all the prominent topographical features of the area, controlling the anchorage and access routes from the sea, and from the landward side protected in some measure by marshy ground that evidently has been subject to improvement in modern times. It must therefore have been an important regional centre, that role being reflected in the wealth of its material culture (Figure 5.22) and evidence for industrial activities on site. How the timber-framed structures came to be fired remains uncertain, as does the date of this episode in the site's long history.

Terrain forts of this kind are known elsewhere in Argyll, where access to the citadel is controlled by a series of intermittent outworks blocking the approaches between rocky outcrops, or where terraces and plateaux that could have served a variety of domestic or agricultural functions are brought within the overall defended circuit. At Dun Chonallaigh north of

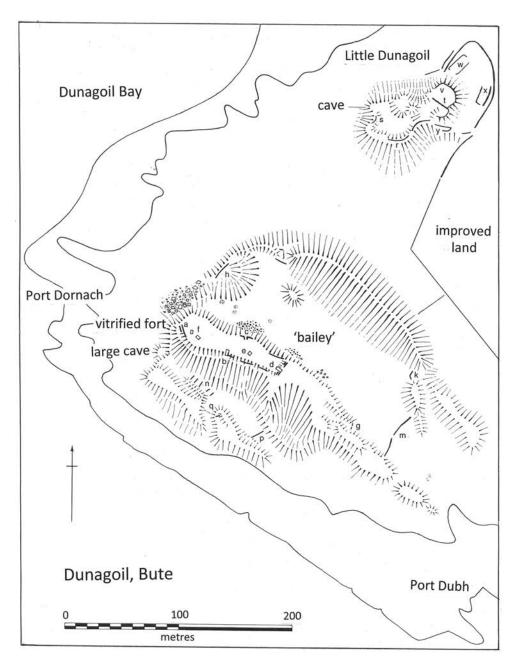


FIGURE 5.21 Dunagoil, Bute: plan

Source: Drawing by D. W. Harding, based upon survey by Christopher Burgess and Jon Henderson.

Kilmartin (RCAHMS, 1988a: no. 250), a small citadel dominated a much larger area enclosed by intermittent outworks, while Dun na Cleite on Tiree (RCAHMS, 1980: no. 142) shows a similar pattern of citadel and outworks. Even the vitrified fort at Carradale Point in Kintyre has half a dozen short lengths of walling controlling access to the citadel. Apart from the

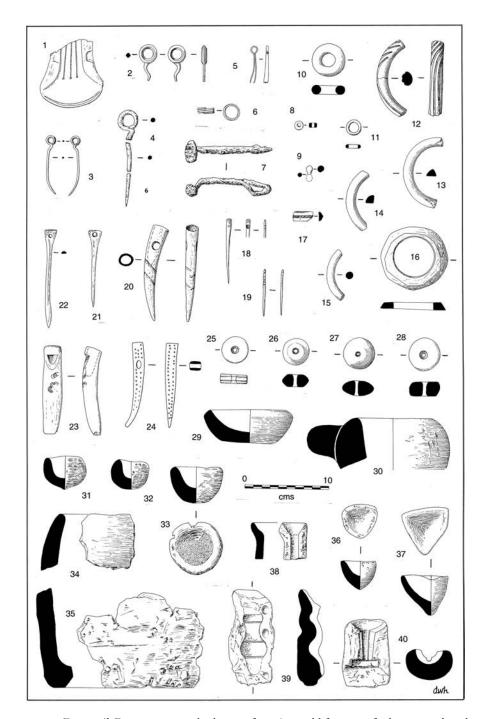


FIGURE 5.22 Dunagoil, Bute: pottery and other artefacts, 1, mould fragment for bronze socketed axe; 2–3, bronze ring-headed pins; 4, iron ring-headed pin; 5, bronze tweezers; 6, bronze spiral ring; 7, iron La Tène 1c brooch; 8, blue glass bead; 9, dumb-bell bead; 10–11, rings; 12–16, lignite bracelets; 17, fragment of glass bangle; 18, 20–21, bone needles; 19, bone pin; 20, 24, antler 'cheek-pieces'; 23, bone whistle; 25–28, spindle whorls; 29–30, stone cups; 31–33, miniature pots; 34–35, fragments of 'Dunagoil' ware; 36–37, crucibles; 38–40, clay moulds

Source: Drawings by D. W. Harding, courtesy of Bute Museum, Rothesay.

expedient use of intermittent walls between rocky outcrops or naturally defended cliff faces, the concept of the terrain fort is not so different from multivallate enclosures such as Ranachan Hill, except in so far as the irregular terrain afforded natural divisions into separately segregated areas. Multivallation itself, especially where widely spaced, could have been devised as a means of segregation, functional or hierarchical, rather than simply as a means of doubling or trebling the defensive barriers. The question remains whether these sites were for permanent, seasonal or special occasional occupation. Even if the terrain forts housed a small, permanent community, it seems possible that this was supplemented seasonally or at times of communal activities or festivals. Future survey of these sites and their environs may be expected to amplify substantially our understanding of their role in the wider landscapes that they served.

Archaeologists have a propensity for classification that may induce an impression of order and conformity to pattern that is more apparent than real. Conversely, failure to recognize a regular and recurrent alternative class of non-broch settlement may not mean that alternatives did not exist, only that they fail to register on the archaeologists' template of classification. This may prove especially true of Argyll and the west, where recognition of different field monuments, and of subtle but significant distinctions among known field monuments, may be inhibited by the straitjacket of a system of classification imposed in the 1960s and now overdue for re-appraisal, as investigations in other regions are beginning to show.

Skye, Ross-shire and the north-west Highlands

Complex Atlantic round-houses are represented on Skye by several outstanding examples that attracted the attention of antiquaries and visitors from at least the eighteenth century. Dr Johnson and Boswell visited Dun Beag, near Struan (Plate 7B), in 1772, when the broch may have still survived to second floor level. A succession of later structures within the interior undoubtedly damaged the original occupation levels, and this, together with the standards of recovery of the Countess de Latour's excavation during the First World War, hardly allows any reconstruction of the artefactual sequence. Nevertheless, MacKie (2007) astutely observed that the blocking of the ground gallery doorway implies secondary modification which would be consistent with the systematic dismantling of the upper floors, which elsewhere in the west appears to have happened in the early centuries of the first millennium AD. The finds assemblage, which included a handled steatite cup, an armlet of translucent green glass, moulds and a crucible, as well as hammer-stones, whetstones, strike-a-lights and whorls, could certainly span the centuries around the turn of the millennium, but as ever, identifying anything diagnostically earlier is more problematical. The pottery (MacSween, 2002) resembles assemblages elsewhere dating from 100 BC to AD 200, but MacKie remarked similarities between the coarse wares and pottery from Dun Mor Vaul that might imply earlier origins.

Dun Fiadhairt (Dun Iardhard) at Dunvegan likewise had all the key characteristics of a complex Atlantic round-house, with the added exceptional feature of a small postern entrance which MacKie surely correctly suspected was a later modification once the broch tower had been reduced in height. It also had a relatively rich material assemblage, including a variety of glass beads and fifty-nine amber beads found in one of its cells. A unique find was a clay model of a bale of hides or wool that is generally regarded as Roman, however acquired, that may have had votive significance.

Round-houses antecedent to the developed brochs of Skye may be represented by the small sub-circular structure from Coile a'Ghasgain in Sleat (Armit, 1996: 104), which may have been occupied in the early Iron Age. Though modest in size, at 5 metres in internal diameter, it is comparable in interior area to the small complex round-house at Dun Bharabhat, Cnip.

An unusual component of the earlier Iron Age in Skye is apparently represented by the sub-rectangular building with integral small souterrain at Tungadale (Figure 10.10, 1; Miket, 2002). The building, some 11 metres by four, had thick rubble walls faced with stone, with the souterrain within the extra thickness of the wall on the uphill long side. Radiocarbon dates (Smith and Banks, 2002: Table 11) indicated occupation of the house around the third and second centuries BC, which might appear unduly early for the souterrain, but is not inconsistent with the Hebridean pottery from the site. An equally unusual discovery in 2011 at Broadford (Birch *et al.*, 2012) was a souterrain in association with several Iron Age storage pits containing substantial quantities of grain, notably hulled barley, together with what was interpreted as a grain drying kiln. Radiocarbon dates indicated the use of these structures in the last quarter of the first millennium BC.

Caves too evidently had some special significance to the Iron Age communities of Skye, as elsewhere in Northern Britain. The existence of the High Pasture caves (Uamh an Ard Achaidh), Strath, was well known, but their archaeological significance was only realized in 2004, when hearths and related stratified deposits were uncovered around a stairwell that had led to the underground system (Birch and Wildgoose, 2005). The forecourt area was evidently the focus of activity that resulted in an accumulation of burnt debris through the second half of the first millennium BC. Underground, the so-called Bone Passage, in which a high proportion of pig bones was represented, evidently reflected ritual activity in the earlier Iron Age. Among a range of finds, one of the most remarkable was the wooden bridge from a stringed instrument, by far the earliest known example of its kind from Britain (Birch, 2012).

The north-west Highlands in general has not been as systematically investigated as some other regions. The site at Dun Lagaidh on Loch Broom (Plate 8B; MacKie, 1976), therefore, is especially important on account of the fact that its solid-based dun stratigraphically post-dated a small vitrified fort in much the same sequence as is exemplified at Dun Skeig in Kintyre. In fact, the relationship between vitrified fort and monumental round-house was one focus of interest of the 1960s investigations and would certainly warrant a further programme of radiocarbon dating. In addition to sections of vitrification at its western end, the fort's eastern outwork, comprising a timber-laced wall nearly 3 metres thick, was heavily vitrified in its central section, whilst ash and charcoal from the presumed destruction episode within the main enclosure yielded a radiocarbon date that suggested an early Iron Age occupation. The later dun, enclosing an area nearly 11 metres in diameter, was built with walls some 3.5 metres thick that contained sections of median wall-facing in the manner of Argyll forts and duns. It also had door-checks and an elongated guard chamber in the entrance passage and an intra-mural cell within which was a staircase to the wall-head. Unlike the earlier enclosure, which yielded few artefacts, the dun occupation produced relatively high-status objects, including an iron two-link bridle-bit, a bronze projecting ring-head pin, a small iron spear-head, and a bone pin with ornamented head, a knife-handle and counter. All of these would be consistent with a date in the early first millennium AD. Nevertheless, with the earlier Iron Age material assemblage sparse and undiagnostic, and the occupation of the fort of uncertain duration, an earlier origin for the secondary dun should not be excluded.

Less than a mile to the south-east is the site of Dun an Ruigh Ruaidh (Rhiroy) (MacKie, 1980). Rhiroy was certainly a complex Atlantic round-house, having evidence, not only of a staircase within a ground floor cell leading to a first floor landing, but of an upper intra-mural

gallery and flight of stairs to a second floor. Excavation also revealed postholes and a hearth at ground level. Here too, the radiocarbon dates did not present a straightforward sequence, but together with the material remains, including bun-shaped and disc querns and a fragment of jet armlet, suggest successive episodes of occupation in the earlier Iron Age, with 'a construction date at least as early as the third century b.c. . . . and perhaps as early as the sixth' (MacKie, 1991: 157).

More recently, a dun or Atlantic round-house has been re-surveyed and excavated at Comar Wood, Cannich, in western Inverness-shire (Birch et al., 2013; Peteranna et al., 2014). With an overall diameter of 21 metres and walls 4 metres thick, the dun had at least one intra-mural cell, but otherwise never attained any great height. Its interior superstructure was supported by post-rings, and its succession of hearths and structural modifications indicated secondary occupation. The dun was evidently built and occupied around the 4th-2nd centuries BC, and re-occupied in the opening centuries AD, both phases apparently being brought to an end by episodes of burning.

Several duns or Atlantic round-houses have been re-examined in Easter Ross by Aberdeen University's Northern Picts Project. A sequence of defensive enclosures is implied by the surviving remains at Easter Rarichie, where sample excavation has shown occupation in the earlier Iron Age (Hatherley and Noble, 2014). Crowning the top of this small but prominent hill is a dun-like structure that has now been shown to have stone-faced earth and rubble walls, with a substantial circle of postholes within. A radiocarbon date calibrated between 400-205 BC (SUERC-46744) from under the stone wall provides a terminus post quem for its construction, the combination of orthostat and horizontal coursing of which elsewhere might suggest a later Iron Age date. At Tarlogie, the walls of Morangie dun had evidently been substantially altered by secondary building episodes, but the internal diameter of 15 metres and wall width over 5 metres is certainly of monumental round-house proportions. Test-pitting revealed a sequence of occupation surfaces, the earliest of which was dated around the fourth-second centuries BC. A further intermediate occupation was assigned to the opening centuries AD, with the latest dated to the third and fourth centuries AD. The evidence seems to confirm the origins of the Easter Ross series in the earlier Iron Age.

More recent research in Wester Ross has substantially advanced our knowledge of simple Atlantic round-houses, notably a programme of small-scale, targeted excavation of roundhouses from which radiocarbon dating has indicated occupation from the Bronze Age through the Iron Age (Welti, 2013; Fenton, 2015). Most of these sites, like Loch Raa and Achnahaird at Achiltbuie, are in the order of 8 to 10 metres in overall diameter, but at least one, at Achtercairn, matches the overall dimensions of larger stone and timber round-houses of the Iron Age, with an overall diameter of 17.5 metres and walls 2 metres thick. The excavators raised the possibility that this may have been a ceremonial site rather than a domestic building, but its monumental scale certainly need not preclude a domestic purpose.

Coastal promontory and related forts

The layout of promontory forts, together with cliff-edge forts and stack forts, is self-evidently determined by topography, in which sheer cliffs minimize the need for artificial defences. Sometimes their locations are so exposed and precipitous that we might question their utility as sites for regular occupation. Because promontory forts are topographically determined, it follows that they cannot be regarded as culturally diagnostic or necessarily contemporaneous.

They are nevertheless especially characteristic of certain regions, notably south-western England and Brittany, where for many years they were mistakenly regarded as the strongholds alluded to by Caesar in his accounts of Venetic coastal forts (*dBG*: III, 12), despite the fact that Caesar's description plainly refers to lower-lying tongues of land, which might be approached on foot when the tide was out or evacuated by ship when the defenders were hard pressed. This hardly fits the craggy and sheer-sided cliff-castles of Brittany or the coastal promontory forts of Atlantic Britain and Ireland, as Hogg (1972: 22) long ago recognized. Furthermore, though some Breton cliff-castles may have been used or re-used in the late Iron Age, archaeological evidence increasingly shows that their principal period of construction and occupation was rather earlier. So to suppose any direct derivation of the promontory forts of Atlantic Scotland, even of those particularly distinguished by the use of multivallation (Lamb, 1980: 62), is hardly warranted. Naturally defended coastal promontories offered an obvious opportunity for reinforcement with minimal effort, whether by a single or multiple barrier according to need or status.

Promontory forts and Atlantic round-houses may occur in close association, though a broch with outworks located on a promontory might well be indistinguishable on the ground from a promontory fort within which a broch had at some stage been built. Dun Mara, Lewis (Figure 5.23A), might be a case in point in the west, or in the north the broch of Burland, Lerwick, Shetland (Figure 5.23B). There are additionally sites in the Hebrides where the defensive wall cutting off the promontory itself displays architectural characteristics similar to those of complex Atlantic round-houses. The most dramatically situated of these is at Sròn an Duin, by Barra Head Lighthouse, Berneray, 600 feet above the Atlantic on the southernmost point of the Western Isles (RCAHMS, 1928: no. 450). Cutting off an area some 40 metres by 12 are the remains of a massive wall, one section of which had superimposed intra-mural galleries. The entrance itself displays broch-like features in its door check and bar-hole, though it has been subject to secondary modification. Almost identical in layout is the promontory dun at Rubh' an Dunain, Bracadale, Skye (RCAHMS, 1928: no. 483), which likewise has a rebated entrance passage and an intra-mural gallery in the longer length of its wall. Rubh' a Dunain also has a scarcement, low down on its inner wall-face, which has generally been supposed to have supported a lean-to structure (MacSween, 1985: 20). Why it should be so low for this purpose is unclear, and an alternative might have been support for a bench or tier of benches in the manner of a grandstand. The position of the entrance in both instances is to one side, allowing a longer intra-mural gallery, and the layout of these features relative to the headland is identical. Whether convenience, convention or some more compelling reason determined this plan is a matter of conjecture. In both instances, the wall presents a wide front across a converging headland, rather than the narrow neck of a promontory, so that the term 'headland fort' may be preferred to 'promontory fort'. The point is not just semantic; given the availability of narrow-necked promontories in the topography, the choice of presenting a wider façade may have been deliberate, for monumental ostentation or for privacy of whatever activities took place beyond the barrier. The implication might well be that the function of such sites was ritual or ceremonial rather than defensive.

Until relatively recently the number of promontory sites in the Western Isles was limited by the lack of archaeological field survey (Burgess, 1999). One of the largest, at Rubha na Beirgh, Shawbost, Lewis (RCAHMS, 1928: no. 12), was reported by Captain Thomas (Thomas, F.W.L., 1890) as having a 'mural passage' within its wall core, no trace of which is now visible. Dating is uncertain without excavation, but if the cellular structures in the collapsed debris of





 $\label{eq:conditional} \textbf{FIGURE 5.23} \ \ At lantic \ round-houses \ in \ cliff-edge \ enclosures, A \ (above), Dun \ Mara, Lewis; B \ (below), Burland, Shetland$

Source: Photographs by D. W. Harding.

the principal wall are indicative of later Iron Age occupation, then the promontory fort itself could easily have later prehistoric origins. Coastal erosion survey of north Lewis (Burgess and Church, 1997) greatly enhanced the known database of promontory sites. Not all were necessarily presumed to be prehistoric or even early historic, but some may well date from the Iron Age or even from the later Bronze Age.

In west Lewis, the small promontory at Gob Eirer, Crowlista (Nesbitt *et al.*, 2011), was investigated following coastal survey (Burgess *et al.*, 1998). Now linked to the shore only by a shingle ridge, the site was protected by a single, low wall of turf on stone foundations, behind which excavation exposed a pair of buildings, the outlines of which were rectilinear rather than circular or cellular, on the strength of which they were tentatively considered as Norse until radiocarbon dates unequivocally assigned the only occupation on the site to the Late Bronze Age and Early Iron Age. The site's location, flanking the Camas Uig and access to the bay where the Lewis chessmen were found, had revived the notion of Norse sea-raiders establishing a foothold from which they could launch their piratical expeditions (Lamb, 1980: Appendix 2, for a critical evaluation), but the strategic merit of the site would have been equally applicable in later prehistory. Without an independent water source, this otherwise unique site's function, however, whether seasonal or permanent, domestic, industrial or ritual, remains uncertain.

By way of parenthesis, we may note that there is also a significant distribution of promontory forts on the Isle of Man, among which some were re-occupied in the Norse period. The fort at Close ny chollagh (Gelling, 1958) was certainly occupied until the first century AD but may have been built considerably earlier.

Cliff-edge forts, that is, enclosures that incorporate a significant length of cliff face as part of their circuit, are relatively rare in Atlantic Scotland. An archetypal example in the Atlantic west would be Dun Aengus on Inishmore, Co Galway, where multivallate defences of a cumulative sequence define a D-shaped precinct of which the seaward edge is a sheer cliff dropping 300 feet into the Atlantic. Its siting is so spectacular that a special function, for ritual or inauguration ceremonies, was postulated (Rynne, 1991, 1992). There is nothing in Atlantic Scotland quite comparable, but the location of some Atlantic Scotlish promontory or headland forts, precipitous to the point of impracticality, could likewise have served as special ceremonial sites.

Few regions of Atlantic Scotland are better suited topographically for the construction of promontory forts than Shetland. In contrast to those small promontory or cliff-edge enclosures that contain a complex Atlantic round-house, like Burland, or Houbie on Fetlar, the multivallate promontory fort at Hog Island, Nesting, the narrow isthmus of which has been completed eroded by the sea to leave the headland as an island, must originally have confined nearly a hectare of land (Harding, 2012: 146–7). Multivallation may have been a measure of status, hierarchically superior by degrees to bivallation and univallation, or the product of cumulative episodes of construction (Carter *et al.*, 1995).

'Blockhouses' or 'gatehouse' forts

The term 'blockhouse' was introduced by J.R.C. Hamilton (1968) in his discussion of Clickhimin; 'gatehouse' fort is sometimes used for the same class of monument (Figure 5.24). This unusual form of dry-stone construction, apparently built either as a free-standing forework or intended as a monumental façade to an enclosing wall or ring-work, is characterized by the presence of architectural traits normally associated with complex Atlantic round-houses. The

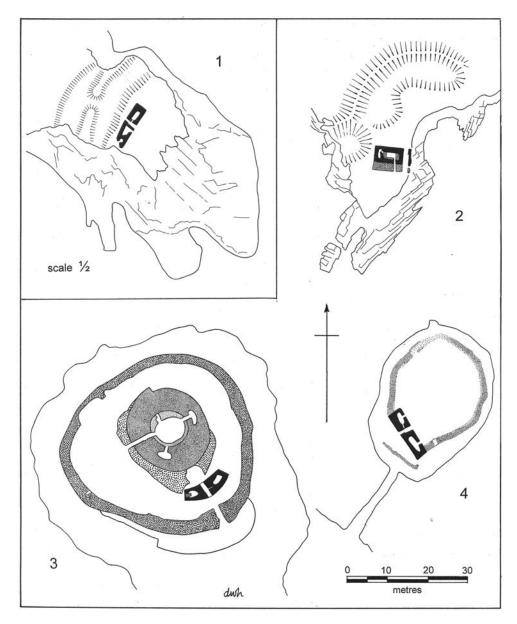
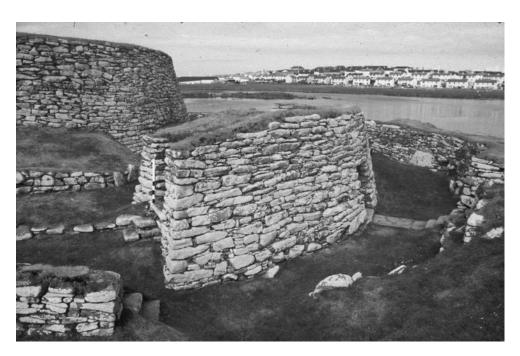


FIGURE 5.24 Blockhouses in Shetland, 1, Ness of Burgi; 2, Scatness; 3, Clickhimin; 4, Loch of Huxter Source: Drawings by D. W. Harding, adapted from RCAMS (1946), Hamilton (1968), Carter et al. (1995).

Clickhimin blockhouse also had a scarcement (Figure 5.25B), which Hamilton thought supported an adjacent timber range against the rear wall. An upper storey has been proposed on the basis of its intra-mural staircase, and the same may be inferred from early accounts of the remains at the Loch of Huxter. At Scatness, a possible flight of steps up the inner wall-face, obscured by the secondary buttressing of the walls, together with secondary internal revetment of the gallery walls, was taken as evidence for an upper storey (Carter et al., 1995).





 $\textbf{FIGURE 5.25} \ \, \text{Clickhimin, Shetland, view of blockhouse, A (above), from the enclosing fort wall, } \\ B \ \, \text{(below), from within, showing scarcement}$

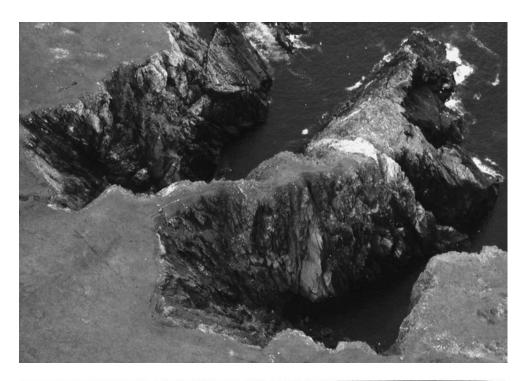
Source: Photographs by D. W. Harding and I. M. Blake.

The four certain examples of blockhouses are the promontory sites of Scatness and nearby Ness of Burgi, and the two loch-forts of Clickhimin and Loch of Huxter. There can be little doubt that the similarities between these examples is such that they must surely be broadly contemporary constructions by culturally related communities. Lamb (1980) also included Burgi Geos, Yell, among the Shetland group, despite its singular layout and uniquely perilous location. The Shetland blockhouses might be seen as comparable to the monumental barriers across the headland sites of Skye and the Western Isles, the scarcements at Clickhimin and at Rubh' an Dunain, Skye, in particular, suggesting that these galleried foreworks could have served a similar function.

A baffling aspect of the Shetland blockhouses, however, is the fact that they are detached, with their wall-ends apparently faced, showing that they were never intended to extend further. Even where the blockhouse forms an integral part of the ring-work, as at the Loch of Huxter, Whalsay, it is not actually bonded in to the enclosure wall. In fact at Clickhimin, Smith (2013) has drawn attention to early accounts and drawings that suggest that access around the blockhouse may have been barred by lateral walls extending inwards from the ring-wall entrance that had been robbed out since Sir Henry Dryden's investigations. In the case of Ness of Burgi, the walls stop well short of the cliff-edge, not apparently as a result of collapse, robbing or erosion, but by design. Evidently, the blockhouse could never have served as a defensive barrier, except in a symbolic sense in which any act of warfare followed a strictly ritualized pattern (Hingley, 1992: 19). Had they been intended as a practical defensive barrier, the problems posed by constant erosion of the wall-ends could have been met by an extended barrier of timber stakes and thorn branches. Anna Ritchie (2003) argued that the Clickhimin gatehouse led directly to a building for which a ritual purpose might be suggested, perhaps endorsing the ceremonial interpretation of blockhouses.

Burgi Geos is exceptional in location and layout. The site is situated on a remote promontory, accessible only across a hinterland of deep peat, now up to 10 metres deep and presumably therefore already dominating the landscape by the Iron Age. It occupies a sinuous isthmus between the north and south Burgi Geos, commanding the approach to the headland (Figure 5.26). The possible blockhouse, if such it is, is located on the north flank of the approach path; it has no entrance passage, and there is no evidence that any structures on the southern flank have eroded away. On the landward side of the isthmus, the approach passes between a line of boulders, which may once have revetted an embankment and an elongated mound into which are set the boulders of a chevaux-de-frise. But these features present no obstacle to access; rather they channel traffic towards the promontory. The conclusion must be that this was not a fortified site in the normal sense. Its location, remote from arable land, its inaccessibility from the sea, and its perilously precipitous topography make it an unlikely candidate for settlement or even as a practical refuge. Accordingly, current opinion once again favours a ceremonial or even ritualistic purpose for the site.

Finally, there remains question of chronology of the Shetland blockhouses. Their use of broch architecture has generally been taken to affirm an Iron Age date, though radiocarbon dates from Scatness indicated that the blockhouse there was still intact into the second half of the first millennium AD. Despite the deficiencies of the Clickhimin sequence, the balance of probabilities favours an early Iron Age construction. One conclusion seems apparent, however, that broch architecture need not have been restricted to the horizon of occupation of complex Atlantic round-houses. Though it is undoubtedly a distinctive feature of monumental buildings, whether forts or round-houses, of the earlier Iron Age, the lasting visibility of these structures alone could account for the survival of some of these architectural traits into later periods.



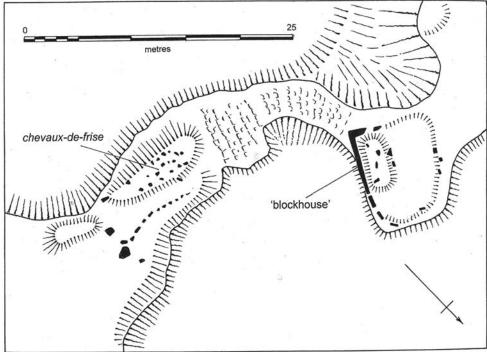


FIGURE 5.26 Burgi Geos, Shetland, A (above), air-photograph, B (below), sketch plan of structures *Source:* Photograph by D. W. Harding; drawing by D. W. Harding, adapted from Lamb (1980).

PART III

The Roman Iron Age and its impact







 $\label{eq:plate1} \textbf{PLATE 1} \ \ A \ (upper), Stanwick, north Yorkshire, view from east over Henah Hill; B \ (lower), Burnswark, Dumfriesshire, from the south$

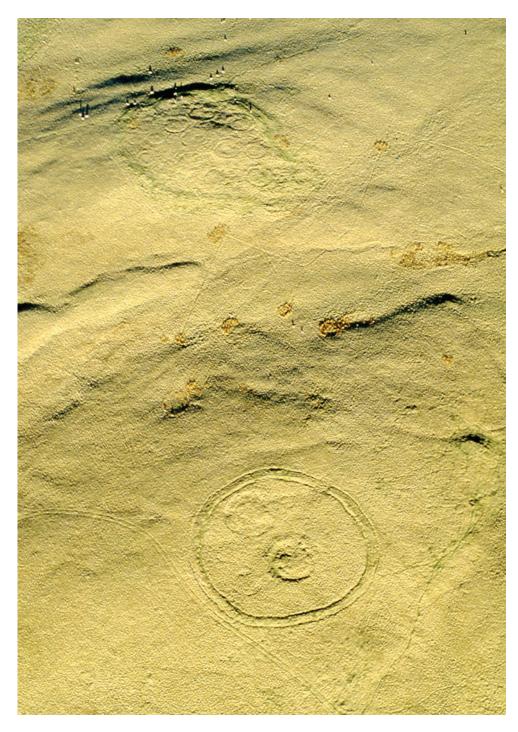
Photographs by D. W. Harding.





 $\label{eq:plate 2} \textbf{PLATE 2} \ \ A \ \ (upper), Eildon \ Hills, Roxburghshire \ from \ Scott's \ \ View; B \ \ (lower), Traprain \ Law, East \ Lothian, from the north$

Photographs by D. W. Harding.



 $\label{eq:PLATE 3} \begin{array}{l} \textbf{PLATE 3} \ \ \textbf{High Knowes}, \textbf{Alnham}, \ \textbf{Northumberland}, \ \textbf{enclosures} \ \textbf{A} \ \textbf{and} \ \textbf{B} \\ \textbf{Air-photograph by D. W. Harding}. \end{array}$





PLATE 4 A (upper), Hayhope Knowe, Roxburghshire, east end of settlement showing earthworks, round-houses, palisade and cord-rig agriculture; B (lower), Hut Knowe, Hownam, Roxburghshire, north-east end of hillfort, showing earthworks, fields and cord-rig agriculture

Air-photographs by D. W. Harding.





PLATE 5 A (upper), Torrs, Kirkcudbrightshire, pony-cap; B (lower), reconstruction of the Deskford, Banffshire, *carnyx*

Photographs copyright National Museums of Scotland.



PLATE 6 Blair Drummond, Stirlingshire, hoard Photograph copyright National Museums of Scotland.





PLATE 7 A (upper), Tap o' Noth, Aberdeenshire; B (lower), Dun Beag, Skye

Photograph A Crown Copyright: Historic Environment Scotland, B, photograph by D. W. Harding.





PLATE 8 A (upper), Gurness, Orkney; B (lower), Dun Lagaidh, Wester Ross Photographs by D. W. Harding.

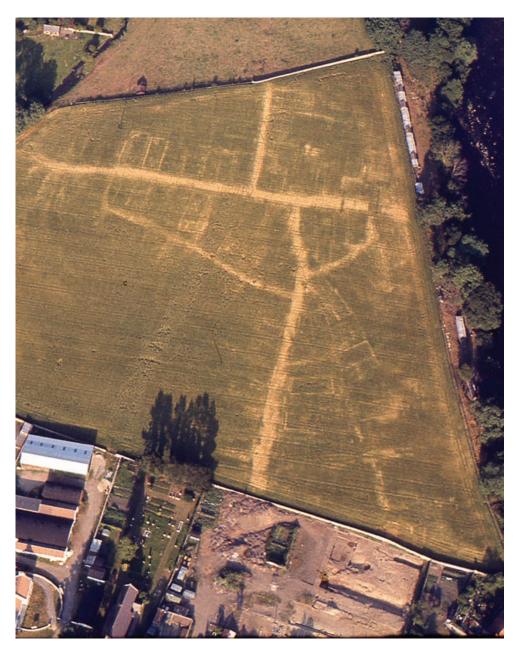


PLATE 9 Tofts field, Piercebridge, Co. Durham, with Roman fort under excavation in foreground Air-photograph by D. W. Harding.







В

PLATE 10 A (left), South Cave, Yorkshire, sword scabbard RF16, left, upper, right, lower; B (right), Aesica brooch: height 10.6 cm

Photographs, A copyright East Riding of Yorkshire Council, B copyright Society of Antiquaries of Newcastle upon Tyne and the Great North Museum: Hancock.

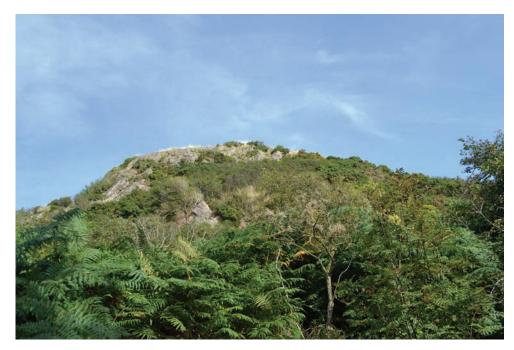




PLATE 11 A (upper), Mote of Mark, Kirkcudbrightshire; B (lower), Trusty's Hill, Anwoth, Kirkcudbrightshire

Photographs by D. W. Harding.





PLATE 12 A (upper), Cnip, west Lewis, Wheelhouse 1; B (lower), Cellular Structure 4 Photographs courtesy of Professor Ian Armit.





 $\label{eq:plate 13} \begin{tabular}{ll} \textbf{PLATE 13} & A (upper), Old Scatness, Shetland, Structure 14; B (lower), Structure 11 \\ Photographs courtesy of S. J. Dockrill. \\ \end{tabular}$





 $\label{eq:plate_14} \textbf{PLATE 14} \ A \ (upper), Mousa, Shetland, from west; B \ (lower), Mousa interior showing scarcements and secondary structures$

Photographs by D. W. Harding.





 $\label{eq:plate_15} \textbf{PLATE 15} \ \ A \ (upper), Beirgh, Cnip, west Lewis, primary cellular phase, timber post in posthole with hurdling; B \ (lower), decorated clay hearth$

Photographs by D. W. Harding.





PLATE 16 A (upper), Old Scatness, Shetland, Structure 7; B (lower), Structure 5 Photographs courtesy of S. J. Dockrill.

ROMANIZATION TO THE NORTHERN FRONTIER

Definition of Romanization

Most accounts of the Roman Iron Age in occupied Northern Britain acknowledge that the impact of Romanization upon the native population, though undoubtedly socially disruptive, was qualified in terms of acculturation. The fact that many rural settlements, of a type hardly distinguishable from their pre-Roman precursors, seldom yield more than limited assemblages of Roman material, and some, especially in the north-west of England, barely any, apparently endorses this conclusion. In fact, though villas and urban settlements are not surprisingly absent from the forward frontier zone, in the past twenty years, there has been increasing evidence for villa-style settlements and urban developments in the north-eastern hinterland that suggests a shift towards a Romanized lifestyle to a degree and at an earlier date than was hitherto suspected.

Debate regarding the concept of Romanization was prompted particularly by the publication by Martin Millett of his The Romanization of Britain (1990), in which he attempted to present a post-imperialist view of the interaction of alien cultures. To an older generation of classically trained scholars, it had been axiomatic that Romanization meant bringing civilization to replace savagery, much as it would have justified its own government's colonial ambitions. In this perspective, Iron Age communities in Britain were primitive barbarians, just as the classical authors portrayed them, head-hunters who practised human sacrifice and spent their wretched lives in a state of drunkenness or boastful combat. By the 1940s, serious scholars had progressed beyond the notion that Iron Age communities in southern England were pit-dwellers, though the idea was surprisingly durable (Wheeler, 1943: 52). Its counterpart in the north was the belief that souterrains were 'earth-houses' where a family could cower to endure the severe winter storms (Childe, 1935a: 187). The fact that Iron Age communities had the capacity to marshal resources for the construction of hillforts or to create technical works of outstanding craftsmanship like parade armour and personal ornaments, was increasingly recognized as incompatible with the view of Celts as savages, however noble. The fact that past usage of the concept of Romanization grossly misrepresented both 'native' and 'Roman' constituencies (Mattingly, 2006: 14-16) need not lead us to jettison the concept itself or to

devise some anodyne euphemism to replace it, rather than attempting to understand better the mutual effects of interaction and the diversity of response within and between communities.

Measuring degrees of Romanization depends crucially upon our yardstick of Romanitas, which itself is not a constant or unified concept across the Empire or throughout its duration (Taylor, 2001). Ethnicity and identity are not absolutes that can be recognized like a samian bowl form; equally the extent to which individuals felt more or less assimilated to the Roman way of life will have varied within and between communities. The principles of citizenship or the legal and administrative structure may have had universal application, but the manifestations of Roman culture that impact upon the archaeological record are more diverse across the Empire. Thus, a villa in the Mediterranean was altogether a different entity from a villa in provincial Britain, both in architectural plan and social use, and the Mediterranean concept of urbanization translates in Britain into a range of settlements whose structural layout and function, political and economic, were not the same as the models upon which they were based. The role of these settlements and the social order that they embodied changed considerably between the Principate and the later Empire. Even between Britain and Gaul, the impact of Roman institutions appears to have differed quite substantially (Woolf, 1998). Furthermore, in the nature of empire, and through the recruitment policy of the Roman army in particular, there would have been an element drawn from other parts of the Roman world that progressively integrated with the indigenous communities of Britain. This factor alone may have encouraged a process of cultural syncretism that Webster (2001) has termed 'creolization', a reciprocal process that results in a genuinely new cultural amalgam. Establishing any kind of independent model of Romanization is therefore a highly subjective exercise in itself. What we can be sure of is that a Mediterranean Roman would have found Britain as alien as a Victorian Englishman would have found India or the African colonies, which is not to say that British institutions or fashions of living did not make a profound effect upon those countries.

To articulate our expectations of Romanization in such circumstances perhaps risks simplistic caricature, not least because key attributes of Romanization may be those that archaeology is least well equipped to recognize. On the basis of documented examples from elsewhere in the Empire, we may assume that the local aristocracies in Iron Age Britain retained a substantial measure of delegated authority, at least where they had not met the colonial power with outright or sustained resistance. It has been suggested (Millett, 1990: 66) that they constituted a significant element in the decurial class of landowning élite that made up the curiae or councils of the civitates, but the basis of their power would no longer have been the bonds of kin and clientship that underpinned Iron Age societies. Some of the tribal élites may have acquired at least a pragmatic literacy for the exercise of their functions, and some may have chosen to emulate Roman fashions in personal dress and habits. Archaeologically, however, recognition of their Romanization is more likely to derive from the excavation of their country houses, with evidence of accumulated wealth displayed in the form of stone and tiled buildings with hypocausted heating systems and tesselated floors, or from the recovery of imported tableware and domestic goods, all of which stand as proxy evidence of Romanization. Romanization in the sense of adopting a Roman way of life is not implicit in the building of a villa or acquisition of certain furnishings and fittings but upon the way in which these were used, just as the acquisition of a Roman drinking service does not necessarily mean the adoption of Roman

Before we can measure the extent of Romanization, we should perhaps first consider the key characteristics of the culture that was about to be exposed to Romanization. We might ask

for example to what extent Iron Age communities were already involved in market economy and external trade in order to assess the extent to which these were indeed catalyzed by a Roman monetary system and integrated marketing structure. Considerable debate has centred on whether Roman customs were imposed by the Roman administration through coercion, or to what extent they were adopted and adapted by local élites to their own advantage, polarized viewpoints that were characterized as the 'interventionist' and 'non-interventionist' models. Millett (1990) believed that it was Roman policy in its own self-interest as far as was practicable to assimilate local political rulers into their own administration, and challenged the idea that annexation of Britain to the Empire was a decision prompted solely by systematic economic imperialism. It is not at all clear that the invasion under Claudius came as an unexpected or even in some quarters an unwelcome intervention. Even during Caesar's raids of the midfirst century BC, some tribal leaders had evidently been more pro-Roman than others, and in the century between Caesar and Claudius, there is documentary evidence for the continuation of some diplomatic alliances between Rome and insular dynastic rulers. To what extent this was fostered by kinship relationships with Gaulish tribes that were already integrated into the Empire is uncertain. Likewise, it has been argued (Creighton, 2001, 2006) that there could already have been trading settlements and even auxiliary forces in Britain to bolster the political authority of local rulers or even client kings: the fact that no such activity is directly recorded in the surviving texts is no reason for assuming that such liaisons were not taking place. Equally, it is possible that the presence of obsides (as Creighton has rightly observed, not best translated as 'hostages', but parties to an institution intended to strengthen bonds of mutual benefit) from ruling houses of the British tribes in Roman political households could have contributed to a climate in which annexation was not resisted universally.

The debate has further highlighted the fact that the effects of Romanization in Britain, however measured, seem to have been less enduring than in other parts of the Empire. For the most part, for example, place-names of Roman settlements and the civitas structure itself does not seem to have survived much beyond the fifth century, by contrast, for example, with Gaul, where it continued to form the basic territorial divisions into the Middle Ages. Hill (2001) rightly rejected the simplistic notion that Romanization is thus shown to have been no more than a veneer and that native communities in post-Roman Britain thereafter reverted to their Iron Age customs and beliefs. The virtual absence of Celtic survivals in Old English suggests that the older order had been substantially superseded. The reality must be more complex, that the communities that faced a new process of 'Germanicization' had transformed their own identities as a result of dynamic interaction with the cosmopolitan world of the Roman Empire. In fact, it is possible that, through pre-Roman contacts with Belgic Gaul, itself long recognized as intermediate between Germanic- and Celtic-speaking areas (Hachmann et al., 1962), that process had already begun in the south-east well before the conquest. Identifying native from incomer in the archaeological record of the post-Roman period presents many of the same dilemmas, in theory and in practice, as it had for the period of Romanization.

Britain on the eve of conquest

It is probably no coincidence that the regions of Britain that show closest contacts with continental Europe on the eve of conquest are those that came within the purview of Caesar during his abortive raids of 55 and 54 BC. The region north of the Thames is particularly distinguished by its wealthy burials of the classic Welwyn series, in which wine-amphorae and high-status

drinking or serving vessels testify to trade or diplomatic exchange with the Roman world. Furthermore, the appearance of imported pottery of Arretine, Gaulish or Gallo-Belgic wares, together with the production of locally made pottery which is wheel-thrown for the first time, indicates the development of new markets and a new kind of economy. Coinage had been introduced into south-eastern England probably already before 100 BC, but its adoption as currency as opposed to its various possible uses in diplomatic, political or social contexts at the level of tribal élites is less easy to establish. Though in absolute terms, the quantities of imports recorded archaeologically may not be large, relative to other parts of the Roman world, there can be little doubt that they do reflect a highly developed dynastic society in which status was measured by the capacity to control resources, including imported goods, and conspicuously to dispose of such wealth in the tombs of their tribal aristocracy.

To the west of this region was another territory in which cross-channel trade was active in the later pre-Roman Iron Age, focused on the port of Hengistbury Head, but doubtless exploiting several natural landing points from Chichester to Poole harbour and beyond. Here the distribution of Dressel 1 amphorae is apparently less impressive in quantity, though this may be a factor of discovery, since finds derive not from cemeteries but from settlements. Bradley (1984) drawing upon Haselgrove (1982b) envisaged a south-eastern 'core' area, extending from the Thames estuary to the Chilterns, that through its coastal centres was in contact with continental traders, which in turn exploited the resources and agricultural production of the 'peripheral' zones to the north and west. Cunliffe (1991, 2005) extended his core to include the whole of south-eastern England as far west as the Isle of Wight, and to the north-west the middle Thames and the Ouse (1991: Figure 7.2 with the Iceni; 2005: Figure 7.2, but without the Iceni, now peripheral). Beyond this was a peripheral zone, including the coin-issuing territories from Dorset to Lincolnshire. Beyond that still were non-coin-using tribes of the remote north and west, whose prospects for Romanization in any sense other than through military coercion might have appeared thus to be minimal. Re-appraisal of the role of Stanwick in the light of excavations in the 1980s, of course, has qualified this assumption.

In terms of settlements, a distinctive innovation of the later Iron Age in south-eastern Britain was the territorial oppidum, not apparently an urban settlement in any sense that would be recognized in the Mediterranean, or even on the Continent, despite Caesar's ironic use of the term (dBG: V, 21), but nevertheless, tribal centres of power that in several instances, like Colchester or Silchester, became important centres under Roman occupation. With the sole and important exception of Stanwick, which incorporates more continuous earthworks in its largest enclosure than its south-eastern counterparts, these territorial oppida are confined to the 'core' area of the south-east of England and its margins. How long conventional hillforts lasted in use in this core area is uncertain. Oldbury in Kent certainly was occupied in the first century BC, but by the early first century AD, the shift towards territorial oppida may well have resulted in the abandonment of hillforts. In the peripheral zone, there is ample evidence of hillforts being defended against the Roman advance, from Maiden Castle, Hod Hill and Spetisbury in Dorset through to Cadbury Castle in Somerset and Sutton Walls, Herefordshire (Harding, 2012). In the territory of the Durotriges especially, the existence of numerous multivallate hillforts may suggest a more fragmented society, in which local chiefdoms were loosely united in federation. It is reasonable to suppose that the Durotriges were one of the two 'strongest' tribes to whom Suetonius referred, which hardly implies a fragmented society, and the fact that no less than twenty oppida had to be taken by force actually suggests a degree of solidarity in the resistance that could well have been the result of mutual obligations based upon a client

relationship. In fact, the Dorset hillforts, if Hod Hill is a model, were densely occupied on the eve of the conquest and may have approximated more closely to urban settlements than the territorial oppida of the south-east. As Richmond rightly underlined (1968: 6), Hod Hill at 55 acres enclosed was considerably larger than Maiden Castle and, together with Hambledon Hill, might justifiably be regarded as a more representative focal centre of the Durotriges.

Other categories of late Iron Age settlement are more difficult to classify. For the most part, the Little Woodbury type of homestead, with its large round-house, was obsolete by the first century BC, and there is some evidence in Wessex for the fragmentation of settlements into smaller units around this time. Small circular huts survive in some numbers at Hod Hill, where Richmond believed that the chieftain's hut was demarcated by its isolation within an individual compound. The round-house was not the universal domestic unit in the immediately pre-Roman Iron Age, however, and there is some evidence from south-eastern England (Rodwell, 1978) for the use of rectangular buildings already before the conquest. Any suggestion therefore that rectangularity in domestic building plans might be a measure of Romanization needs to be qualified to take into account the possibility of its currency in Britain already by the later Iron Age. Rectangular buildings may be constructed using techniques other than earth-fast postholes, so that archaeologists' pre-occupation with houses of the Little Woodbury kind may have militated against the recognition of different types of building.

In northern England, within those regions that subsequently came within the Roman frontiers, Iron Age society appears to have been based upon dispersed rural settlements of which enclosed homesteads, either rectilinear or circular in plan, and containing one or more circular house, were a widespread element over much of the first millennium BC. Occasional hillforts may still have been in use but were never as numerous as in parts of southern England. The number of permanent settlements and extensive linear earthworks and field-systems may indicate an ordered division of the landscape into territorial and agricultural units, so that we should be wary of misty visions of 'Celtic' cowboys and shepherds drifting aimlessly across the upland hills. The Brigantes, as we have seen, were probably at most an unequal alliance of local communities, so that their reported schism into pro-Roman and anti-Roman factions was probably no more than a reflection of their lack of political coherence.

The establishment of Roman control

Roman domination of southern and south-eastern England will evidently have come about as a result of a combination of military conquest and negotiated annexation. The documentary sources indicate that political liaisons were being negotiated before the conquest, probably linked to internal hostilities between native rivals. Some tribal groupings may have negotiated client status with Rome, and internal political dissent between pro-Roman and anti-Roman factions among the tribal aristocracies may well have resulted in some territorial re-alignments in the decades before the conquest.

In consequence, Millett (1990) has plausibly argued that the conquest proceeded on a tribe-by-tribe basis, so that where a single paramount authority controlled a substantial tribe or tribal federation, progress would have been more rapid than in regions where a more fragmented structure prevailed. As well as being a natural geographical axis the Fosse Way frontier quite probably corresponded to the borders of the tribes of the 'peripheral' zone, the Durotriges, the Dobunni and the Corieltauvi. To the south and east of this frontier the tribal territories duly acquired civitas capitals, generally located at or near former tribal centres. It remains a matter of debate how far the *civitates* themselves had represented political realities of the pre-Roman period and how far they were really constructs of the Roman administration. Archaeologists have conventionally assigned tribal names to several of the pre-Roman coin distributions, in the expectation that these reflect tribal groupings, or at least the distribution area within which a tribal élite's authority was recognized. These distributions may be a truer reflection of such units than the distribution of pottery styles, which could easily have an inter-community circulation. In any event, the political map of later Iron Age Britain was most probably in a state of dynamic change, which would make any such identification more difficult.

Older studies of Roman Britain generally treated towns and the countryside as two entities, related but distinct. With the social and economic emphasis of contemporary archaeology, they should probably be regarded as mutually dependent parts of a single system. Urbanized settlements under the Roman occupation are conventionally classed in Roman terminology either as civitas capitals, as municipia, or colonia (colonies initially established by the commandeering of land for army veterans). Less clearly defined is the category of 'small town', while vici, or civilian settlements, grew up in the immediate vicinity of forts. Even the major settlements did not always conform to the classical model; their fora frequently did not include temples, for example, which in British towns were often clustered elsewhere in the urban plan. This might be regarded as a departure from a Romanized norm, and thereby a measure of qualified Romanization, or simply as a rational adaptation to local circumstances. The status of the lesser 'urban' settlements is still more equivocal if measured against a rigid norm. Small towns could seemingly grow up around rural temples, as at Frilford in Oxfordshire. In the northern zone the vicus at Piercebridge, located on either side of the river crossing over the Tees on the main route of Dere Street northwards, has sometimes been thought of as a small town (Millett, 1990: Figure 64). More recent finds suggest another contender at Sedgefield in Co. Durham. In terms of understanding the political, social and economic functioning of the Roman province, it is clear that applying strict definitions based upon formalized expectations of size or plan is not a particularly helpful exercise.

Likewise, rural settlement in Romanized Britain hardly accords to a Mediterranean model of estates focused around country house or mansion, either in architectural plan or social ownership and use. Conventionally, Roman archaeologists have classified villas in Romanized Britain into categories by ground-plan, aisled and halled villas, corridor and winged corridor villas, or courtyard villas, with a sub-text of progressive social sophistication. Even some of the earlier establishments may have been stone-built with tiled roofs and furnished with hypocausted heating systems and tesselated or mosaic floors. But some of the earliest were of wood and daub construction with thatched roofs and might be seen as evidence of native occupants progressively adopting the preferred Roman mode of rectangular building, if they had not already done so. Actual site continuity is not unknown. At Gorhambury, Hertfordshire (Neal et al., 1990), located in close proximity to the tribal oppidum at St Albans, the late pre-Roman phase included an Iron Age, timber-built aisled house which underlay a subsequent aisled house of the Romano-British phase of occupation. These structures were interpreted as the estate workers' quarters of the villa that came to dominate the settlement's principal enclosure, which by around AD 100 was a stone-built house of simple plan, with separate adjacent bath building. Its predecessors, however, were built of timber in the first century AD, and the relative social hierarchy between the two enclosures would have been far less obvious. Woodhouse Hill, Studland (Field, 1965), overlooking Poole Harbour, represents

a lower social order altogether. Here the occupants of late Iron Age sub-circular huts in the first century AD acquired samian tableware and Roman coins. By the third century, they were living in two-roomed 'cottages', which, though their stone foundations remained unmortared, their floors of earth and their roofs of thatch rather than tiled, nevertheless represent the lowest order of aisled long-house.

The simple aisled house and its more developed variant, the hall-house, are of particular interest in that their social design appears to place a greater emphasis on a communal central hall, around which smaller rooms are clustered, by comparison with the linear suites of broadly equal-sized rooms that characterize other villa types. In some instances, the peripheral space created by the aisled structure was reinforced by partitions; in the hall-house, this function is formalized in a series of clearly separate adjacent rooms. In its basic form, this layout has been compared with the design of larger Iron Age round-houses of the Little Woodbury (Bersu, 1940) or Pimperne (Harding et al., 1993) class in which there is an implied division between central, public space and peripheral, private or functionally specific space (Millett, 1990: 201), but translated into rectilinear geometry. The origins of the aisled plan in Britain are obscure, perhaps through lack of excavated evidence, though, as we have seen, its presence has been recorded in the later Iron Age in south-eastern England. Most though not all examples are of late date and were conventionally assigned to the poorer and more primitive elements in Romano-British rural society (Collingwood and Richmond, 1969: 147). There seems no reason to assume any direct input from the northern European Iron Age tradition of aisled longhouses, itself a developed manifestation of a long-standing tradition of rectangular domestic architecture east of the Rhine, from which Britain in the earlier Iron Age need not have been totally isolated or immune. Its occurrence therefore at Gorhambury in the later pre-Roman Iron Age and in close proximity to the dyke-system of the regional oppidum is of particular importance in establishing an insular pedigree for the type.

An important contribution (though the idea goes back to Haverfield originally) was the recognition that villas may have been in joint or even multiple ownership and occupancy. Smith (1997) was particularly concerned with the social patterns revealed by villa plans in a study that was not without controversy. He had identified a significant number of villa sites in Britain that appeared to conform to a unit system (Smith, J. T., 1978), in which two separate buildings were apparently occupied contemporaneously by social groups of approximately the same size and social standing. Richmond assumed that the second building was for occupation by estate workers or socially subordinate groups, but increasingly, evidence suggested that this was not the only plausible explanation. Joint occupancy and joint land-holding could, for example, have been a means of avoiding fragmenting an estate through multiple inheritance (Hingley, 1989: 151). Beadlam in Yorkshire is a good northern example of a unit villa, but the distribution covers most of the lowland zone south and east of the Jurassic Way. Much the same principle seems to be at work in the remarkable plan of the second-century winged corridor villa at Gadebridge (Neal, 1974), literally semi-detached in plan to the point of having duplicated porches. The implications of dual or multiple occupation in terms of property owning and land-holding are self-evident, and prompt questions as to whether Roman or local legal conventions were in play. The suggestion that twin buildings were the product of native practices in inheritance cannot be dismissed simply because it should have manifested itself in progressive sub-division into ever smaller entities. The existence of conjoined circular houses or house-plots has been widely remarked in the pre-Roman Iron Age, from Pilsdon Pen in Dorset (Gelling, 1977) to the uplands of Perthshire (RCAHMS, 1990).

Villa settlements in the north

In discussing the Romanization of northern England, it is important not to assume that the entire province from the Trent to Hadrian's Wall was uniformly responsive or hostile to annexation and acculturation. The distribution of villas and related settlements in comparison to military establishments, without regard specifically to the question of date and duration of occupation (Figure 6.1), makes clear that Romanization made a greater impact on the east than

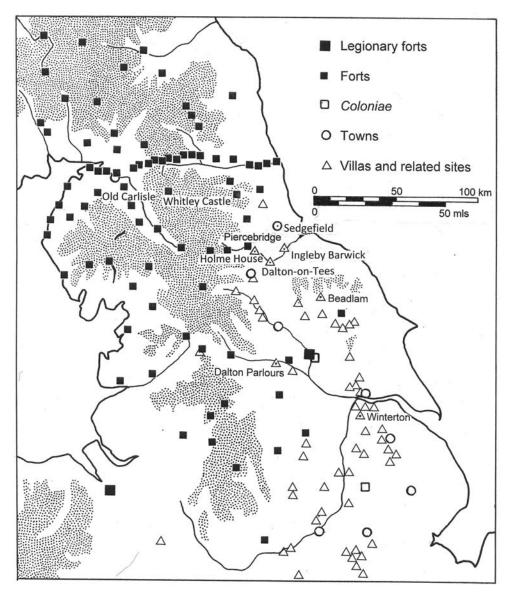


FIGURE 6.1 Distribution of forts, towns and villas in northern England

Source: Drawing by D. W. Harding.

it did west of the Pennines (Branigan, 1980: 18). The reason for this is doubtless in part related to geography, and to the pattern of the military advance, but it may also be in part a question of the responsiveness to change of the eastern tribal groupings, and the extent to which they had already been in contact with imported fashions from south-eastern England in the years before the conquest. The evidence from Stanwick, as currently re-interpreted, is pivotal in this regard.

The distribution of villa settlements in the north, of course, may not just reflect the amenability of the local population; we need first to consider who owned the land on which they were built and who occupied them, together with potential constraints upon Romanization that the political or military character of the frontier zone might have imposed. Branigan isolated the unusual plans of buildings at Drax and Snape as possible villas built by army veterans on land that had presumably been acquired from former native control. The sites of Langton and Gargrave, on the other hand, displayed a greater integration of 'native' and 'Romanizing' elements, which would be consistent with the progressive adoption of Roman building styles by local élites. The extent of Romanization evinced by northern villas should not, however, be over-stated. Not only are they relatively few in number, but they are of modest proportions, and even in the third and fourth century, their mosaics must have appeared extremely provincial and even crude by southern English standards.

Most northerly of the recognized unit villas is Beadlam on the northern edge of the Vale of Pickering (Figure 6.2, 2; Neal, 1996a). Here, two distinctly separated corridor buildings are disposed at right angles to each other, in a manner that certainly implies two units rather than one integrated villa. In fact, Neal argued that the north range itself may have started as 'two separated units at either end of a "barn" (1996a: 41), suggesting a more modest original unit arrangement. The fourth-century occupation at Dalton Parlours (Wrathmell and Nicholson, 1990) also apparently had two residential buildings (Figures 6.2, 1), one a small winged corridor villa in which the eastern rooms were hypocausted and the western boasted mosaic floors. The basic layout of this building, with central oblong room and flanking square rooms, has been compared to similar buildings on villa sites at Langton and Beadlam to the northeast. The second major structure was an aisled building, the dating of which was less secure, but which probably overlapped the winged corridor villa in occupation rather than being its precursor or successor. In at least one phase of use, it was certainly residential. Both buildings may have had use of separate, external bath-houses, one of which at least was embellished with elaborately painted walls and ceiling. Ancillary buildings, kilns and ovens have been interpreted in the context of an agricultural economy, and estate workers or slaves were probably housed in native buildings external to the main residential quarters. This pairing of principal buildings would certainly be consistent with joint proprietorship (Wrathmell and Nicholson, 1990: 283), but in this instance, the lapse in occupation since its earlier Iron Age phase, and the silted up state of its ditches, argues against the progressive Romanization of a native family and community. In fact, the presence of some items of military equipment among the excavated metalwork, and the previously reported existence of tiles with stamps of the Sixth Legion from the site, suggests instead that the site may have been within the military jurisdiction of the legionary headquarters at York. It is quite possible that it was one of the farming estates that supplied the army, and even that it was under the control of a retired legionary veteran or veterans.

The most significant aspect of the villa at Holme House, Piercebridge (Figure 6.3; Harding, 1984b, reprinted in Cool and Mason, 2008), and one that demands explanation, is its early establishment, apparently within a very few decades of the Roman conquest of the region. The earliest building appears to have been a modest, cottage-type rectangular building, of which

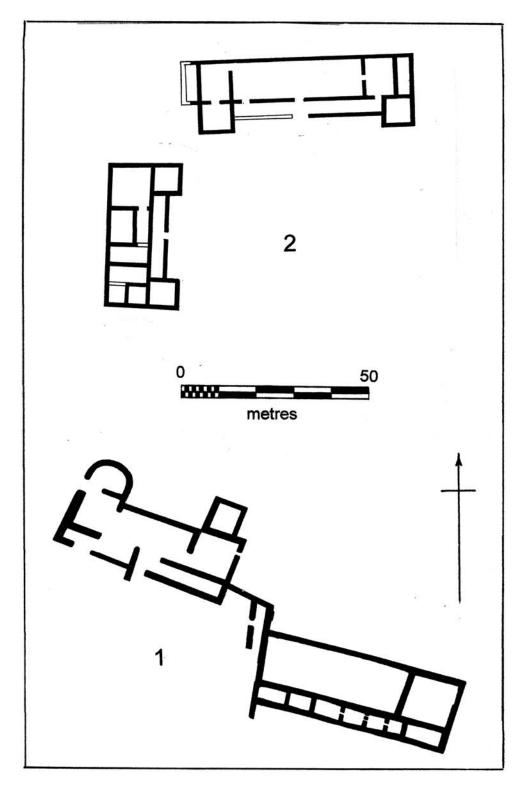


FIGURE 6.2 Unit villas in northern England: plans, 1, Dalton Parlours, Yorkshire; 2, Beadlam, Yorkshire, early phase

Source: Drawings by D. W. Harding, adapted from Wrathmell and Nicholson (1990) and Neal (1996a).

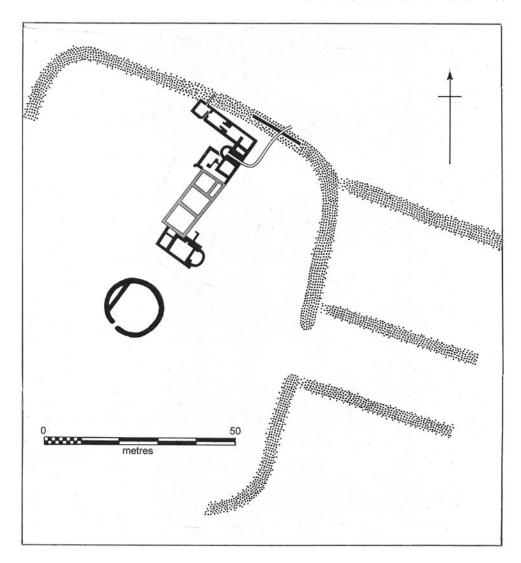


FIGURE 6.3 Holme House, Piercebridge, Yorkshire: plan

Source: Drawing by D. W. Harding.

only the cobbled foundations, bound in stiff, red clay, survived, together with an external line of stone post-supports along the northern and western walls indicating a possible veranda. The building had only three principal rooms, though a narrow, fourth room may have accommodated a stair to an upper floor (Neal, 1996b). These foundations lay only just below ploughsoil, and the only surface to survive was an area of light cobbling in the smallest room. No dating evidence was recovered whatsoever from this building, so that its construction and occupation can only be inferred from the overall site sequence. The absence of finds presumably reflects the fact that the floor level was effectively at modern ground level, with minimal foundations below plough level or other sub-surface contexts.

The foundations of the northern bath-house extension were likewise of river cobbles, in this instance bound in stiff, yellow/grey clay. This wing featured a heated suite with *caldarium* and *tepidarium* with *opus signinum* floors and a cold plunge with a tessellated floor and several rooms that boasted painted, plastered walls. Pottery from this extension, and deposits of samian and native pottery within the drain in particular, indicated that the building was in use in the Hadrianic to Antonine periods and was abandoned before the end of the second century. The fact that there was no robber trench in the deep apsidal cold plunge clearly indicated that the masonry had been dismantled systematically at or shortly after the bath building's abandonment, and before it had accumulated infilling, and it would not be unreasonable to assume that the dressed masonry elsewhere on the site had been removed at the same time.

The southern apsidal suite, in which two rooms had a hypocausted heating system, appears likewise to have been a secondary extension. The fact that its under-floor pillars were constructed of ashlar, rather than tiled *pilae* as in the northern suite, might indicate that separate building episodes were represented. Sealed in the wall foundations was a silver denarius of Nero, which plainly provides no more than a *terminus post quem* for the construction of the extension, and the majority of pottery suggests a date for its use in the mid-later second century.

A striking feature of the layout at Holme House is that the villa occupies the northern end of the ditched enclosure, from an air-photograph of which the site had first been recognized. The central position was occupied instead by a circular building some 15 metres in diameter, the ashlar walls of which, almost totally dismantled, had been built on three courses of river cobbles set within a foundation trench. A break on the SSW side of the circuit indicated an entrance, some 3 metres in width. Within the building was a complex arrangement of substantial post-pits, of which one setting of six sizeable pits and another nearer the centre of four pits containing massive heel stones, presumably for upright timbers, could be identified among other less substantial features. A central four-post or pillar setting is known elsewhere in Roman-period round-houses (Figure 6.4), and its striking resemblance to the Little Woodbury plan would be more informative if the latter were not exceptional in that regard among Iron Age round-house plans. The scale of foundations of the Holme House round-house certainly would be consistent with a building that had an upper floor. Dating evidence indicates the use of this circular building throughout the second century, so contemporary with the aggrandized villa, though it had none of the architectural or structural sophistication of the latter. One unexplained feature of this building was a length of cobbled walling forming a chord on its west side of the building, which lacked a foundation trench and appears to have revetted a low platform or dais. It has been argued (Willis, 2010) that this was part of an earlier, rectangular building through which the foundations of the circular structure had cut, as in fact the first interim report of the excavation had suggested. Subsequent investigation, however, had revealed no convincing evidence for its continuation in any direction beyond the circular building, so that the excavators were forced to the conclusion that it was an integral, if secondary element of the circular plan. In fact, it overlies one of the post-pits of the series of six, so that it would be possible to suppose that the circular foundations were used through two successive building phases, one with the ring of six post-pits, the second with the chord wall and central setting of four. The pit of six that was sealed by the chord wall contained a coin of Trajan, so that both phases evidently dated from the second century. One further element was a flagstone-lined channel, assumed to be a water supply from a spring to the early 'cottage' villa, that ran under the circular foundations in the south-east quadrant (and under the secondary apsidal extension at the southern end of the villa) that clearly indicated a break in the structural sequence

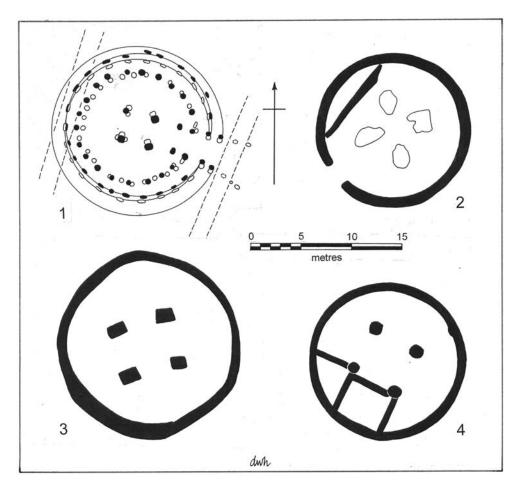


FIGURE 6.4 Iron Age and Romano-British round-houses with four-post settings, 1, Little Woodbury, Wiltshire; 2, Holme House; 3, Winterton, Lincs; 4, Bozeat, Northants

Source: Drawings by D. W. Harding, adapted from Bersu (1940), Harding (1984b), Stead (1976) and Wilson (1966).

between the second-century circular building and any inferred first-century antecedent. The end of use of the circular building is more problematic, as pottery from the post-pits included later third-century wares. But it is important to consider questions of taphonomy. These pits also included fragments of tile and wall plaster, debris presumably from the demolition of the villa. Since there was no trace in situ of the massive timbers that these pits once held, it seems likely that the demolition process included salvaging the circular building's ashlar masonry and substantial timberwork, leaving the pits open to scattered debris from later episodes of occupation. The evidence for systematic demolition and salvaging of building materials from both villa and circular building argues for the complete abandonment of the site at the end of the second century. The occasion for this can only be guessed. The threat of imminent raids from northern barbarians seemed too dependent upon historical records to the excavator, who regarded the site's location only just above the floodplain of the Tees as vulnerable to the sort of flash flooding that several times in the eighteenth century wrought havoc, for example, to

nearby Yarm. Alternatively, a substantially enhanced military presence at Piercebridge by the end of the second century may have resulted in a re-organization of land rights that displaced the villa occupants.

The fact that the circular building occupied the central position within the enclosure led the excavators to infer that the site might have originated as a pre-conquest Iron Age settlement, its basic layout (i.e. apart from the eastern annexes) according well with Iron Age and native settlements in the region. Doubt has been cast upon this possibility (Willis, 2010) on the legitimate grounds that there is no definitive evidence for an early round-house settlement. Certainly the native pottery, though retaining traditional forms, is almost exclusively second century or later. A key factor regarding the enclosure ditch itself is the total absence of Roman material below its uppermost filling where sampled along the northern sector. In fact, the footings of the stone enclosure wall (pace Willis, hardly substantial enough for an aisled building on the Ingleby Barwick model, spanning the drain and with no trace of a lateral end wall over 20 metres of its length), set, like the additional end room of the bath suite and its drain, in the top of the ditch filling, clearly indicate that the enclosure ditch had effectively been levelled by the mid-second century. In fact, assuming that there had been a bank on the inner lip of the ditches, it would have been necessary to level this prior to the construction of the main bath suite wing. Since this ditch apparently had been re-dug in a secondary episode of enclosure, neither of which yielded any trace of Roman material, it does not seem unreasonable to infer that they might have originated in the pre-conquest period. Tracing evidence for an earlier round-house beneath the substantially re-designed second-century circular buildings is plainly speculative, though the setting of four posts straddling the cobbled foundations just east of the entrance appeared to be candidates for an earlier porched entrance. The fact remains, as Cool and Mason recognized (2008: 311) that the occurrence of late Neronian fine wares on the villa site indicates activity at an early period, even if direct associations with early buildings are lacking.

The function of the circular building has proved equally contentious. The idea that the second-century round-house might have been occupied by estate workers whilst their Romanized masters enjoyed the luxury of the villa now seems rather dated, and a persuasive alternative might be Mattingly's (2006: 375) model of two buildings, one in the native tradition for conducting local affairs and the other in the style of the ruling regime for impressing diplomatic visitors. At a more pragmatic level, Willis (2010) has likened the circular building to the Stanwick, Northamptonshire, example (Neal, 1989), which its excavator interpreted as a powered mill, and one quern fragment from Holme House was reckoned to have been large enough for a powered mill (Cool and Mason, 2008: 263). The Holme House building, however, lacks the crucial evidence of wear in the floor resulting from an animal's rotary movement, though if this had been the function of the building in its penultimate, six post-pit phase, then such traces could have been obliterated by the final re-design of the interior. Alternatively, the building could have functioned as a barn- or byre-house with human quarters on the upper floor and stock beneath, in which case the chord wall in the final phase could have retained a hay store.

There remains the question of why there should have been a villa at Holme House at such an early date, and who might have been its influential occupants. There would hardly have been time for a local veteran in the Roman army to have served his time and to have been established in retirement. However, with the Brigantes now seen as possible clients of Rome and Stanwick as Cartimandua's capital, it is conceivable that younger members of the pro-Roman élite had been trained, if not in Rome, in another major Roman centre or in the army (Creighton, 2001), to whom Roman architectural fashions and the employment of builders and

craftsmen with the requisite skills to construct and furnish a villa at such an early date might not have been so alien.

At the time of the Holme House excavation, it stood in isolation as a northern outpost, with only the limited remains salvaged at Old Durham beyond (Wright and Gillam, 1951). In the light of subsequent finds along the Tees, Old Durham looks more convincing as a villa site. The villa at Quarry Farm, Ingleby Barwick (Willis and Carne, 2013), like Holme House, was located on the southern bank of the Tees but further downstream. It was not excavated, being reprieved within a modern housing development; its character and dating therefore were not investigated in detail, but its winged corridor plan was broadly established by geophysical survey. The villa complex included additional buildings, notably a two-roomed caldarium and a simple aisled building, together with a stone-built circular building around 9 metres in diameter which, not unlike Holme House, had a short revetment wall that apparently supported a platform on one side of its circuit, but which, unlike Holme House, dated from the late fourth century. A possible contender for an earlier, antecedent settlement was a ditched enclosure identified by geophysical survey to the west of the villa, which apparently contained a circular or oval structure some 11 metres in diameter within it. Otherwise, the only excavated evidence for earlier occupation was a small, ring-groove round-house on the south-western edge of the villa complex which pre-dated the Roman period enclosure system.

The villa complex at Dalton on Tees (Brown, 1999) also included a winged corridor villa, apparently built in a single construction episode, with little evidence of structural sophistication other than its very substantial foundations. The aisled building at Dalton, however, which appears to have undergone several phases of structural modification, evidently included the use of concrete floors and painted wall plaster. A third building was investigated only by trial trenching, whilst a large, octagonal structure was identified from geophysical survey only. Material from the ditches indicated occupation from the mid-second to later Roman periods.

Native settlement in Yorkshire

The extent to which the process of Romanization made an impact on native communities east of the Pennines was plainly very variable. Ramm (1980) made the fundamental point that the Romans had nothing to offer in technical terms to improve cereal production or yields. Their skill in so far as it affected production lay in the ruthless re-organization of land, with roads, forts and land divisions violating traditional land ownership and boundaries. The native response therefore must inevitably have been qualified.

Between the Foulness valley and the Wolds, long-term excavations at Shiptonthorpe (Millett, 2006) and Hayton (Halkon et al., 2015) have shown the gradual adoption of Roman fashions by the local communities of roadside settlements over several generations. At Wattle Syke (Martin et al., 2013), on the other hand, on the fertile magnesian limestone to the west of the Vale of York, only a couple of kilometres north of Dalton Parlours, the later pre-Roman Iron Age settlement continued into the Roman period initially with little evidence of acculturation in terms of material remains, while the local pre-Roman practice of occasional crouched inhumation burial in and around the settlement area continued unabated until extended inhumation was finally adopted in the fourth century AD. The occupation of Wattle Syke appears to have been broadly continuous from the fourth century BC to the late Roman period, in the Iron Age conforming to a pattern of conjoined enclosures known as 'washing line' settlements, related to the 'ladder' settlement form of eastern Yorkshire, and subsequently

undergoing various modifications before the final phase of unenclosed settlement in the late Roman period. In contrast, at Dalton Parlours, the earlier Iron Age settlement appears to have been abandoned by the first and second centuries AD (though there may have been occupation in the near neighbourhood) and not substantially re-occupied until the construction of the villa settlement around AD 200. It is around this time that Wattle Syke shows more evidence of Roman material culture, together with a shift in agricultural basis from stock rearing to cereal production on a larger scale. Its location, within 30 kilometres of York itself, with surrounding forts and villas, suggests that it may have lain within the *territorium legionis* of York, by now not only a legionary headquarters but capital of the province of *Britannia Inferior*. Wattle Syke, together with the native settlement at Garforth to the south (Owen, 2000), may have been subsumed within larger estates centred on villas like Dalton Parlours in a re-organized economic landscape focused on cereal production for export (Martin *et al.*, 2013: 300).

It is the later Roman settlement pattern at Wattle Syke (Figure 6.5), dating from the late third to early fifth centuries, that was especially distinctive, being characterized by a series of sub-rectangular or sub-oval buildings with sunken foundations, varying in size from 6 to 10 metres in length and 4 or 5 metres wide, some of decidedly irregular outline and not all assuredly roofed structures. In a number of these buildings, the edges were revetted with dry-stone coursing, probably intended to retain a low bank derived from the sunken foundations, on to which the rafters of a simple roof could be bedded. For the most part, there was no evidence of posts supporting the ridge or gable ends, as is commonly found in post-Roman *Grubenhäuser*. Internal ovens, fragmented quern-stones and deposits of carbonized grain indicate that the majority of these structures were associated with processing of cereal crops, though Building 1 yielded quantities of hammerscale and may have had an industrial role. Buildings 10 and 12 displayed unusual ground-plans, having two sunken cells, conjoined and detached respectively, that may have had a superstructure akin to the figure-of-eight buildings of the later Iron Age in Northern Britain and Ireland.

The excavators cited local examples of buildings with sunken foundations that may have been comparable in function as ancillary structures on agricultural settlements. Their rather ephemeral footprint inevitably leads to their being overlooked in comparison to more distinctive or substantial buildings. Sunken foundations evidently had the advantage of creating headroom where the roof was simply founded on a low external wall footing, as in the classic *Grubenhaus*, which has its antecedents already in later pre-Roman Iron Age *oppida* in central Europe. Later Iron Age 'Pictish' sub-circular houses in eastern Scotland appear to have adopted the same principle of revetting the sides of a sunken foundation, as at Easter Kinnear and Hawkhill, Fife (Driscoll, 1997), though here it has been suggested that the floor was raised to ground level to provide under-floor storage. The importance of Wattle Syke is that these sunken buildings constituted the principal form of structure, no less than fifteen being grouped within the area of the former 'washing line' settlement. Though the site may well have been economically dependent at this period on supplying grain to Roman military markets, there is still only limited archaeological evidence of Romanization in any significant degree.

In north Yorkshire, the pattern is not dissimilar. At Newbridge Quarry on the north side of the Vale of Pickering (Richardson, 2012), an essentially open settlement of round-houses was succeeded by a 'ladder settlement' of rectilinear enclosures appended to a double-ditched trackway in the late pre-Roman Iron Age and into the early Roman period. In the mid-Roman phase of occupation the pattern of enclosures was reconfigured, but the limited evidence of domestic building indicates the continued use of round-houses, with no shift to rectilinear plans. Furthermore, there is no evidence for the acquisition of Roman material goods on any significant scale,

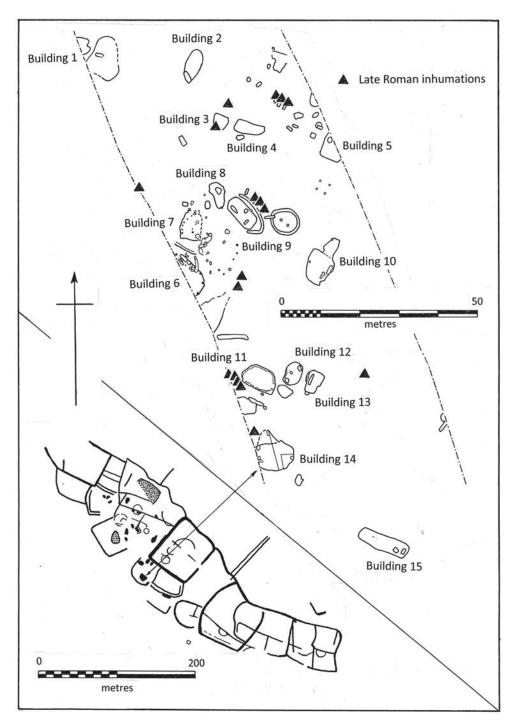


FIGURE 6.5 Wattle Syke, Yorkshire, later Roman-period settlement *Source:* Drawing by D. W. Harding, adapted from Martin *et al.* (2013).

nor for the adoption of Roman lifestyles, despite the proximity of the Roman military at Cawthorn. The absence of fourth-century pottery from the settlement suggests that it was effectively abandoned at this stage, apart from the presence of later Roman burials. Long-term development on the south side of the Vale at West Heslerton has exposed an extensive swathe of linear features and enclosures, from which it is clear that, far from representing a palimpsest of landscape re-organization, the patterns established in the later pre-Roman Iron Age continued in modified form throughout the Roman period and into the post-Roman Iron Age (Powlesland, 2014).

Stanwick and Teesside

Excavations and re-assessment of the Stanwick fortification in the 1980s has resulted in a major review of Wheeler's conclusions of the 1950s. The threefold progressive enlargement of the enclosure from a primary hillfort located on the Tofts field to a terrain enclosure of 300 hectares had already been questioned by Brian Dobson and others in the 1970s. Haselgrove's re-assessment (2016) examined the potentially critical points of intersection between Wheeler's Phase 1 and 2 earthworks (Tofts-Maiden Gill) and his Phase 2 and 3 junction (Maiden Gill-outer system), offering a revised chronology based upon radiocarbon determinations and the evidence of material remains. Despite outstanding issues, structurally and stratigraphically there seems to be no compelling reason for regarding the northern enclosure works and the southern outer system other than as broadly contemporary within Period 5 (AD 30/40–50/60).

Excavations in the 1980s concluded that Wheeler's view of Stanwick as the stronghold of an anti-Roman faction in the first century AD was totally misplaced, and that more probably the Stanwick aristocracy was in treaty relationship with Rome, enjoying the benefits of Roman imports from the south. From the open settlement of the first century BC, the site was expanded on a massive scale in the mid-first century AD by the construction of the major earthwork enclosures, not as an expanding sequence, but as a unitary concept in which a smaller, northern compound formed the focus of habitation, while the larger, southern compound enclosed areas set aside for arable and pastoral activities (Haselgrove et al., 1990). Though not remotely on the same massive scale as the southern or south-eastern oppida exemplified at Silchester or Colchester, Stanwick could certainly have been designed as a terrain-enclosing site of a similar general class. Evidence of the material assemblage from Stanwick, and from the contemporary occupation of the nearby site at Melsonby, indicates high-status occupation. Spanish amphorae used for importing olive oil and Rhodian wine-amphorae, samian ware and flagons of the Neronian and early Flavian periods, all signify Roman imports before the conquest of northern England. The unusually wide range of samian types represented on both sites, and the high proportion of decorated vessels, indicates that this ware was especially valued (Willis, 1998; Fitts et al., 1999). Both Stanwick and Melsonby also yielded quantities of briquetage from their late pre-Roman occupation, evidence with finds from other local sites of an extensive regional network of salt production and distribution, probably based upon sources around the mouth of the Tees.

More comprehensive analysis of palaeo-botanical and faunal remains than was possible in the 1950s also permitted a re-assessment of the economic basis of the Stanwick community, the evidence for cereal cultivation clearly disposing of the older view of a predominantly pastoral economy of 'footloose Celtic cowboys' (Piggott, 1958a). Nevertheless, had the site functioned as a centre for the assembly and throughput of thousands of head of cattle for rearing and slaughter elsewhere, as Mercer has persuasively argued, then such activity would make little or no impact on the faunal record from Stanwick itself.

Further research on the Melsonby hoard (MacGregor, 1962; Fitts et al., 1999) also prompted radical reinterpretation of its possible context. Previous opinion had considered the possibility that it was a votive hoard, or a founder's hoard buried in the political emergency of the Roman advance north. Wheeler had suggested that it might have been a chariot burial, not least because of the reported proximity of several 'large iron hoops', which could have signalled tyres from chariot wheels, notwithstanding the fact that Melsonby lay well beyond the main distribution of Arras culture vehicle burials. As regards the dating of the hoard, analyses confirmed that, with one important exception, the majority of pieces are in fact a zinc alloy or brass, and hence unlikely to be earlier than the first century AD, and entirely consistent with its conventional dating (MacGregor, 1962) around the middle of that century.

As to a possible burial context, re-examination of the hoops indicated several technical reasons why they cannot have been tyres, but might plausibly have been iron binding-hoops for a stave-built wooden bucket of the kind known from Marlborough in Wiltshire and sites of the late Iron Age in south-eastern England. These, and their counterparts in north-eastern Gaul, were not infrequently used to contain cremation burials, raising the prospect that the Melsonby hoard could have been from an aristocratic burial of the mid-first century AD. Heat damage to several of the items in the hoard would be consistent with their exposure to a funeral pyre. The wooden frame of the bucket would have decayed long since, and the few calcined remains of a cremation could easily have been overlooked by the hoard's nineteenthcentury finders. This tentative proposal would certainly reinforce the idea of an élite group at Stanwick that was in regular exchange with peers in south-eastern England.

The current view, therefore, that the occupants of Stanwick were engaged in positive trading activities with the Romanized south in the decades before military annexation, possibly through a treaty relationship, now makes better sense than Wheeler's belief that it was the headquarters of an anti-Roman faction among the Brigantes. What remains puzzling, nevertheless, is the apparent abandonment of Stanwick around the end of the first century. A clue to the reason may be provided by the relative proximity of the villa settlement at Holme House, the character of which suggests a Romanized native estate rather than one imposed by the military or civil authorities.

Just north of the Tees the settlement at Faverdale, Darlington (Proctor, 2012) has yielded subtle insights into the process of Romanization in the second century. The earlier unenclosed occupation, described by the excavator as 'polyfocal' and apparently comprising a series of heavily truncated small ditched features with the remains of at least nine ring-groove roundhouses, may date from around AD 70, an assessment based upon imported samian rather than on native wares, though the latter, as elsewhere in the region, appear to date from the Roman horizon, even though forms and fabrics may preserve traditional styles. The economy was based on mixed agriculture, with spelt wheat a significant component of the cereal regime. In the second century, the focus of the settlement was a substantial ditched enclosure adjoining a series of lesser enclosures within which no trace of its principal building(s) survived. Abundant material from the ditch, however, suggested a significant change in diet and lifestyle, with oysters and a higher proportion of pig than is found on most native settlements of the period. Organic residue analysis indicated that plants and vegetables were being processed in mortaria, indicating novel fashions in food preparation. A unique find was a handmade mortarium in native ware, an indication either of limited supply of Roman goods or perhaps an innate conservatism that favoured the retention of local production. Some roof tile was recovered from the ditch, but insufficient for a substantial building, so the excavator concluded that these must

have been built in the native style. By contrast, on the southern side of the enclosure was a small, two-roomed hypocausted building with painted wall plaster and *opus signinum* flooring, not unlike the small bath building from Ingleby Barwick. Like Holme House, however, the main enclosure at Faverdale was evidently abandoned and levelled around the end of the second century. If these sites were economically dependent upon military as well as civilian markets, they may have been victims of arbitrary change in military or political circumstances, such as the death or posting of individuals whose authority had underpinned relationships.

An important aspect of the Piercebridge complex is the relationship of the villa to the vicus or civilian settlement north and south of the river adjacent to the later fort. The vexed issue of whether there was an early fort, and if so where it was located, has yet to be resolved, but it is clear from Peter Scott's excavations that a civilian settlement was already in existence before AD 100, progressively straddling both banks of the Tees and attaining the proportions of a small town. Air-photographs of the Tofts field (Plate 9) had suggested an earlier street alignment leading from Dere Street towards the south-west corner, and test excavation here in 1973 confirmed activity in the last decades of the first century, with two phases of later building. Clack (1982: 393) had suggested that the Holme House villa was the centre of a small estate, the produce from which could have supplied a local garrison, with surpluses marketed in the vicus or exchanged for consumer goods. Broadly contemporary with the second-century occupation of the Holme House villa is the civilian settlement at Sedgefield, an extensive development flanking a section of north-south Roman 'Cade's' road, comprising a series of enclosures with industrial, agricultural and domestic buildings approximating in size to a small town but with limited evidence for any public buildings. This too could have served as a market centre for other native agricultural settlements in the region.

Lancashire and Cumbria

Though the frontier works themselves affected native communities on east and west in equal measure, it was undoubtedly the west that from the archaeological record appears to have been least Romanized. The absence of villas west of the Pennines or north of Cheshire is surely significant and cannot be accounted for as a product of inadequate archaeological research. In Cumbria, air-photographic survey was directed quite explicitly at the detection of villas or related settlements in the Solway-Eden regions without success (Higham, 1989: 161). The few instances of the adoption of rectangular building plans on native sites in Cumbria by the Severan period, such as Risehow (Blake, 1959) were more probably influenced by familiarity with buildings in the military *vici* than by the villas of the east and south. The distribution of forts and military establishments of the early second century (Breeze and Dobson, 2000: Figure 6.11) shows such an overwhelming concentration in the west, from the southern Pennines, through the Cumbrian Pennines and the Lake District to the Cumbrian coast, in contrast to the distribution of villas through the Vale of York to the Tees and into County Durham, that the northern half of the province appears to have been divided fundamentally on an east-west axis.

It has been argued (Higham, 1982: 117) that native sites in Cumbria have yielded a richer assemblage of Roman material than native sites in Northumberland, including samian and black-burnished ware, presumably acquired through the local *vici*. Even if this proved to be the case – and the number of excavated sites in Cumbria is limited – it need hardly occasion surprise that settlements within the frontier had more regular access to such material than sites

that were for much of the period beyond the frontier. On the German limes, the distribution of Roman material fades dramatically beyond the frontier (Fulford, 1989), and the economic importance of any 'buffer zone' and the consequential impact upon it of Romanization by proximity should not be exaggerated. The problem remains that dating of native sites is not sufficiently fine-tuned to make possible valid comparisons between communities within and beyond the frontier. In any event, it is hard to see that any benefit could have brought to native communities in the north-west by the Roman presence. Basic supplies of timber and stone for building purposes would have been commandeered by the military, while pottery and other everyday goods would have been imported. It is generally argued that the Roman army was provisioned as far as possible from local supplies, but in the north-west, this was likely to have been less than sufficient, and requisitioning would have left the native population underprovided. Further extensification of agriculture might have been practicable in the north-east in response to military demands, but in Cumbria, agricultural potential was more limited, thus further enhancing the east-west divide. The army of course would also have made substantial demands upon the local population for meat and hides, possibly through purchase, but doubtless also through taxation in kind or simple extortion. Local mineral resources were evidently exploited in due course, like lead from the South Tyne valley, where the multiple ditches of Whitley Castle (Figure 6.6) indicate that defence in this region was no mere formality.



FIGURE 6.6 Whitley Castle, Alston, Cumbria, Roman fort, air-photograph

Source: Photograph by D. W. Harding.

The frontier zone

The negative impact of Romanization must inevitably have been more enduring in the immediate frontier zones than in regions further south. The establishment of the frontier works themselves and the network of forts and depots in the hinterland would have entailed the confiscation of native land, the displacement of local communities and considerable restrictions upon native mobility to seasonal pastures or traditional sources of supply. Almost certainly, the linear frontier of Hadrian's Wall would have cut across traditional tribal territories, dividing kin from kin, and, like the Berlin Wall of more recent times, imposing restrictions on movement that must have been deeply resented. This, together with the burden of taxation and the risk of enslavement or conscription, would have generated a degree of hostility to the Roman military presence which, even when not actively expressed in resistance, would have inhibited the process of Romanization.

This apart, the environment and opportunity for the local population to feel the benefits of Romanization that were available to their cousins in the south were plainly not applicable in the frontier zone. The lack of acculturation could in principle be accounted for in one of three ways. The Roman military regime may not have permitted it, the native population may actively have rejected it, or the economic and social infrastructure of the native communities may not have been conducive to it. The first two in essence involve political decisions, while the third might have resulted from more complex factors. It has sometimes been argued that control of external contacts, resulting in the import of exotic goods, presumably in exchange for local products such as mineral ores, cattle, hides and even slaves, was an important element in sustaining the hierarchical structure of Iron Age society. In effect, the tribal élites controlled a prestige goods economy and the distribution or redistribution of economic production among their clients in the social order. Something approximating to this system may have obtained into the second century AD in lowland Scotland, with lowland brochs acting in the role of élite centres (Macinnes, 1984). Within the borders of empire, however, the Romans were dealing not with friendly kings but with a subjugated population, so that there was no need to indulge in such diplomatic niceties. Furthermore, in northern England, there were not even the rudiments of a native market economy system that might have been adapted to mutual advantage under Roman occupation. In Gaul on the eve of conquest, and in south-eastern England too, there is evidence for the beginnings of a market economy with the specialist production of pottery and personal bronzes like brooches, together with the use of smaller denomination currency. All of these were alien to Northern Britain, so that there was no economic infrastructure nor were there market centres where such activities could be encouraged. In fact, archaeologically there is no clear evidence for the existence of a tribal aristocracy in north-western Brigantia, no dominant sites within the dispersed settlement pattern, and no evidence for their presence within the military vici. In fact, we may question whether the social structure of Brigantia at large was at all like that inferred for southern Britain or even north-eastern England in the later pre-Roman Iron Age and under the Roman occupation.

In the south of England, as in Gaul, the former tribal aristocracies would have been encouraged to assume a role of responsibility within the Romanized *civitas*. This inevitably would have entailed a breakdown of the social bond between native élites and their client dependants, doubtless to the disadvantage of the dependants, and a shift in the basis of élite authority from social bonds to Roman patronage. But in the frontier zone of northern England, it is not clear

what opportunities there were for such acculturation into the Roman system, even had tribal aristocracies wished to opt for them.

A measure of the inherent insecurity of the northern frontier is the creation of the Vallum, unique among all the frontiers of the Roman Empire and in its sheer scale indicative of a problem that was far from token. Evidently included in the design of the frontier works at the time of, or very shortly after the construction of the Wall itself, the immediate effect of the Vallum was to reduce the number of points at which the frontier could be crossed, mainly to those manned by the frontier garrisons. As Breeze and Dobson recognized (2000: 57-9), the Vallum was designed to reinforce the security of the frontier from its rear and presupposes a threat to it from the south. At the same time, its dual ramparts flanking a medial ditch do not conform to any logical defensive layout, since the outer bank would afford cover to hostile forces, and the alignment of the Vallum in any case does not follow the best tactically defensive course (Jones and Woolliscroft, 2001: 81). The conclusion must be that the Vallum was designed to inhibit traffic rather than unencumbered armed bands: in effect, that it was intended to prevent cattle-raiding, or movement of stock and wagons other than that which was strictly controlled through army checkpoints. The implication of the entire frontier network must be that the native communities were far from passive and still less persuaded of the attractions of Romanization.

Unlike southern England, where the civitas capitals and network of lesser urban centres provided a framework of local administration and economic integration in which the former native élite and entrepreneurs could flourish, in the frontier zone there was no such urban infrastructure. The two most obvious urban centres, Corbridge and Carlisle, were nevertheless unique establishments, substantially dependent upon the frontier garrisons for their raison d'être. Corbridge developed into a walled town of 12 hectares, but remained essentially under military authority. Carlisle may have been the centre of a regional territory in north Cumbria which, on the basis of epigraphic evidence, appears to have acquired in the mid-third century the status of a civitas of the Carvetii, perhaps a sub-group of the Brigantian alliance.

Among the vici, most if not all were totally dependent upon their parent garrisons for their economic existence, though Piercebridge in the south-east came closest to acquiring the economic independence of a small town. Within the hinterland of the Wall the vicus at Vindolanda has been extensively excavated, revealing numerous simple rectangular 'strip houses', the foundations of which were of stone with tiled roofs over upper levels of timber and clay. Functionally it is assumed that the ground floors served as shops or workshops, with living accommodation above. The vicus also had a mansio or inn and other residential buildings. At Vindolanda, the vicus extends directly out of the fort along the main road, whereas at Old Carlisle (Figure 6.7) it is noticeably aligned along the road from Papcastle to Carlisle as if its location was determined as much by its regional connections as by its immediate dependency upon the fort. This impression is reinforced by the apparent concentration of native settlements in the vicinity (Higham and Jones, 1975).

The vici undoubtedly served as the markets for the wider distribution to rural settlements of those Roman products that did reach native households, of which there is widespread but hardly prolific evidence. Samian and Roman coarse wares, together with occasional glass ornaments, are found on Romano-British settlements in the frontier zone, but the quality of these products is relatively low grade by comparison with what was circulating in the forts and vici themselves. The rural settlements must have been producing basic agricultural products in some quantity for the frontier army and its dependants, but the almost total absence of coins



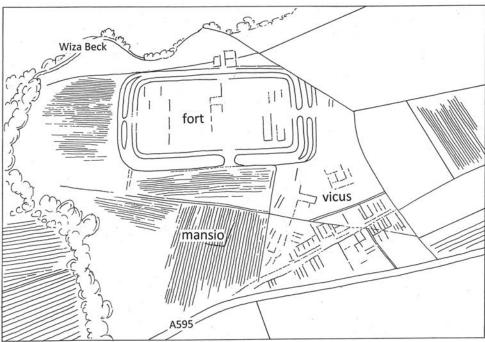


FIGURE 6.7 Old Carlisle, Cumbria, Roman fort and *vicus*, A (above), air-photograph, B (below), unrectified sketch plan

Source: Drawing and photograph by D. W. Harding.

from native sites suggests that this was extracted as taxation or by exchange in kind. There is little evidence that the local economy was boosted by the opening up of new markets or that the agricultural economy itself was revitalized and re-organized for greater productivity, as is implied elsewhere. In consequence, the vici in turn were vulnerable to political and economic fluctuations and seldom achieved economic independence of the garrisons from which they had developed.

Romanization and insular La Tène art

The impact of Romanization and the native response to it is nowhere better illustrated than in high-status metalwork. The century following Caesar's raids of 55 and 54 BC on south-eastern England saw a substantial increase in the import of wine and oil and a range of Roman provincial goods from the Continent into south-eastern and central southern England, including occasionally vessels for drinking at the aristocratic feast. This in itself should hardly be taken as a measure of insular Romanization, merely that aristocratic society in late pre-Roman Iron Age Southern Britain was quite prepared to adopt continental fashions to enhance its status and political influence. Until the conquest native craftsmen maintained nevertheless a considerable degree of stylistic independence in the production of warrior and equestrian equipment, and of personal ornaments, including lavish gold torcs in a variety of forms. With the conquest, the infrastructure of production and supply was evidently disrupted, and craftsmen who had formerly produced weaponry and armour under aristocratic patronage were displaced by makers of mass-produced brooches and trinkets for what Megaw and Megaw have caricatured as the tourist market (2001: 230). Presumably, some ruling groups chose exile beyond the subjugation of Rome, and it is therefore perhaps hardly surprising that some of the more striking examples of native art of the period following the conquest and into the second century come from the fringes of the advancing Roman frontier, from Wales and the west, from northern England and then Scotland.

The distribution of metalwork types (Figure 6.8), especially items of horse-trappings like bridle-bits, strap junctions and terrets, shows a spread of usage from southern England to the north which would be consistent with refugee movements, but at the same time, there developed, in northern England and beyond, distinctive variants that plainly originated in the north. The so-called 'derivative' three-link horse-bits, Palk's (1984) 'straight-bar snaffles', characterized by having their side-rings cast in one piece with the outer links of the bit, are plausibly derived from a type of three-link bit in which side-rings are loose and independent of the links, which is found widely to the south and east of the Jurassic ridge. The derivative variant itself, however, is found only from Brigantia through into southern Scotland, with notable collections in the Melsonby and Middlebie, Dumfriesshire, hoards. Platform terrets, so named from the three or four raised, flattened knobs or platforms which decorated their outer edges, are also concentrated between the Humber and the Forth, though examples from Essex and East Anglia indicate continuing links with the south-east. One of the most striking examples of a north-south connection is the distribution of Piggott's Group IV swords and scabbards (MacGregor, 1976: Map 13), with its preponderance in Brigantia and lowland Scotland, and with a small but surely significant group in Dorset. These latter come from Durotrigan sites that would have been among those captured by Vespasian in the early years of the conquest, and their form would be consistent with an earlier first century AD date. Those from the north date from the Flavian period into the early second century. The dating

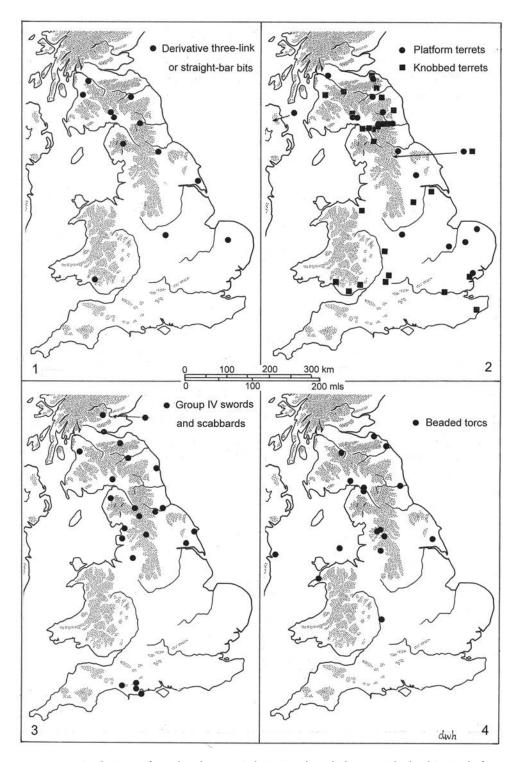


FIGURE 6.8 Distributions of metalwork types, 1, derivative three-link or straight-bar bits; 2, platform terrets and knobbed terrets; 3, group IV swords and scabbards; 4, beaded torcs

Source: Drawings by D. W. Harding, adapted from MacGregor (1976), with additions.

of the series therefore would not be inconsistent with MacGregor's suggestion (1976: 83) that the type was introduced to Brigantia by Durotrigan refugees in the wake of their defeat by the advancing legions.

One of the most important finds of recent years was the cache of weapons uncovered in a field near the village of South Cave on the edge of the Foulness valley in Yorkshire (Evans, 2006). Five swords with scabbards, some incorporating organic elements of elephant and whale ivory, antler and horn (Plate 10A), together with no less than thirty-three spear-heads, were recovered from a pit dug into the ditch of a later pre-Roman Iron Age enclosure. Swords and spear-heads were separately wrapped in animal skins and the pit had been lined and capped with amphorae fragments, plainly indicating a deliberate deposit, either votive or for safe keeping. Since the cache appears to have been buried towards the close of the first century AD, it is tempting to think that it was occasioned directly by the Roman advance into northern England.

Characteristic metalwork types of the first and early second centuries AD that are exclusive to the north of Britain, or nearly so, include beaded torcs, among which there are variants in which the beads are threaded on to the rod and others in which the simulated beads are cast in one with the torc. Commonly made of bronze, the rods may nevertheless be of iron, and in at least one instance there is evidence of gilding. The torcs are annular, being opened by mortice and tenon joints. The torc is, of course, a widespread Iron Age type of probable regal or ritual significance, and the use of beading as ornament has a long ancestry in Hallstatt and La Tène Europe. Within southern Britain from the first century BC there are several variants, notably of penannular types, of which occasional examples found their way north.

One of the finest products of a native workshop of the first century AD is the collar conventionally attributed to a provenance at Stichill in Roxburghshire (Figure 6.9). It shows technical affinities to Irish metalwork of the same period in the use of background tooling to create a relief effect, like the Bann disc, Cork horns and Petrie crown. At the same time, it displays typological affinities with south-western British and wider artistic fashions. The hinge mechanism of the collar allies it to a group of collars from south-western Britain, of which the finest example is that from Wraxall in Somerset. Located on the fringes of the expanding province, these collars display a conservative use of La Tène motifs undiluted by Roman provincial fashion. The combination on the Stichill collar of distinctive technical traits from different regions, and the development of the ornamental theme to its climax at the front of the collar is hardly the work of some provincial hack, but of a master craftsman familiar with the skills and artistic fashions of the northern and western schools. As to date and origin, the suggestion that it was the product of a Hiberno-Scottish workshop of the first century AD in the Solway-Clyde region (RCAHMS, 1956: 22) still seems reasonable.

Roman influence in the ornamental metalwork of the first century AD is perhaps best exemplified in the bronze mounts which are conventionally interpreted as embellishments for wooden caskets, not themselves for containing the remains of the dead, though commonly found in graves, but probably for jewellery or personal items. The Elmswell, Yorkshire, mount (Corder and Hawkes, 1940) has as its central motif an omega-lyre which conceals a cartoon-like zoomorphic face, of which the 'ears' are formed by trumpets and the 'eyes' by berried rosettes. A more explicit version of the same motif figures in repoussé on a bronze strip from Great Tower Street, London. Berried rosettes abound, and may be attributed to Roman influence, though La Tène art had earlier adopted this motif from Mediterranean originals. Certainly Roman is the inspiration for the vine-scroll with champlevé enamel that forms the

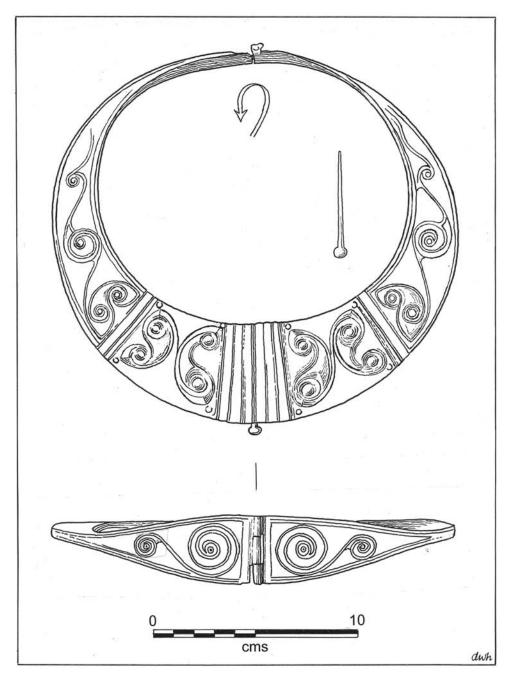


FIGURE 6.9 Stichill, Roxburghshire, collar

Source: Drawing by D. W. Harding, adapted from MacGregor (1976) and Jope and Jacobsthal (2000).

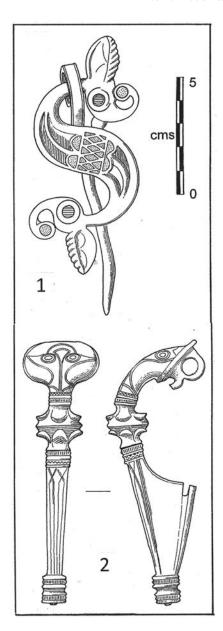


FIGURE 6.10 Romano-British brooches, 1, dragonesque brooch from Norton, Malton, Yorkshire, 2, silver trumpet brooch from Chorley, Lancashire

Source: Drawings by D. W. Harding, adapted from British Museum (1951).

attached strip of the Elmswell mount, for which parallels on decorated samian vessels were cited by Hawkes. A related piece is the bronze strip from the Santon, Norfolk, hoard, which likewise abounds in berried rosettes in a rather uninspired and repetitive design.

A fusion of La Tène and Roman provincial styles or types is well exemplified among personal ornaments by brooches. The dragonesque brooch takes essentially the basic S-motif and embellishes its terminals typically to form the head of a sea-horse, at the same time elaborating the central portion of the brooch with polychrome enamel inlay. The British distribution lies entirely south of the Forth, though not especially concentrated in Brigantia and southern Scotland as often claimed, but with hardly any in Wales or the west of England. Dating of dragonesque brooches extends from the first century AD and throughout the second. The form also is found quite widely through north-Alpine Europe from France to Hungary. Trumpet brooches, likewise a distinctively Roman provincial British type but probably derived from continental late Iron Age types, have a widespread distribution in the Roman military zone, continuing into the second century with a variety of forms including some with polychrome enamelling. Finally, there are fan-tail brooches of which the finest example is undoubtedly the massive silver-gilt Aesica brooch (Plate 10B) from the Roman fort at Great Chesters in Northumberland, part of a later third- or fourth-century hoard but itself undoubtedly of later first-century AD manufacture. The design on the brooch defies simple or even consensual description. Its relief ornament consists of trumpets, peltae, S-scrolls and even suggestions of comma-leaf motifs, combined so skilfully as to suggest zoomorphic or ornithomorphic images. MacGregor (1976: 119-23) saw an equine face and muzzle between spring-cover and bow; Jope convincingly argued for an opposed pair of birds with swan-like necks but whalelike bodies and tail-fins on the fan-foot (Jope and Jacobsthal, 2000).

Toynbee (1964) seemingly was disposed to see masterpieces like the Aesica brooch as evidence for the stimulating effect of the Roman conquest, rather than seeing Romanization as an agency directly or indirectly for the suppression of insular art. It is significant, however, that a number of the finest examples are from the northern or western fringes of the expanding military zone. Though commentators in the past have been only too ready to regard these as products of more southerly workshops, there is really no reason for regarding the north and west as cultural backwaters incapable of independent production, particularly if they were reinforced by displaced élites and their entourages from further south. Much of what is produced under the Roman occupation is pedestrian and uninspired, but the finest pieces would seem to suggest that the continuing manufacture of high-quality and high-status products in the pre-Roman artistic tradition, even evoking deliberately the memory of styles of a long-past era, was a potent means of re-asserting the independence and identity of the native aristocracy.

ROMANIZATION BETWEEN AND BEYOND THE FRONTIERS

The northern frontier: nature and purpose

Most studies of the nature and purpose of the Roman frontiers of Northern Britain begin from the premise that there was a consistent policy in the establishment and maintenance of the frontiers of the Roman Empire, whether in Germany, North Africa or Britain, and that frontier policy was determined by some governing principle, generally perceived as rational, just and paternalistically benign, in the way that was once assumed in the minds of its enforcers of British imperial administration. The extent to which subjugated native populations adopted a Romanized way of life was seen as a measure of their innate receptivity to civilization or the capacity of their primitive social and economic infrastructure to adapt to such improvement. Until relatively recently, the possibility that native communities may have exercised positive choice in the matter, and actively rejected Romanization, was not seriously entertained. In the case of the northern frontier of Britain, it is also possible that the option of Romanization was limited from the outset and that the impact of the Roman presence was one of cynical exploitation with little pretence of colonial altruism.

It is generally acknowledged that Roman frontier policy would have been modified pragmatically between the early years of colonial expansion and the period of consolidation in the later Empire. The northern frontier of Britain, in any event, was unique in its circumstances and problems and inherently unstable from the beginning. The advance from Hadrian's Wall to the Forth-Clyde line in the Antonine period, with phases of withdrawal and re-advance, is indicative of that instability and has resulted in the commonplace observation that the Romans only actually occupied Scotland at most for sixty or seventy years. As Whittaker has argued (1989), however, the concept of the Roman frontier may have entailed the exercise of indirect or negotiated control over territory beyond the line of the formal *limes*, over a 'buffer zone' between those communities that lay within the legal jurisdiction of the subjugated Empire and those tribes that occupied territory wholly beyond the immediate range of Roman influence. The apparent occupation of a limited number only of forts along the Antonine Wall in its second period of use, together with the contemporary occupation of some of the forts between the Tyne-Solway and Forth-Clyde lines, would be consistent with this notion of frontier in depth.

The archaeological evidence for Roman and native on the northern frontier is very unequally informative. On the one hand, archaeological evidence for Roman military dispositions in the Borders and southern Scotland can be amplified from historical sources to provide a closely dated narrative of events on the northern frontier in a period in which the political impact of the Roman advance upon native communities must have been profound. More particularly Hadrian's Wall itself and its military history has been studied in great detail, to the point where books can be written on its forts and milecastles, their plans and histories, and the detachments, commanders and ranks that occupied them, almost as if they occupied a vacant landscape. It is as if recent historians were to study the Berlin Wall on the basis of its construction and design, its checkpoints and watch-towers, without reference to the daily trials of a divided community or the personal tragedies of those who vainly tried to escape. On the other hand, archaeological evidence for the effects of the Roman presence upon native settlement is remarkably sparse, but this is in no small measure a product of past priorities of archaeological research. A major inhibition has been our inability to fine-tune dating of the occupation of native sites to the same level as historically recorded episodes or horizons of Roman military activity. This problem of close dating also impedes any attempt to compare the impact of Romanization on settlements beyond the frontier with its effect on settlements within the frontier, since episodes of advance and withdrawal in the second century make it impossible to know on the basis of archaeological data with which phase native occupation of sites between the Tyne-Solway line and the Forth-Clyde line coincided.

In terms of Millett's (1990: 100) model of Roman impact upon native societies, communities in Northern Britain would doubtless be regarded as 'decentralized and egalitarian'. Accordingly, we might expect that the nature of the Roman impact would have been substantially negative through military occupation, and the opportunities for towns and villas to develop extremely limited. In the frontier zone, however, the situation is more complicated and more especially so in the case of communities that lived beyond the frontier, whether periodically or permanently. An intriguing question is whether inducement to liaison with communities beyond the formal frontier might not have resulted archaeologically in greater apparent evidence of 'Romanization' than among those whose territory had already to subject to military annexation.

The fact that the Roman occupation made so little impact upon Scotland really should occasion little surprise, for the simple reason, though seldom acknowledged overtly, that it was both politically and militarily a failure. According to textbooks of Roman archaeology, the tribes north of the Tyne-Solway line were 'conquered' on innumerable occasions following the celebrated victory at Mons Graupius. Yet repeatedly 'withdrawals' were necessary and punitive attempts at re-conquest were frustrated before the final tactical retreat to Hadrian's Wall. Even then, according to Roman documentary sources, barbarian incursions occurred on more than one occasion on a scale that could not be concealed. For Northern Britain behind the Tyne-Forth line, the concept of 'Romanization' might have some relevance. For Scotland beyond the Forth-Clyde line, particularly after the effective defeat and expulsion of Roman forces at the end of the second and beginning of the third centuries, the question is largely irrelevant.

Native settlement in Northumberland and the Cheviots

The impact of the Roman military frontier on native communities has been a subject of debate over many years, often usefully informed by comparison between frontiers in different

parts of the empire (Barrett et al., 1989; Hanson, 1989). The conventional view has generally been that the Roman advance into Northern Britain and the establishment of Hadrian's Wall, though evidently disrupting those communities that were immediately involved, made little impact on native settlement beyond the frontier. The density of native settlements did not suggest any major depopulation of a 'buffer zone' and might even have suggested a measure of population expansion during the years of occupation. Whilst there may be little evidence of direct Roman intervention to trigger a widespread re-organization of the rural landscape, it has been argued more recently (Hodgson et al., 2012), for the regions in the immediate coastal hinterland at any rate, that the impact of the Roman frontier may have been more disruptive than hitherto supposed.

To begin with, as we have seen, some of the settlements formerly regarded as typically native sites of the Roman period have been shown to have earlier occupation, so that the distribution cannot be assumed to reflect only native population under the occupation. In fact, Hodgson argued that the settlements at Blagdon Park 2, East and West Brunton and Pegswood Moor came to an end not long into the Roman occupation, possibly around the time of the establishment of the Tyne-Solway frontier. He revived Collingwood's suggestion (Collingwood and Myres, 1937: 127) that the pre-Hadrianic frontier east of Corbridge may have followed the line of the Devil's Causeway, thereby bringing the sites of the Northumberland coastal plain initially within the jurisdiction and protection of the Roman military. The decision to re-align the frontier across the Tyne-Solway isthmus from AD 122 therefore would have left these settlements exposed at best, and at worst may have resulted in their clearance from the immediate hinterland of the Wall by the creation of a 'buffer zone'. The evidence of radiocarbon dating and limited incidence of Roman finds certainly would be consistent with the abandonment of Iron Age settlements early in the Roman period but hardly permits a close attribution to a specific horizon. Hingley (2014) thought it unlikely that the Roman army would have deliberately disrupted a well-established agricultural regime that it could readily have exploited for its own supplies but conceded that the more stable environment growing up south of the Wall may have prompted some re-settlement.

Before the widespread application of radiocarbon dating, establishing the absolute date of native settlements in the Tyne-Tweed region was dependent on a few dateable Roman artefacts, often abraded survivals or lacking reliable or definitive contexts. Jobey therefore (1966b: 1) started from the initial premise that many of the 'scooped' homesteads of Northumberland overlay earlier Iron Age settlements, and like the Period IV settlement at Hownam Rings, their stone-built houses were most likely to have been occupied in the Roman period. There were numerous examples (Jobey, 1960, 1964) where stone-built settlements overlay the reduced or abandoned defences of earlier hillforts, from which it was inferred, not unreasonably, that such sequences might represent the re-settlement of a local community under the pax Romana. Among such sites, Greaves Ash in the Cheviot foothills (Figure 7.1) is one of the largest. Here, as many as forty stone-built houses survive in two adjacent groups, though these were almost certainly not all in contemporaneous occupation.

Native settlements in Northumberland showed considerable regularity in plan and layout and, on the basis of limited finds of Roman pottery and, in the absence of any definitive evidence of earlier (or later) occupation, were dated to the late first and second centuries AD. The circular, stone-built houses, commonly three to five in number and around 7 or 8 metres in diameter, were located on the leading edge of an upper terrace at the back of the enclosure and were generally approached by means of a causeway across two flanking cobbled yards. Towards

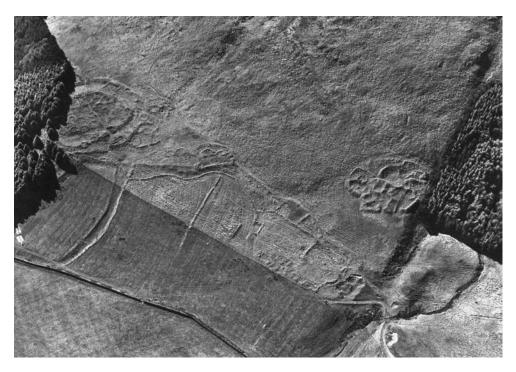


FIGURE 7.1 Greaves Ash, Northumberland, native settlement: air-photograph

Source: Photograph by D. W. Harding.

the Cheviot foothills curvilinear enclosures predominated, in which up to half a dozen stonebuilt circular houses, each some 7 or 8 metres in diameter, were ranged around the back of the enclosure with a scooped yard in front of them where livestock doubtless could be corralled. Their distribution was not uniform, but for the most part reflected the availability of better agricultural land or pasture. A concentration of sites in the north Tyne valley was so close to Hadrian's Wall that they could not have been occupied other than by negotiated agreement with the military authorities. In fact, the seeming regularity of distribution even suggested to Jobey (1966b: 6-8) the deliberate ordering of settlement for the purposes of agricultural development. Further north in the Cheviots too, he presumed that some degree of regulation would have been in force, the more so when the northern Antonine frontier was operational.

The growth in size of settlements in the early Roman period in the uplands beyond the frontier is well demonstrated at Hetha Burn (Burgess, 1970). Here the Roman Iron Age sequence began with a pair of stone-built round-houses within a sub-rectangular stone-walled enclosure, then progressing through two further stages of structural development, in which the number of houses was increased. In its final stage, the enclosure was extended so that no less than ten stone-built houses could be accommodated in what amounts to a small village. Dating was based on artefactual evidence, including native pottery in larger than usual quantity, but principally personal ornaments, none of which can be closely assigned to date. But the entire sequence could be accommodated in the period up to AD 200, with minimal evidence of occupation beyond that date.

The problem posed by the paucity of archaeological evidence for settlement in the later Roman period has long been recognized (Burgess, C. B., 1984: 171). It is plainly compounded by the limitations of material culture and the paucity of diagnostic types. But the Roman withdrawal from the Antonine frontier by the end of the second century may not only have made access to Roman material more difficult, but may have had more fundamentally disruptive consequences for the native population and its economy.

It was Jobey's own work on a group of sites in the north Tyne region, notably at Tower Knowe (Jobey, 1973), Belling Law (Jobey, 1977) and Kennel Hall Knowe (Jobey, 1978b), that qualified the older conventional view of stone building by demonstrating, not only that some stone-built settlements were not constructed until the mid-second century, but also that they had a much longer antecedent sequence of timber round-houses and enclosing palisades going back to the second century BC or earlier. The pattern of settlement was thus not established directly by the pax Romana but was part of a longer sequence of development. Dating evidence from native settlements, however, overwhelmingly points to their use in the later first and second century, reflecting perhaps more on the nature of the evidence than the span of the sites' occupation. At Crock Cleugh in Roxburghshire, excavations (Steer and Keeney, 1947) suggested the possibility of occupation continuing into the late Roman or even sub-Roman periods, while the latest stone houses at Hownam Rings were also assigned to the later Roman or even post-Roman periods. Evidence of later occupation in general, however, is remarkably sparse, to the point that Hill was moved to talk about a 'tableaux of desertion which may be compared with . . . the Highland clearances' (Hill, P., 1982a: 10). Without allowing the documented record of Roman withdrawal from the Antonine Wall and late second-century political upheavals on the northern frontier to pre-judge the issue, it is not unreasonable to infer that the fortunes of native settlement between and beyond the walls would have fluctuated with the political stability of the Roman frontier.

One site that stands apart from the general pattern is the enclosed settlement that replaced the earlier Iron Age multivallate fort at Edgerston, Roxburghshire (RCAHMS, 1956: no. 457). Here, several stone-built round-houses averaged 12 metres in overall diameter with stone walls nearly 2 metres thick, the inner faces of which were revetted by a timber framework bedded in a circular trench. These houses lay within an enclosure wall constructed in similar technique, though the exact structural sequence was not resolved by excavation in the 1930s. Finds were relatively prolific, including horse-harness and a range of personal ornaments, suggesting occupation of relatively high status in the first and second centuries AD. Perhaps this site served as a centre for the redistribution of prestige goods in much the same way as has been suggested (Macinnes, 1984) for the lowland brochs north of the Tweed. It would certainly warrant re-investigation.

South-west Scotland

Among the hillforts of the south-west, Castle O'er in upper Eskdale (Figure 7.2), together with its neighbour on Bailliehill (Figure 7.3), has yielded evidence of a thriving occupation in the early centuries of the first millennium AD (RCAHMS, 1997), broadly contemporary with the Roman advance into Scotland and the establishment of the permanent northern frontier on the Tyne-Solway line. The date of occupation is of particular interest because it raises challenging questions regarding the native relationship with the occupied territories. Situated some 10 miles from the fort at Birrens and the Annandale route into Scotland it is scarcely credible



 $\textbf{FIGURE 7.2} \ \, \text{Castle O'er, Dumfriesshire, hillfort: air-photograph} \\$

Source: Photograph by D. W. Harding.



FIGURE 7.3 Bailliehill, Dumfriesshire, hillfort: air-photograph

Source: Photograph by D. W. Harding.

that Castle O'er could have been occupied without the diplomatic agreement of the Roman authorities, perhaps involving the supply of cattle and hides for the Roman army.

Though small in its enclosed core area, Castle O'er (Mercer, forthcoming) appears to have been an important nuclear centre of a predominantly pastoral community, controlling a landscape divided by a complex system of linear earthworks. The fort displays two principal phases of construction, an earlier undated enclosure comprising double banks and medial ditch that may well have had its origins in the earlier Iron Age, and a later stonewalled enclosure within it, which on the basis of radiocarbon dates appears to have been occupied in the early centuries AD. This later enclosure was itself modified in a secondary phase of construction that saw the addition of a double hornwork around the south-west entrance. The whole nucleus is extended by an annexe that was evidently secondary to the primary hillfort, the outer wall of which it over-rides at the north end. The buildings within the interior of the fort reflect its defensive complexity. At first sight, a series of roundhouses would appear to flank a central street extending from the fort's northern to southern entrances. In fact, these represent cumulative construction over a period of time, and one group of round-houses at the north end overlies and therefore post-dates the dereliction of the fort defences. These houses were evidently timber built, in some instances with ringgroove foundations and with diameters up to 16 metres, certainly qualifying as 'substantial round-houses' (Hingley, 1992). In striking contrast to south-eastern Scotland, these houses show no sign of stone construction, either in the later pre-Roman Iron Age or in the period of Roman occupation.

A key feature of the Castle O'er hillfort was its annexe. Its earthworks, comprising double banks topped with palisade and medial ditch, were hardly of defensive proportions, but sufficient to contain stock. Radiocarbon samples from the primary filling of the annexe ditch again suggested activity in the opening centuries AD. A spring was contained within the area of the annexe, which would have been crucial to stock management, but larger areas of grazing would have been essential for significant numbers of cattle. The relationship between the fort and the surrounding linear earthworks is hard to demonstrate definitively because of damage by afforestation, but the case for regarding some significant part of the system as originating in a later pre-Roman Iron Age pastoral landscape has been convincingly argued (RCAHMS, 1997). Mercer estimated that the area enclosed by the White and Black Esk and the Black Burn, themselves an adequate water supply, would have been in excess of 1.4 square kilometres, on a par with the 300 hectares of the Stanwick fortifications at their maximum extent. He argued that these sites were not simply ranches that maintained permanent herds of hundreds of cattle, but were designed for the throughput of thousands. In effect, the native community at Castle O'er must have been in treaty relationship with the Roman military authorities to supply cattle and perhaps ponies and other meat and dairy products in a political context like that described by Tacitus (Agricola: 21).

South of the confluence of the White and Black Esks the hillfort on Bailiehill shows a parallel sequence of structural development, again with intensive occupation of the core fort by circular, timber-built houses, and with an enclosing annexe in which there are no traces of domestic occupation. It is hard to resist the conclusion that these two forts must have been broadly contemporary centres of territorial units associated with the pastoral communities of the Iron Age in upper Eskdale.

Within the Castle O'er complex, in a low-lying natural amphitheatre by a bend in the river White Esk, lies the enigmatic Over Rig enclosure. Its triple ditches describe a C-shaped enclosure, with an outlying earthwork on the higher slopes to the north and west. Notwith-standing its timber palisade and a pair of circular buildings of concentric ring-groove construction, the layout of the site and its location did not suggest a normal domestic function. In particular, a trapezoidal stone setting some 4 metres across formed the principal structure within the surviving area. Finds from the waterlogged ditches included two wooden 'daggers', the purpose of which is more likely to have been ceremonial than practical. The site conforms to no known class of settlement or ritual monument, but the excavator's inference that it was a place of ceremonial assembly seems not unreasonable (Mercer, 1985). Radiocarbon dates do not preclude the site's earlier origins, but the balance of probabilities favours its use in the opening centuries AD, contemporary with the occupation of the nearby forts.

A question of interest is how long this network of sites continued in occupation. Radiocarbon dates from the annexe outworks of Castle O'er could well indicate a prolonged use of the earthwork complex through the Roman period, while the timber round-houses overlying the hillfort earthworks at its north-east end, as we have remarked, evidently represent occupation after those defences themselves had fallen into decline. As ever, the lack of definitive or diagnostic material associations makes it difficult to demonstrate later Roman or even post-Roman occupation, but the environmental record from the locality suggests continuing activity until the mid-first millennium AD.

Stone-built houses were also conspicuous by their absence in the Roman Iron Age occupation of the settlement at Boonies, Dumfriesshire (Jobey, 1974). This small enclosure corresponds to what in the south-east would have been a scooped settlement, though its relatively level situation resulted in only the yard being noticeably sunken. The occupation of the interior at Boonies demonstrated at least seven phases of construction, almost certainly from the pre-Roman Iron Age, though the enclosure itself was probably a late addition. The latest settlement was represented by five round-houses in a group at the back of the yard. Each was defined by a ring-groove between 5 and 8 metres in diameter, and each had an area of paving leading to its entrance. These buildings were smaller than the ring-groove houses of earlier phases, in which seldom more than one was occupied simultaneously. This change in house size and number must indicate a change in social organization, but it is difficult to match it to any widespread pattern of social change. It may therefore reflect local circumstances, such as the impact of a form of partitive inheritance on the kin group. A single radiocarbon date, from a wood sample sealed by the bank, centred on the turn of the first and second centuries AD, while the material assemblage, including Roman pottery, a fragment of glass bracelet and a penannular brooch, together with less diagnostic native pottery and stone artefacts, was broadly consistent with the same chronological horizon.

Despite the evidence of radiocarbon dates, which somewhat erratically endorse a pre-Roman dating for the site at Long Knowe in Eskdale (Mercer, 1981b), it is worth recalling that here too the excavator believed that the final phase of occupation was represented by a shift in the domestic pattern from a pair of ring-groove houses to a group of five round-houses of reduced diameter. The presence of paving within these buildings or leading to their entrances affords a further parallel with Boonies. Given the recognition of at least seven successive phases of construction of these buildings, it is possible that the site's occupation reflects a similar pattern of progressive social change, represented by the phenomenon of size reduction and increase of unit number of domestic houses.

Roman period artefacts were also found at Carronbridge within the area of the main ditched settlement (Enclosure A), including a melon bead, a fragment of glass armlet and a fine

trumpet brooch (Johnston, 1994). On the basis of radiocarbon dates, this site evidently continued from probable pre-Roman origins through the second century AD and perhaps later, with metalwork finds of the ninth or tenth centuries indicating later activity in the area still. The parallel in plan between Carronbridge Enclosure A and Burradon, Northumberland, may be deceptive, if both are composite. The principal structure of the later occupation was apparently a ring-groove building with two, opposed entrances (Figure 2.12, 8), a feature already noted in later pre-Roman Iron Age settlements in northern England and the Borders. The very close proximity of a Roman temporary camp argues for a break in the sequence of native occupation, which might have coincided with the change in enclosure plan.

The enclosure at Woodend in Annandale (Banks, 2000) also showed a pattern of superimposed ring-groove structures, ranging in size from 5 to 10 metres in diameter, with some structures underlying the bank and others external to the enclosure altogether. The largest building, 12 metres in diameter, was interpreted on the basis of phosphate analysis and soil micromorphology as a stock pen, though a 'byre-house' of the kind discussed earlier might leave similar evidence. Otherwise, the structures were all considered to have been domestic in function. Radiocarbon dates did not exclude the possibility of a pre-Roman origin for the site, but they clearly indicated that its occupation must have extended well into the Roman period. In view of this, the total absence of Roman finds, on a site that lay barely half a mile across the river Annan from the Roman road, is surprising and not easily explained. This, together with the poverty of the material assemblage, which comprised exclusively coarse stone artefacts, is hardly indicative of a high-status settlement. In the absence of preservation of animal bones, the excavator nevertheless assumed that pastoralism would have been dominant in the local economy, and we may wonder whether the site might not have served a seasonal purpose rather than as a permanent settlement.

In sum, the evidence from south-western Scotland, not yet as abundant as for the southeastern Borders, indicates a considerable diversity of settlement continuing into the Roman period, with some notable regional differences in building fashions. Major hillforts are not in evidence, assuming that Burnswark was no longer in permanent occupation, and the evidence of field monuments might suggest a fragmented and less obviously hierarchical society than elsewhere. The continuing occupation of the hillforts at Castle O'er and Bailliehill, therefore, though not themselves major sites in terms of area enclosed, assumes greater importance. The number and quantity of Roman finds is limited, and distributed principally along the southern coastal settlements.

Burnswark and Woden Law: siege or practice works?

The role of Burnswark at this time remains unclear. For many years the presence of the two Roman camps on its northern and southern flanks, and the artillery platforms of the latter, strategically sited facing the hillfort (Figure 7.4), was taken as evidence that the hillfort for used as a practice range for siege and assault tactics by the Roman army. The argument was based on the fact that Jobey's (1978a) excavations had shown little evidence for continuation of the earlier Iron Age occupation into the Roman period, so that an actual siege of a derelict site seemed improbable. This conventional view has recently been challenged (Reid, 2016) as a result of specialist metal detector survey, which has identified concentrations especially of lead bullets, more effective ballistically than clay, along the southern ramparts and gates, as if they were the genuine product of an assault. In addition to standard-sized lemon-shaped and acorn-shaped



FIGURE 7.4 Burnswark, Dumfriesshire: air-photograph

Source: Photograph by D. W. Harding.

sling bullets, some smaller lemon-shaped bullets that could have been fired as grapeshot in groups of three or four were found with a small, circular hole in them, the purpose of which proved experimentally to be aerophonic, creating a buzzing sound that would certainly have been alarming to anyone on the receiving end. This alone argues against the practice theory in favour of an actual assault. A question arises therefore what exactly the status of Burnswark was at this point. Hillforts could have been occupied even when their defences were not maintained, or they could have been the emergency focus of collective resistance without permanent occupation. This of course has wider implications for the 'abandonment' of hillforts generally, where that assessment is based solely on the apparent failure to maintain the enclosure walls or where evidence for continuing 'permanent' occupation is absent, both terms that really require definition and clarification.

Equally problematic is the interpretation of the external earthworks at Woden Law. Richmond's sections across the earthworks in 1950 (Richmond and St Joseph, 1982) indicated that the innermost bank of the hillfort was the latest, late Roman or sub-Roman in date. The earliest enclosure was most probably the second in his sequence of four lines of banks (unless there was a palisaded site prior to that, which topographically in these parts would not be surprising). The dating of this early hillfort is wholly speculative, as is its relationship with the swathes of cord-rigging that extend across the south-eastern approaches between the hillfort and the palisaded enclosure to the east. That presumably early Iron Age palisaded settlement is surrounded and respected by cord-rigging that would therefore appear to be part of a contemporary landscape. Whether the cord-rigging between the hillfort outworks is equally early

can only be surmised. Between these two chronological horizons are the two outer lines of earthworks, which appear to link up with the annexe at the southern end of the hillfort, which may well represent later pre-Roman Iron Age activity, perhaps unusually continuing into the period of Roman occupation.

Outside these cumulative hillfort defences, extending around their eastern and southern sides, are the so-called Z earthworks (Figure 3.6A), a system comprising three lines of ditch with two banks between, which Richmond interpreted as Roman practice siege-works, on the basis of their distinctive construction, unlike the hillfort defences, and because they apparently faced west towards the hillfort rather than outward to the south-east. Though hardly necessary to 'beleaguer so insignificant a hillfort, which a determined assault would have overwhelmed in a matter of hours' (Richmond and St Joseph, 1982: 283), he envisaged the site as a training ground for troops based at Pennymuir, just a mile to the north-west.

Though no material dating evidence was recovered, Richmond's case should not be lightly discounted. But the role of the outer linear works W, X and Y (Figure 3.6A) in the Richmond model as training in ditch-digging and related fatigues seems less persuasive. Halliday (1982) initially challenged their interpretation, drawing parallels from sites like Tamshiel Rig for linear earthworks associated with pastoral settlements, and more recently Mercer (forthcoming) has suggested that Woden Law too may have been a centre for processing cattle to supply the Roman army, building upon the fact that it had been a focus for stock management in the pre-Roman period. The alternative interpretation is certainly persuasive, the one qualifying consideration being the state of preservation of the cord-rigging, which, fugitive as it is, might well have been obliterated completely by such subsequent activity.

Lowland brochs

A distinctive element in the Roman Iron Age landscape of southern and south-eastern Scotland, one that in many respects appears anomalous in a regional environment of small, enclosed homesteads, are the lowland brochs and duns. They appear even more anomalous in the light of recent research in the Atlantic north and west, where complex Atlantic round-houses can now be dated from the second half of the first millennium BC, since the lowland examples were evidently occupied in the first and second centuries AD, on the basis of Roman material found in their domestic assemblages. How these monumental structures relate to the local settlement pattern is not at all clear. Whether they represent an influx of élite groups from the north and west, or whether they are a demonstration of native monumentality by already established local élites in the face of the threat from an alien Roman culture, is a matter of debate. At Edin's Hall, Berwickshire (Dunwell, 1999), the broch seemingly did integrate within a larger settlement, or at least one phase of that larger settlement (Figure 7.5), and the same could be argued for Torwoodlee, Selkirkshire (Piggott, S., 1951). Structurally, the Edin's Hall broch poses problems of reconstruction, having an internal diameter that exceeds that of the largest of the complex Atlantic round-houses, so that roofing in a single span might be regarded as impractical, even in a region where supplies of suitable timber might have been more plentiful than in the broch's native environment. Whilst it may appear to conform to the archaeological typology, therefore, it is by no means clear that in this context it fulfilled the same role as a complex Atlantic round-house.

Site continuity from early Iron Age antecedents is not in dispute. At both Leckie (MacKie, 1982) and Fairy Knowe (Main, 1998), Stirlingshire, there was evidence of antecedent



FIGURE 7.5 Edin's Hall, Berwickshire, broch and native settlement: air-photograph *Source*: Photograph courtesy of Historic Environment Scotland (John Dewar Collection).

occupation, though this in itself does not minimize the radical nature of the structural innovation. Macinnes adopted a somewhat equivocal view: 'drystone architecture, of which brochs are perhaps the finest expression, was being adopted in southern Scotland independent of the brochs themselves', but at the same time, 'the various mural features characteristic of brochs were not duplicated in the local settlement record and the idea of these could indeed have derived from northern Scotland' (1984: 239). We are thus left with the tantalizing question, was this an independent local development, or was the idea consciously borrowed from the Atlantic round-house cultural tradition? Stone building technology was certainly well established in lowland Scotland and the Borders, both for the construction of hillfort defences and the foundations of domestic round-houses, but not on the monumental scale of brochs that would undoubtedly have impressed the agents of Rome. The technology may have been imported from Atlantic Scotland, therefore, for chauvinistic display, but it is unlikely that these isolated examples of lowland brochs imply the introduction of a new social order, or even the same function as brochs in the north and west.

Macinnes (1984) argued persuasively that, before the construction of the Antonine Wall, high-status sites including most conspicuously the lowland brochs and duns would have been the focus of a prestige goods economy, effectively monopolizing the acquisition and redistribution of Roman goods in the buffer zone north of Hadrian's Wall. Their role would therefore have been not as fortified centres of native resistance to Romanization but as the primary points of contact with emissaries of the imperial power. The total lack of Roman goods at Edin's Hall would seem to exclude its interpretation in accordance with this model, though the site otherwise is not lacking in material evidence for its high status. With the establishment

of the northern frontier on the Forth-Clyde line, of course, the native population would have come into regular contact with the Roman military and civilian apparatus at first hand, without the need of élite intermediaries.

The Antonine frontier

The Antonine Wall was occupied for a relatively short period in the mid-second century, so that a substantial impact on the rural landscape is hardly to be expected. In any event, archaeological dating techniques would be hard pressed to identify sites or phases of native settlements that could be attributed quite so precisely to this short interlude. Once again, however, a civilian presence is attested in the immediate environs of forts, notably at Inveresk, which occupied an important strategic site by the shores of the Firth of Forth. Early excavations revealed structures of some sophistication, which could have been town houses or a mansio; subsequent excavations (Thomas, G., 1988) uncovered a succession of simple timber-built rectangular structures of the Antonine period. Not far distant the site at Cramond has also yielded evidence of extensive extra-mural settlement. The presence of the military garrisons undoubtedly produced a demand for grain and other produce, though whether field-systems located by air-photography in close proximity to forts at Inveresk, Croy and Carriden, for example, are evidence of agricultural intensification at this time must be wholly speculative.

The Forth-Clyde line at the time of the construction of the Antonine Wall has sometimes been regarded as a political, cultural and possibly even linguistic boundary among the native tribes (Maxwell, 1976). Stevenson (Stevenson, R.B.K., 1966: 28) certainly saw 'a real difference in population north and south of the Forth' on the basis of the distributions of glass bangles, dragonesque brooches and dress fasteners. Nevertheless, we cannot simply equate the occurrence of Roman style artefacts in the archaeological record with 'Romanization' without closer analysis of the nature of those exotic imports. For the ruling élite of the Maeatae, control of Roman goods in the second century in the buffer zone beyond the frontier may have sustained a selective prestige goods economy in much the same way as has been proposed for the first-century lowland brochs. With the added factor of possible protectorate status providing security against potential aggression from Caledonian neighbours, they may have been replicating the policy of appearement which some of the tribal élites of south-eastern England had adopted in the initial stages of the conquest. But this is not to suppose that native identities were subsumed by Romanization, or that traditional practices were abandoned. As Hunter has shown (Hunter, 1997), hoard deposition in the north-east proclaimed a distinctly native regional tradition, and Roman imports were not used except in a handful of graves. Presence or absence of artefacts from the record therefore depends, not just upon their availability, but on what communities chose to do with them.

The fact that Roman policy reputedly preferred the creation of its frontiers along natural geographical or cultural and tribal boundaries need not mean that this was actually achieved in the case of either of the northern frontiers in Britain. The debate has even been refined to consider whether the Tay-Clyde line was closer to a meaningful cultural division between the native populations, and might thus have commended itself even from the time of Agricola (Maxwell, 1989: 125). Macinnes (1982) saw a distinction between the settlement patterns north and south of the Tay, and wondered whether the communities of the Fife peninsula might not have had Roman sympathies. Roman sources certainly speak of the hostile populations north of the Antonine frontier, first as Caledonians and Maeatae, thereafter as 'Caledonians and other Picti', though it is doubtful whether they were reliably informed on the actual tribal groupings within these populations. Identifying such groups archaeologically is likely to prove difficult in practice and questionable in principle, and is in any case bound up with the question of 'Pictish' origins, to which we shall return later.

Traprain Law

In an era when hillforts were archetypally regarded as early Iron Age, Traprain Law (Jobey, 1976) was regarded as the tribal capital of the Votadini of East Lothian and, together with Eildon Hill North, its counterpart among the Selgovae of the Borders, was assumed to have been in occupation up to the eve of the Roman conquest. As we have seen earlier, this view has been cast into doubt by modern excavation, which has indicated a sequence of occupation on both sites from the later Bronze Age through to the end of the Roman period at least, but with limited evidence for activity on either site in the pre-Roman Iron Age. The occupation of Traprain in the Roman period, of course, had long been recognized from material like the numerous glass armlets (Kilbride-Jones, 1938; Stevenson, 1956) dating to the second century or thereabouts.

In the case of Traprain Law, excavations (Armit et al., 1999; Armit, 2000) have undermined the older conventional analysis of the progression of its defensive enclosures from a summit enclosure of around ten acres, first to a 20 acre enclosure, then to 40 acres before reduction again in its final stage to a 30 acre enclosure (Feachem, 1963; Hogg, 1975). Only the rampart of the last phase, named the Cruden Wall after an earlier excavator and dated to the late Roman or sub-Roman period, survives as a significant bank, so that the proposed sequence was always tentative to a degree. The faint extant alignment of the northern side of the summit earthwork, probably of the late Roman period, concealed a stone founded wall, though scarcely one of defensive proportions, which in its incorporation of some stone of roughly dressed appearance and upright orthostats was not unlike the Cruden Wall, in construction if not in scale. The rampart of the 20 acre enclosure, sectioned in two places west of the summit, had evidently been a coursed, stone wall with rubble core but had been reduced and levelled for the foundations of a succession of structures of the Roman Iron Age. Overlying levels included a fragment of second-century samian ware, providing a terminus ante quem for the demise of the rampart, which thus could have originated in the earlier Iron Age.

This campaign of excavation was directed primarily at the summit of the site and did not target the western plateau on which Curle and Cree in the early years of the twentieth century had discovered evidence of intensive late Bronze Age occupation and industrial activity. Following a fire in 2003, further work was undertaken around the summit and its margins (Armit *et al.*, 2005; Hunter, 2005; Hunter, 2006a). The importance of this work was its demonstration of extensive occupation, possibly from the late pre-Roman Iron Age, but certainly through the second and third centuries AD and into the late Roman period. The nature of the buildings, which may have included both circular and rectangular plans, was not always clearly defined, but the site evidently was an influential native centre in the Roman period, perhaps even approximating to an urbanized model.

We have already reviewed Macinnes' (1984) case for regarding lowland brochs like Torwoodlee, Fairy Knowe and Hurley Hawkin as centres of regional élites that in the later first and early second centuries AD controlled the import of prestige goods from the Romanized south in order to sustain their social status and political authority. Much the same role may have sustained the special status of Traprain Law. Macinnes (1989) detected contrasting patterns of distribution of Roman imports in the Antonine period from preceding and subsequent periods. Whereas earlier Roman imports had been geographically restricted to the south and east of Scotland, and apparently channelled through high-status sites, including Traprain itself, the Antonine distribution was much more extensive geographically, with finds occurring on a wider range of sites. At the same time, the artefacts in question tended to be of more everyday and mundane types. Traprain in this period nevertheless remained exceptional in the range, quantity and quality of types represented. In fact, Traprain continues to be exceptional into the later Roman period, when Roman products once again elsewhere became limited in their distribution. Macinnes' conclusion was that the currency of Roman finds in Scotland was greatest, and their distribution most extensive, in the limited periods of actual Roman occupation. This would certainly accord with Fulford's view (1989:87), based on coin evidence from the German frontier, that the limes there did indeed act as a significant barrier to trade or exchange with the 'buffer' zone or regions beyond.

There are problems nevertheless in using Roman imports as a basis for dating and evaluating activity on native sites, as Fraser Hunter demonstrated, for example, in the apparent inconstancy of occurrence of Roman artefacts, samian being in limited supply in the Flavian period when coins were abundant whilst glass and pottery was amply attested between the mid-second and mid-third centuries when there was a paucity of coin evidence (Hunter, 2009b: 227). One analysis, however, suggested a 'strong correlation between the typological spectra of the samian vessels from Traprain Law and several Roman military sites' (Erdrich et al., 2000: 453). Yet taking the ceramic assemblage more generally it seems that Traprain, in common with most native sites, was attracted particularly to samian ware, rather than to other kinds of Roman pottery, a fact which tends to endorse the belief that samian was regarded as a prestigious acquisition. A similar correlation had been remarked in the types of brooches present at Traprain and at military sites in Scotland (Hunter, F., 1996: 121-3), which, if sustainable, could certainly be regarded as an index of Romanization, since it bucks the trend of native sites elsewhere. In general it seems that native communities favoured those brooches, like the trumpet, head-stud and dragonesque types, which accorded more closely to their own taste in personal ornament and display (Hunter, F., 2001a: 300-1). One inference to be drawn from the analysis was that the army was instrumental in the supply of samian pottery to Traprain, most probably through markets based on the vicus at Inveresk. Whether or not the relative percentages of forms (Erdrich et al., 2000: Table 1) absolutely demand this interpretation, the role of the local vicus in the supply of goods is probably more plausible than direct contact between the native centre and Roman mercatores or negotiatores. It is interesting in any case that the dining service of the native élite of Traprain Law had the same range of bowls, dishes and cups as their Roman suppliers in broadly the same proportions, since eating habits might be regarded as one of the more distinctive of cultural traditions. In sum, Traprain Law evidently enjoyed a status that was uniquely privileged in Roman Scotland in the Antonine period, and it was one which, from the continuing presence of Roman goods into the third century, would appear to have been maintained, albeit more remotely, after the Roman withdrawal to the Tyne-Forth frontier. Whether this resulted from a formal alliance of a quisling native aristocracy with the Roman authorities or from a mutual pact of co-existence, it evidently allowed Traprain Law to emerge at the end of the Roman occupation as a site of pre-eminence in south-east Scotland.

The late Roman period at Traprain was evidently one of intensive occupation, with the hill re-fortified as a 12 hectare enclosure within a stone-based turf wall. From Curle's excavation, Hogg (1951) reconstructed the settlement on the western shelf, comprising sub-rectangular and cellular elements flanking a roadway, while some of the rectangular buildings identified

more recently on the summit doubtless also belonged to the late Roman occupation. Identifying fifth-century occupation is necessarily more tentative with the demise of coins and diagnostic pottery, though some glass finds including possible Mediterranean imports (Price, 2000b) and less definitive artefacts like knobbed spear-butts and pins point to continuing activity. The principal find of early fifth-century date, however, is the famous hoard of late Roman silver plate (Curle, 1923; Hunter and Painter, 2013). Among over a hundred pieces was a flagon embellished with repoussé ornament depicting biblical scenes, a pair of spoons bearing the chi-rho monogram and a wine-strainer with chi-rho and the name of Christ outlined in its perforations. These were plainly prestigious pieces, though their presence in the hoard need not imply commitment to Christianity on the part of the Traprain aristocracy. The assortment of flagons, bowls and miscellaneous fragments could have originated in various parts of the Empire, arriving in Northern Britain by a variety of different routes. Much of the silver had been cut up or folded ready for re-processing, in a manner also noted in the later Norrie's Law hoard. The purpose of such Hacksilber hoards has been much debated. The older conventional view was that it represented loot from Roman sites, a diplomatic bribe to buy peace and neutrality from the tribal community based around Traprain, or even payment in kind for mercenary services, cut up by barbarians for recycling in the political turmoil of the early fifth century. A votive deposit seemed less probable, but should not be excluded (Hunter, F., 1997: 123, footnote 5), and need not be incompatible with other explanations of its previous purpose. It is now clear that Hacksilber was a phenomenon both north and south of the frontier in the later Roman period, its cutting into specific units of weight being not the random act of barbarians but a deliberate reflection of a bullion-based economy as an alternative to a coin-based system (Hunter and Painter, 2013). The fact that some of the crucibles from Traprain bear traces of silver (Hunter, 2013: 7) would suggest that material was being re-processed, perhaps into equally fine treasures like the massive silver chain from the site.

Material culture: native and Roman

Roman material from native sites has been a subject of study for many years (Robertson, 1970). The evidence from native settlements, the role of lowland brochs in the distribution of prestigious Roman goods and the special status of Traprain Law might all suggest that Roman goods were not uniformly available and were selectively received among native communities in Northern Britain. North of Hadrian's Wall, the majority of Roman imports was evidently acquired by native communities during periods of actual Roman occupation, though this is more readily demonstrated in the case of samian ware and coins than for finds such as brooches, which are not so amenable to close dating. The presence of odd sherds of samian on native settlements, of course, is in itself hardly a meaningful measure of Romanization. Hunter was surely right (Hunter, F., 2001a) to distinguish between occasional finds of a *single* type and those sites that yielded a greater *range* of types. Occasional finds may be no more than exotic curiosities or trophies, whereas the range of material displayed by Traprain Law, or the lowland brochs at Fairy Knowe, Leckie and Hurley Hawkin, suggests the adoption of new methods of food preparation and consumption, which might well signify a shift towards a Romanized way of life.

The material types in question themselves display a degree of selectivity, being principally those associated with feasting and drinking or personal ornament, that is, the traditional obsessions of Iron Age societies in north-alpine Europe that dictated the pattern of Greek, Etruscan and finally Roman imports. The third area of traditional interest, the warrior panoply and

equestrian gear, is not directly in evidence, though a degree of Romanization might be inferred from stylistic developments in native metalworking. The relative poverty of Roman goods from Scotland beyond the Roman frontier is commonly contrasted with the wealth of material in Denmark, a key difference being that the Danish material is largely derived from burial contexts in contrast to the surviving domestic debris of settlement sites in Northern Britain. The impact of Roman glass in Scotland, for example, is almost certainly underestimated in consequence by comparison with the lavish vessels known from Danish graves.

Roman glass from native sites in Scotland has been studied in some detail by Ingemark (2014), who argued that the distribution north of Hadrian's Wall was not a simple gradation, but showed concentrations in key centres, notably Traprain Law, which indicated selectivity of good-quality products on the part of local élites rather than the more random distribution of baubles for the natives. He also showed that the dominant forms represented were vessels associated with drinking, such as cups, beakers, bottles and flagons, and believed more controversially that these indicated that the native élites had adopted Roman drinking conventions, rather than simply using exotic imports to impress whilst retaining local social customs.

In fact, the distribution of Roman finds beyond the Antonine Wall is really quite extensive, especially on the east coast of Scotland. In the Inner Hebrides and Western Isles, finds are fewer, despite an intensification of research in recent years. In these areas, Roman imports must have been exceptional and exotic, whether brought by Roman entrepreneurs or through down-the-line native exchange. There are fragments of Spanish amphorae from the Gurness broch, apparently attributable to the broch occupation (Hedges, 1987: II, 82), which suggests that even Orkney may have been directly or indirectly a recipient of Roman trading goods. The mechanisms whereby Roman material founds its way into native contexts, therefore, were doubtless variable in different regions of Northern Britain, as indeed were the uses to which this material was put, and the relative esteem in which it was held. There can certainly be no automatic assumption that Roman products were held in awe by a native population that was technologically less advanced than the intrusive Roman culture.

The output and distribution of high-status native products at this time is instructive. Whereas much of the equestrian equipment of the first century AD, such as bridle-bits and terrets, appears to have been of southern derivation and has for many years been regarded as evidence of the displacement of aristocratic refugees and their retinues in the face of Roman military annexation, two distinctive types of the later first and second centuries AD stand out as having an eastern Scottish distribution, with few outliers south of the Forth-Clyde line. These are the massive armlets and snake armlets (Figure 7.6; MacGregor, 1976), ornaments whose sheer weight would have rendered them an uncomfortable extravagance for practical use, but which might well have been in demand for ceremonial display. Massive armlets have been found between the Tweed and the Moray Firth (Figure 7.7), with just one outlier in County Down, which could easily be the product of diplomatic exchange. The snake armlets are likewise concentrated in the east, between the Tay and the Moray Firth, with an outlier on Skye. A single example from a burial at Snailwell in Cambridgeshire, once regarded as indicative of an ultimate origin for the series in the south-east of Britain, is much more likely to have been a diplomatic gift or dowry from a northern potentate. Such anomalies should not distract from the distinctive and markedly regional character of both types. Their distributions accord quite closely with the distribution of souterrrains; indeed two of the massive armlets were found in souterrains. Yet other types, such as massive terrets, which are broadly contemporary, have on the one hand a more localized concentration in north-east Scotland and on the other a

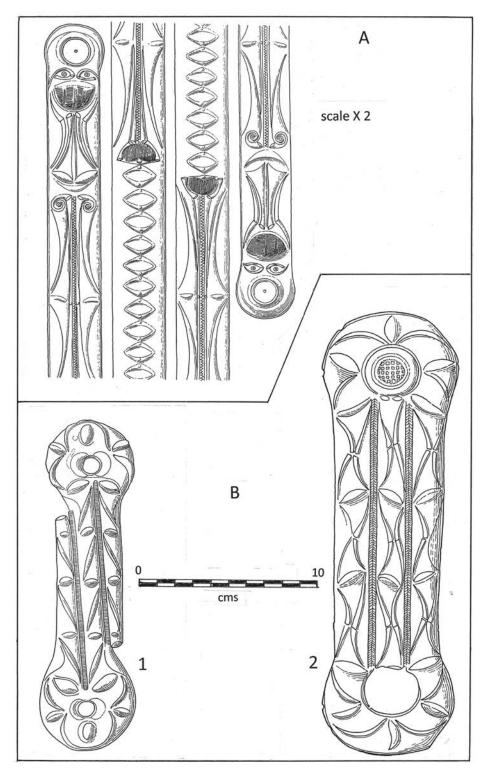


FIGURE 7.6 Scottish cast bronze armlets, A, Culbin Sands, Moray, spiral 'snake' armlet, B, 1, Bunrannoch, Perthshire, massive armlet, 2, Castle Newe, Strathdon, Aberdeenshire, massive armlet

Source: Drawings by D. W. Harding, adapted from MacGregor (1976).

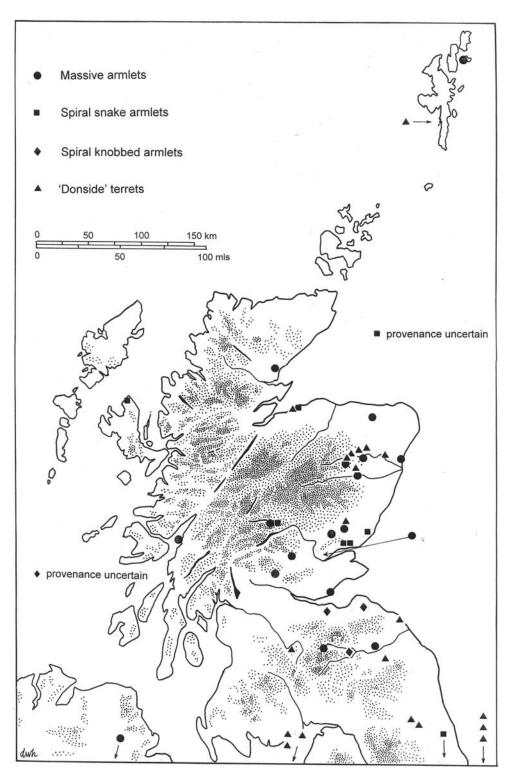


FIGURE 7.7 Distribution of massive armlets, snake armlets, knobbed armlets and Donside terrets *Source:* Drawing by D. W. Harding adapted from MacGregor (1976) and Hunter (2006b).

wider distribution extending through northern England with examples in the south-east and outliers in north Wales. It may be worth remarking that bridle-bits are not found north of the Forth, not because horses or horse teams were not harnessed, but more probably because bridles of perishable material – leather or rope with wooden, bone or antler accessories – were used instead.

The distribution of Roman coins from native contexts north of Hadrian's Wall broadly conforms to the distribution of Roman finds in general. Nevertheless, we should question whether the distribution entirely represents an authentic product of antiquity? Casey (1984) showed, on the basis of fourth-century issues that can be assigned to specific mints, that the profile of coins from native sites other than Traprain Law was at total variance from the profile of mints of coins from military contexts, raising serious doubts regarding the reliability of many of the native finds. Robertson (1975) had already noted that the denominations represented on native sites were consistently too high to be explained as the product of market activity, that is, there was insufficient small change.

Notable hoards are found in native contexts, as at Falkirk, not far from the Antonine Wall, where 2,000 silver denarii spanning the first to early third century were discovered sealed in a coarse ware pot (Robertson, 1978). They may have represented the accumulated wealth of a native trader, or they may have been payments made to the native population as part of a nonaggression pact, in effect a political bribe like the later dangeld (Todd, 1985). According to Roman historians, the late second and early third centuries saw a good deal of turmoil on the northern frontier, and Cassius Dio (LXXV, 5) in a celebrated passage recorded the governor of Britain Lupus buying peace from the Maeatae for a great price. In fact, there are over forty denarius hoards from Scotland dating from the Antonine period to the early third century, which may stand testimony to the Romans' desperate attempts to buy off trouble. One of the more northerly and most striking finds are the two hoards from Birnie, south of Elgin in Morayshire, actually buried within the precincts of a native settlement (Hunter, F., 2002). Here, a settlement of timber round-houses, probably dating from the early Iron Age, was occupied through the para-Roman period at least into the third century. The coin-hoards, each containing just over three hundred denarii, were not the only evidence of the adoption of Roman goods: Roman brooches included examples with silver and enamel inlay. Items of horse-gear suggested stylistic connections with southern Scotland. Attractive though the notion may be of payments for peace, we may wonder why natives from so far north were being bought off with silver coins that they had no obvious use for as currency or bullion. Was this simply their small share, passed down the line, of the peace dividend? Or was it brought by auxiliary veterans or deserters returning to exile in free Caledonia? Or could the hoards and personal ornaments have been acquired from maritime traders reaching the Moray coast? Would we have considered the idea of payments for peace, had not Cassius Dio sown the seed of that idea? By whatever agency it came, here was plunder or wealth to be extorted from the hapless custodians of the provincial frontier that would strengthen the fabric of native society and greatly enhance the status of its chieftains. Along the same stretch of coast, the large enamelled brooch discovered in 2014 at Auldearn testifies to the capacity and inclination of metalworkers to combine traditional styles of ornament with Roman types.

Some hoards of exotic material continue to defy simple explanation. The Helmsdale bowls (Spearman, 1990), from the coast of Sutherland, are of various probable dates and origin, in Britain or continental Europe. Their date of manufacture probably lies within the second century, but several have been repaired and show signs of use over many generations, and it

is probable that they were not finally deposited in the ground until the fourth century. They were evidently prestigious pieces, vessels, including strainers, associated with drinking and feasting, and would therefore have been attractive items for the chieftain's table. Whether he acquired them, directly or indirectly from southern neighbours, as booty or as a share in the price of peace, or whether diplomatic traders from the south still intermittently made direct sea-borne contact with the tribes of the far north, remains a matter of speculation. That the Romans were familiar with northern waters from an early date is not in dispute, and there is every reason to suppose that any political tactic would have been exploited to secure the northern frontier from harassment.

Ritual and special deposits

Other non-Roman sites from which Roman artefacts have been recovered include the Fife caves at Kinkell, St Andrews and Constantine's Cave at Crail, both investigated in the early years of the twentieth century. Both also produced evidence of industrial activity, ironworking and antlerworking at Constantine's Cave and boneworking at Kinkell. A variety of Roman material spanning the second to fourth centuries was also recovered from the Sculptor's Cave at Covesea in Morayshire (Benton, 1931; Shepherd and Shepherd, 1995; Armit et al., 2011), where a long sequence of activity from at least the Bronze Age to the early historic period is attested. In all, three rock carvings stand testimony to later use, small inscribed crosses at Kinkell and Constantine's Cave being indicative of early Christian activity, while the late Bronze Age ossuary and early historic symbol carvings at the Sculptor's Cave equally attest its long-lasting special status. Whether Roman objects had any symbolic or magical role in these contexts can only be guessed, but for societies in which domestic routines, industrial crafts and ritual activities were doubtless closely integrated these portable symbols of an alien identity may well have been seen as more than mere baubles.

The fascination with votive deposits in watery locations – lakes, rivers, marshes or wells – is widely attested archaeologically and in the documentary sources. Accordingly, Piggott (Piggott, S., 1953a) was surely right in seeing a votive context for the deposits in Carlingwark Loch, Kirkcudbrightshire (Figure 7.8, 2), at Blackburn Mill in Berwickshire and at Eckford in Roxburghshire, all attributed to the later first or second centuries AD. What distinguishes all three hoards is their combination of plainly Roman products with native Iron Age types, together with a number that are not definitively attributable to one rather than the other tradition, being common Romano-British types. Manning regarded Northern Britain in the Iron Age as technologically retarded (1972, 1981: 55-6) and cited the similarity between the contents of the hoards and assemblages from Roman forts on the frontier as evidence that the hoards were in some way related to the Roman military presence, perhaps as deposits by native auxiliaries. Fraser Hunter (1997: 116-17), however, has pointed to metallographic and radiographic analyses that demonstrate clear differences between the hoards and military material, so that native deposit, albeit with exotic Roman items, seems confirmed.

What does perhaps warrant further consideration is the presumed unity of contents and character of the three hoards. Piggott's conclusion that all three were indicative of 'farmers, shepherds, peasants and the village blacksmith' (Piggott, S., 1953a: 8) seems unduly influenced by the substantial quantities of tools and domestic equipment in the hoards. Present in all three hoards are harness gear or vehicle fittings that elsewhere would be accepted as highstatus equipment rather than for farm carts and peaceable country pursuits. Certainly personal

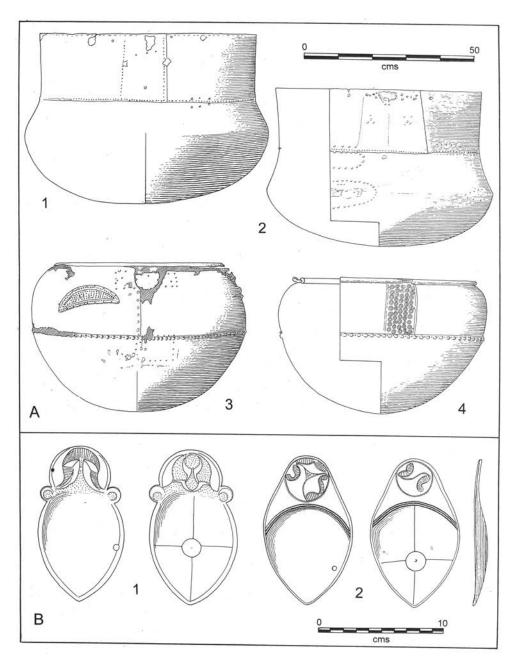


FIGURE 7.8 Metalwork from Northern Britain and Ireland, A: cauldrons. 1, Ballymoney, Co. Antrim; 2, Carlingwark Loch, Kirkcudbright; 3, Ballyedmond, Co. Galway; 4, Kincardine Moss, Stirlingshire. B: spoons. 1, Ireland, no provenance; 2, Crosby Ravensworth, Westmorland

Source: Drawings by D. W. Harding, adapted from MacGregor (1976) and Raftery (1984).

ornaments are decidedly absent, but cauldrons and cauldron chains, gridiron and tripod, would all normally be regarded as trappings for the aristocratic feast rather than for the use of shepherds and peasants. Finally, the presence of no less than eight tips of sword-blades from Carlingwark, together with a sizeable remnant of chain mail, must represent a martial component with very specific implications. Certainly Carlingwark, in the south-west, where Roman finds are less densely represented, stands apart in this respect from the other two hoards. Perhaps the hoards should not be assumed uncritically to have been deposited in identical circumstances.

What may be significant is the evident similarities between these high-status communal cauldrons and examples from Ireland (Figure 7.8), a similarity that extends to the enigmatic bronze 'spoons' that must surely have had a special, possibly ritual, purpose. Recalling the stylistic similarities between the Torrs pony-cap and the Loughnashade trumpet, we may speculate whether long-standing diplomatic or kin ties between the Iron Age élites of Northern Britain and Ireland might not have resulted in a close rapport between specialist metalworkers in their patronage. Dating of cauldrons and spoons has proved intractable on account of circumstances of discovery, and the radiocarbon date in the closing centuries BC for the Burnmouth grave (Sheridan, 2004: 175) is somewhat earlier than the conventional assessment of the spoons.

As a result of renewed fieldwork on an old find-spot, it transpired that one of the most remarkable native artefacts of the Roman period in Scotland, the Deskford carnyx (Plate 5B), was itself in all probability a votive deposit (Hunter, 2001b). Technical analysis has shown that the metal is re-used Roman material, high in zinc, in which different alloys appear to have been used to heighten the colour contrast of different component parts. Its date is currently assessed as between the first and third centuries AD. As to function, carnyxes are widely acknowledged as war-trumpets, but their potential in other ceremonial contexts should not be under-rated. As John Purser (pers. com.) has stressed, in accompaniment with the human voice and in the hands of a master musician they could 'provide rhythm, pulse, tonal variety, ostinato and drone, with a rich spectrum of harmonics'.

Souterrains

The study of souterrains in eastern Scotland in modern times owes its foundations to the fieldwork and publications of F. T. Wainwright, based particularly on his work at Ardestie and Carlungie in Angus and synthesized by him in a now seminal study (Wainwright, 1963). Though souterrains are conventionally thought of as coinciding in their distribution with the territory of southern Picts, Wainwright (1955: 91) was quite clear that chronologically their main period of use preceded the historical identification of Picts and that they had probably fallen out of use by the third century. Furthermore, he understood from his own fieldwork that souterrains were essentially part of settlements. Whilst he no longer subscribed to the view that they served as dwellings, his conclusion that they were closely associated with habitation sites would still command general accord.

The souterrains of Fife, Perthshire and Angus are characterized by their curving plan, sometimes with side annexes, ranging between 15 and 25 metres in length, Carlungie 1 being exceptional at nearly 40 metres. The width of their passages varied from 1.5 to 3 metres, and whilst walls were sometimes partially corbelled inwards, as at Carlungie and Ardestie, or in the well-preserved example at Pitcur, Perthshire, it is unlikely that all could have been spanned with single, massive stone slabs. In the case of more complex examples, souterrains must have been the outcome of more than one episode of construction, and in the case of Pitcur (RCAHMS, 1994: 63) the principal annexe itself accords to the plan and proportions of many standard souterrains. Internal architectural details, such as door rebates and aumbreys in the walls at Pitcur and elsewhere echo the techniques recognized in monumental stone buildings of Atlantic Scotland. The floor of the souterrain was frequently paved, and sometimes, as at Ardestie, a drain extended along its length. The passage could be up to 2 metres below the ground, but others were much shallower, and despite their name, it is clear that the roofs of many souterrains would have been visible above the ground. This factor is important since, together with their integral proximity to dwellings, it renders improbable the idea that souterrains could have served as defensive shelters, as Wainwright certainly recognized. Nevertheless, Warner (1980) made a cogent case for regarding Irish souterrains as refuges, so that purpose should not be discounted for some Scottish examples. Wainwright saw the classic souterrain as a stone structure, with stone walls and slabbed roof; where the latter were not in evidence archaeologically it was assumed they had been robbed in antiquity or early modern times. In fact, even without the evidence of the 'proto-souterrains' discussed earlier, the evidence from Newmill and elsewhere suggests that some roofs were of timber, in the case of those souterrains like Ardestie where the passage is less deeply founded, possibly being pitched rather than flat for extra headroom. Some souterrains had more than one entrance, perhaps, as Watkins (1980b) argued for Newmill, to permit access from within the integral dwelling as well as from outside.

One of the largest souterrains from eastern Scotland that incorporated a number of these characteristic features was that excavated in advance of roadworks at Ardownie in Angus (Anderson and Rees, 2006). The principal passage was 19 metres in length and some 2 metres in width, its walls corbelling inwards and upwards to a roof that did not survive. A second passage 10 metres long was reached through an entrance from the main passage and followed its alignment. Both were paved, and the entrance was marked by door jambs and bar-holes. Pollen analysis of deposits from the souterrain suggested that its function had been storage of both cultivated and wild crops and plants. Unlike Newmill, there was no evidence of any substantial earth-fast building adjacent to it, and it evidently was abandoned by the end of the second century AD.

Contrary to the popular equation with southern Pictland, souterrains are distributed quite widely in Scotland (Figure 7.9), with significant local distributions in Deeside, Donside and the north-east, Caithness and Sutherland, the Northern Isles and in Skye and the Western Isles. The particular concentration in Angus and eastern Perthshire coincides broadly with the territory of the Maeatae, the tribe against whom Severus and Caracalla are reported as conducting punitive campaigns in the early third century. The coincidence of distribution between souterrains and Severan marching camps (Armit, 1999b: Illus. 4) is striking, but Armit adduced evidence to show that in fact souterrains appear to have gone out of use by the end of the second century, even if the settlements to which they were attached continued to be occupied. On the assumption that souterrains were storehouses for agricultural produce, he saw their increase in numbers in the second century as a native response to the need for provisions of the Antonine garrisons. Conversely, with the withdrawal of the army from the Antonine Wall in the 160s the market for agricultural surpluses disappeared, and with it the reciprocal source of prestige imports, with a consequent destabilization of the native social order. Gillam (1958: 75) believed that the Maeatae in Antonine times had been in treaty relationship with the Romans, prompting Dio's claim (LXXV, 5, 4) that treaties had been broken by the insurrections of the late second and early third centuries. As for the idea of a souterrain abandonment horizon, several excavators have remarked that souterrains appear to have been deliberately infilled in

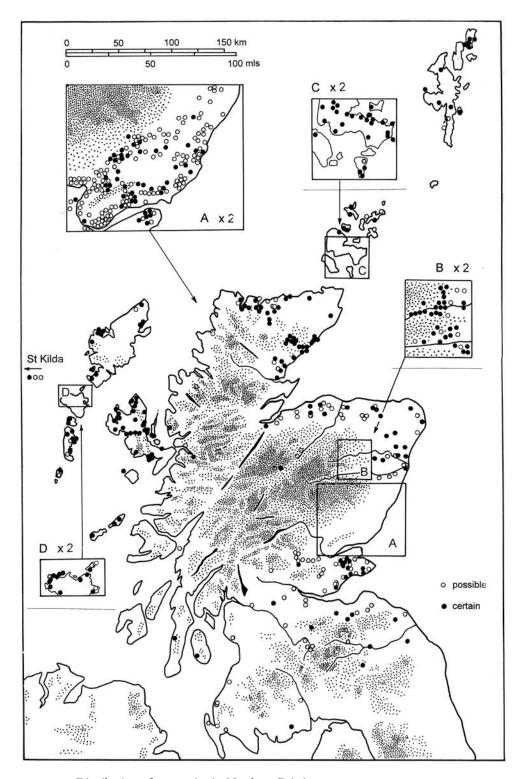


FIGURE 7.9 Distribution of souterrains in Northern Britain

Source: Drawing by D. W. Harding, adapted from Armit (1999b), Miket (2002) and from NMRS.

a single episode of activity, rather than being allowed to silt up with natural weathering. This need not of course imply that this was a coterminous event occasioned by wider political or economic factors, and there is no direct evidence of Roman involvement in their abandonment. Close dating is perhaps more problematic, not so much because of the 'heirloom factor', which has possibly been over-rated, but because the lack of third- and fourth-century Roman material from settlement sites generally makes it more difficult to establish a close chronology for occupation of native sites of this period.

Armit's (1999b) case for the particular use and abandonment of souterrains in Angus and eastern Perthshire should not obscure the fact that their distribution in Scotland is wider than that concentration, and their use, as indicated by radiocarbon dates from Cyderhall, Sutherland (Pollock, 1992) could begin significantly earlier than the Roman occupation. Analogous structures are known in south-western England and in Brittany, where they date from the early La Tène Iron Age, and from Ireland where most are assigned to the Early Christian period. There is no reason to suppose a single explanation for the function of souterrains, and there is certainly no reason to restrict their existence and use to the Roman horizon alone.

If the idea that souterrains were primitive dwellings is consigned to the realms of archaeological mythology, the most probable interpretation of their function is for storage, a northern counterpart to the pit-silos of southern England, which also were fancifully regarded as subterranean dwellings in an earlier age. Wainwright's belief that they provided shelter for livestock can hardly be sustained for any but the largest souterrains, and the current fashion for ritual interpretations is no more amenable to archaeological demonstration than are other possible functions. Storage itself implies a seasonal ritual, and the opening or closing of a souterrain would doubtless have been accompanied by special dedicatory or imprecatory ceremonies. Watkins favoured the idea of cereal storage, pointing to the broad coincidence between the distribution of souterrains and good quality arable land in eastern Scotland. Barclay (1980: 206) argued that the cool environment of these underground cellars would have been especially suitable for the storage of dairy produce, to which might be added meat storage, or indeed related processes like the smoking and curing of meat or fish. The significant point, however, is that the capacity of the larger souterrains would have exceeded considerably the domestic requirements of the associated family household and that some wider communal role is therefore implied. Whatever their function, it was evidently fulfilled by other means in the later Roman period, and even on the classic souterrain sites investigated by Wainwright evidence for occupation outlasts the use of the souterrains themselves, extending into the later Iron Age.

PART IV The later Iron Age



THE BORDERS AND SOUTHERN SCOTLAND

Hillforts and homesteads in south-east Scotland

Whatever impact the relatively brief Roman occupation made upon native communities, it is unlikely to have changed radically the distribution of settlement (Figure 8.1) or to have obliterated all memory of the importance of traditional centres, as the distribution of native sites in south-eastern Scotland and the Northumberland Cheviots shows. Where continuity is disrupted, it is more likely to have been the consequence of a shift in the focus of settlement well before the Roman advance, rather than the lasting consequence of short-term Roman repression. Tracing settlement continuity into the sub-Roman or post-Roman periods, however, is difficult, principally because of the lack of diagnostic assemblages in the period between the Roman occupation and the period of Anglian settlement.

As a starting point, we may re-visit the classic sites of Hownam Rings and Bonchester Hill. At Hownam, a stone-built house within the enclosure produced Roman material on its floor indicative of occupation in the later third, and possibly fourth centuries, and Mrs Piggott considered the possibility that occupation extended into the post-Roman period. At Bonchester Hill (Figure 8.2, 1), the intermediate circuit of enclosing ramparts, which unlike the earlier defences did not follow the contours of the hilltop, included a distinctive method of revetment of the front face of the rampart, using edge-set boulders with horizontal coursing above (Piggott, C. M., 1950: Cutting X, Figure 8.8). The excavator rightly observed that in Northern Britain this was a construction technique characteristic of post-Roman defences, and it closely resembles the method employed in cellular buildings in Atlantic Scotland in the mid-first millennium AD. Whilst material evidence for later occupation at Bonchester was sparse, and the blue glass bead claimed as Dark Age would no longer be regarded as diagnostically post-Roman, a later re-use of the hilltop should certainly not be discounted.

At Woden Law (Figure 8.2, 2), Rampart 3, which again incorporated substantial boulders in its facing, is evidently not of the same design concept as Enclosures 1 and 2, since its circuit ignores and blocks the entrance through the earlier three lines of defence. If the slighting of the Phase 2 earthworks is equated with the Roman use of the site, the possibility of post-Roman activity represented by Phase 3 should not be discounted. At least one stone round-house was



FIGURE 8.1 Location map of later Iron Age sites in Scotland

Source: Drawing by D. W. Harding.

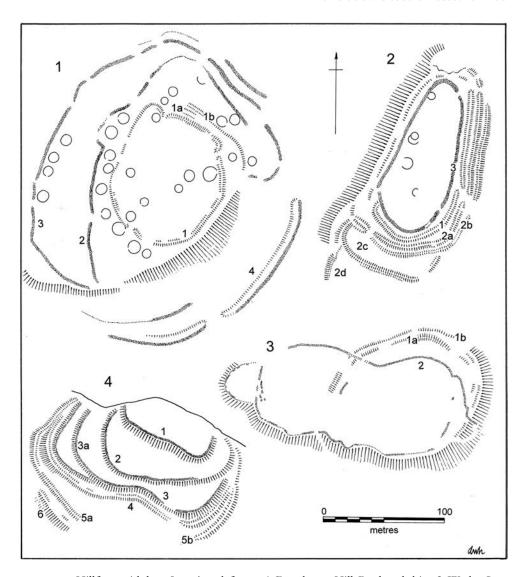


FIGURE 8.2 Hillforts with later Iron Age defences, 1, Bonchester Hill, Roxburghshire; 2, Woden Law, Roxburghshire; 3, Peniel Heugh, Roxburghshire; 4, Clatchard Craig, Fife

Source: Drawings by D. W. Harding, adapted from RCAHMS (1956) and Close-Brooks (1986).

built into the inner face of this latest rampart. An even more radical re-design in plan and wall construction is evident at Peniel Heugh, Crailing (Figure 8.2, 3). Here, the early Iron Age hillfort is succeeded on a markedly different orientation by a wall comprising an outer face of large orthostats with smaller masonry between, which, though exaggerated by some modern reconstruction, is plainly a different technique from that which characterizes early Iron Age defences. There is little trace of occupation of either early or later enclosures, and no artefactual evidence of dating. On the basis of the wall structure alone, however, a post-Roman context would not be impossible. In fact, a good case could be made for selective test excavation

aimed at retrieving samples for absolute dating in cases like Bonchester Hill and Woden Law, where discontinuity of plan suggests a different period of construction.

There are few instances in the Borders where artefactual evidence might support late occupation. At Crock Cleuch, Roxburghshire (Steer and Keeney, 1947), the ribbed annular brooch found on the floor of the principal house with sherds of 'native' pottery could well be from a post-Roman phase of occupation. The construction of the houses, with paved floor and central post, is distinctive, as are the massive orthostats incorporated into the outer face of the enclosure wall, and it is possible that the superficial evidence for Roman native occupation belies the longevity of re-use of such homesteads. At Huckhoe in Northumberland, the rectangular buildings that represented the latest occupation on the site appear to have been successive to stone-built round-houses of the Roman native occupation (Jobey, 1959). Apart from some scraps of fourth-century pottery, the site also yielded wheel-thrown wares that were assigned to the fifth or sixth centuries and compared to pottery from Dunadd, suggesting that occupation may have continued here uninterrupted into the post-Roman period.

The technique of boulder revetment noted at Bonchester Hill is also used in the construction of a pair of sub-rectangular enclosures linked by a trackway on Fasset Hill, Morebattle. One (RCAHMS, 1956: no. 678) has at least two periods of enclosure, the later extension embracing a building of rectangular plan. The neighbouring homestead likewise suggests structural modification, its surviving buildings being a sub-oval house and a smaller, probably secondary rectangular building. The trackway, and the cultivation terraces on the hill slopes beneath, are similarly revetted on their uphill side, and once again could represent a settlement pattern which continued from native Roman times into the early Medieval period. The settlement at Shank End, overlooking the Kale Water in Roxburghshire (RCAHMS, 1956: no. 310), likewise displays a combination of circular and rectangular house foundations, two adjacent to the enclosure wall and one more obviously overlying it within a secondary extension. The probability is therefore that rectangular plans were being adopted in the later Roman period on some native settlements, even if the tradition of circular building persisted among more conservative communities rather later into the sub-Roman period. Whether the two types of building were indeed in contemporaneous occupation on sites like Shank End and, if so, whether rectangular buildings served any different functions from their circular counterparts, is an issue that only research excavation can resolve.

The possibility that other forms of building characterized the sub-Roman or post-Roman phases in the region, as elsewhere in Scotland, is suggested by the secondary occupation at Park Law, Morebattle. Two sets of conjoined round-houses in particular, in one group amounting to little more than small, oval outbuildings, suggest units akin to the cellular buildings of Atlantic Scotland in the early mid-first millennium AD. At Staney Knowe, Morebattle (RCAHMS, 1956: no 641), some stone-walled circular buildings likewise were conjoined, and Stevens noted in one a secondary structure, which he believed may have had a beehive roof. The presumed transition from round to rectangular, therefore, should not be allowed to obscure the possibility of other classes of domestic structure in the early historic period.

South-west Scotland and the kingdom of Rheged

Archaeological evidence for post-Roman settlement in south-western Scotland and Cumbria, in terms of sites that can be shown to have been occupied in that period, is limited. In Cumbria, confident identification of non-fortified settlements is impeded, as for the pre-Roman Iron Age, by the lack of diagnostic material assemblages. Any notion that the region was largely

depopulated in the early Iron Age, and again in the early historic period after a period of settlement intensification in the Roman period, is hardly credible. On the other hand, political disruption caused by the withdrawal of Roman authority, and episodes of raiding, and perhaps famine or plague, may have resulted in patterns of transient settlement that not surprisingly are hard to detect archaeologically. Major centres of settlement like Corbridge and Carlisle might be expected to have sustained some continuing occupation into the post-Roman period, but what evidence there is for this does not suggest a significant presence for very long, even if the more substantial Roman buildings remained extant for some time. As in Northumberland and southeastern Scotland, we might expect that some earlier Iron Age sites would have been re-occupied, though there are many fewer hillforts in the region that might have become the focus for local communities. There is some palynological evidence for woodland regeneration in the mid-first millennium AD, but the pattern does not consistently attest a decline in agricultural production, and it is probable that pastoralism continued to be a dominant element in the economy.

The regions flanking the Solway Firth are traditionally ascribed for the early post-Roman period to the kingdom of Rheged, ruled over in the later sixth century by the warlord Urien and his sons until the region was absorbed by the Anglian settlement of Cumbria and Dumfriesshire in the seventh century. The documentary evidence for Rheged is based upon Welsh genealogies and court poetry ascribed to Taliesin; other major sources such as Bede, the Gododdin or the Anglo-Saxon Chronicle make no reference to Rheged. Its existence, therefore, remains tentative and its location even more so. Smyth (1984: 20-1) included the Eden Valley, coastal Cumbria and Dumfriesshire in Urien's realm, extending Rheged as far as Catterick in the early post-Roman period. This was essentially the view of A.H.A. Hogg (1965), who saw Rheged as the early historic successor to the territory of the Brigantes, minus that region in its south-eastern quarter that was absorbed into the kingdom of Elmet. He even suggested that Burwens, one of the Westmorland series of 'native' sites, might have been the location of Urien's 'palace'. A more minimal view was taken by McCarthy, who pointed out that twenty-five years of careful, selective excavation in Carlisle failed to produce any evidence of occupation there in the sixth century in the form of Mediterranean or Gaulish imports of the kind represented at Whithorn. Accordingly he placed Rheged in the Rhinns of Galloway (McCarthy, 2002), whilst acknowledging that there was no archaeological evidence to support the linguistic identification of Dunragit, between Glenluce and Stranraer, as a stronghold of an early post-Roman kingdom of Rheged. Indeed Laing and Longley (2006: 164) suggested that Dunragit may have had another derivation entirely, undermining the otherwise limited case for a western focus for Rheged.

The one outstanding centre of early post-Roman occupation is the Mote of Mark, on the north side of the Solway Firth in Dumfries and Galloway (Plate 11A; Laing and Longley, 2006). Occupying a rocky knoll overlooking the Urr estuary, the Mote of Mark was evidently a site of importance disproportionate to its small size (1/2 acre, 0.2 hectare). Sub-trapezoidal in plan, it measures some 60 metres by 30. It was enclosed by a stone-faced, timber-laced rampart, now much denuded, which on its north side was found to have been 5 metres thick. The defences were destroyed by fire, resulting in traces of vitrification, and dismantled in the mid-late seventh century AD. Alexander Curle in 1913 had wrongly inferred two stages of rampart construction, but excavations in 1973 and 1979 had confirmed just a single rampart. Internally excavations had yielded a rich assemblage of metalworking debris, including moulds for penannular brooches and for a mount decorated with interlace. Sherds of imported D-ware and E-ware, and Rhenish glass indicate long-distance connections with continental Europe. Occupation of the hill and metalworking may have preceded construction of the defences, but the fort was occupied through the later

sixth and much of the seventh centuries. The later occupation of the site yielded Anglian finds, including one certain runic inscription, a personal name carved on bone, and a second possible inscription on stone. In view of the archaeological evidence for Anglian expansion in the seventh century, it is possible that the destruction of the Mote of Mark was related to documented political events, but some occupation of the site appears to have continued until the end of the century.

Though the Mote of Mark appears to have been a relatively important centre of Rheged, the excavators did not claim it as a royal residence, but perhaps the residence of a master smith occupying intermediate rank in a hierarchical social structure, receiving dues from subordinates but owing hospitality to superiors. The site was certainly well located to capitalize upon the mercantile connections of the western seaways in the later sixth and seventh centuries.

A site that equally has yielded evidence of high-status activity in the later Iron Age is Trusty's Hill, Anwoth (Plate 11B), a small, nuclear fort, or perhaps an early Iron Age citadel around which outworks were added during an early historic re-occupation, first excavated by Charles Thomas (1960) and more recently re-examined by the Galloway Picts Project (Toolis and Bowles, 2013). Though radiocarbon sampling suggested initial occupation of the hill around 400 BC, the timber-laced rampart has been dated between early sixth and mid-seventh centuries AD, with that rampart being destroyed by fire resulting in vitrification in the southwest sector at the end of this period. Activity in the sixth or seventh centuries AD has long been indicated by the carving on outcropping rock beside the southern entrance to the citadel of Class I symbols, a rare example in southern Scotland. But contemporary artefacts now endorse this occupation, in the form of a rim of imported E-ware and crucibles and mould fragments that suggest that Trusty's Hill was an important regional centre.

Cemetery evidence is less well documented, though sites have been detected from air-survey (Cowley, 1996). They generally comprise fewer than a dozen barrows, including some round barrows as well as square and sub-square. Though they share some features of square-ditched barrow cemeteries north of the Forth, their morphology is less distinctive, including more irregular quadrilateral ditches, and their dating remains wholly undemonstrated, though assumed to be Iron Age.

Nuclear and citadel forts

The concept of the nuclear fort was first advanced by R.B.K. Stevenson (1949b) and has become synonymous with princely centres of the early historic period. The defining characteristic of the nuclear fort, as represented by the type-site at Dalmahoy, Midlothian (Figure 8.3, 4), was its summit citadel, from which a series of subordinate enclosures looped out around lower plateaux to create a hierarchy of enclosures, determined largely by the naturally craggy topography of the site. The choice of site was evidently dictated by the requirement for this hierarchical relationship between citadel and subordinate enclosures. Since this was not a determining criterion in the location of earlier Iron Age fortifications, it is hardly surprising that some of the more distinctively precipitous sites, like Dundurn and Dumbarton Rock, appear to have had minimal if any previous history of occupation in the later prehistoric period. Though the concept of a nuclear fort could have been a unitary one from the outset, achievement of the concept in tangible circuits of enclosure may have come about progressively over time. This was demonstrated archaeologically by Alcock at Dundurn (Alcock *et al.*, 1989) and apparently was also the case at Dunadd (Figure 8.3, 3; Lane and Campbell, 2000).

In his study of 'Pictish' fortifications, Feachem (1955) added a related category of 'citadel forts', in which the citadel is surrounded by outer ramparts, generally at a lower contour, but not linked together in the spider's web of the nuclear forts. This form was less obviously distinguished from earlier Iron Age hillforts with outworks; indeed, Feachem examined several sites

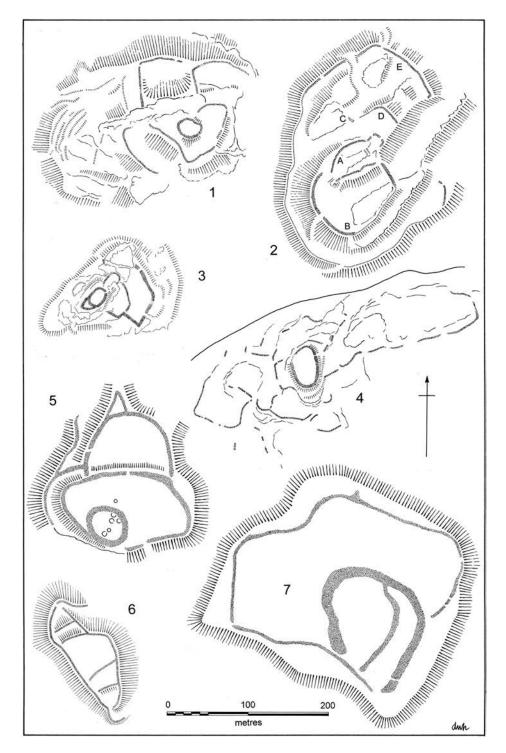


FIGURE 8.3 Nuclear and related forts: plans, 1, Dundurn, Perthshire; 2, Rubers Law, Roxburghshire; 3, Dunadd, Argyll; 4, Dalmahoy, Midlothian; 5, Moncrieffe Hill, Moncrieffe Hill, Perthshire; 6, Moat Knowe, Buchtrig, Roxburghshire; 7, Humbleton Hill, Northumberland

Source: Drawings by D. W. Harding, adapted from Alcock et al. (1989), RCAHMS (1956), Lane and Campbell (2000), Stevenson (1949b), Wainwright (1955) and Waddington (1998).

where a citadel had seemingly been built within the derelict remains of early Iron Age forts, the walls of which he supposed were either re-used or served as a quarry for building materials.

Almost certainly of post-Roman date, on account of its extensive use of robbed Roman masonry, is the citadel and adjacent outworks on Rubers Law, Cavers, Roxburghshire (Figure 8.3, 2; Curle, 1905). Here both the citadel wall and the wall surrounding the plateau to the south were of substantial proportions, incorporating the use of large boulders in their facing and together with lengths of wall flanking the main approach to the summit from the north-east may be regarded as part of a unitary construction. The outermost wall (E), on the other hand, enclosing nearly 3 hectares around the contours of the hill, shows no sign of re-used Roman stonework, and may date from the earlier Iron Age. The presence of a Roman signal station on the site has been inferred not only from the re-used Roman masonry, but from the discovery of Roman finds on the site, notably the hoard of bronze vessels found in 1863. At Moat Knowe, Buchtrig (Figure 8.3, 6), by contrast, an early historic dating is inferred solely from the similarities in plan to the nuclear prototype, the central summit having two lower plateaux enclosed on its north and south sides. Again, the walls of both summit citadel and lower courts are sufficiently substantial to suggest that they were part of a contemporary and unitary design. In the summit enclosure, the use of edge-set slabs could certainly be matched in building techniques of the early historic period elsewhere. The fort on the summit of Chatto Craig, also in Hownam parish, is closer in plan to a citadel fort than a nuclear fort, but on the basis of its layout and use of outcropping terrain has been identified as potentially of the post-Roman period (RCAHMS, 1956: no. 305). In Northumberland, Humbleton Hill (Figure 8.3, 7; Waddington, 1998), likewise has the prospective appearance of a citadel fort, though its date has yet to be confirmed by excavation, and Jobey (1965, 1966a: 98-9) was equivocal regarding its candidature as a post-Roman site.

Outside Scotland, forts with similar layout to the 'nuclear' type have been identified in North Wales and the Isle of Man. At Cronk Sumark, Man, the inner of two ramparts that loop around the summit citadel has yielded vitrified material, though the construction and occupation of the site remain undated (Champion, S., 1995).

A salutary lesson on the dangers inherent in interpreting field monuments on the basis of surface morphology, however, was provided by excavations in the 1960s and again in the 1980s at the Dunion, Roxburghshire, a site that was assigned on the basis of surface survey to a later Iron Age date (RCAHMS, 1956: no. 33; Rideout *et al.*, 1992). The quasi-nuclear layout of enclosures, and the use of massive boulders, up to a metre in height at one point (Rideout *et al.*, 1992: 82), in the construction of the walls, might well have encouraged this view. Neither campaign of excavation, however, yielded any evidence whatsoever for construction or occupation in the early historic period, but they did demonstrate fairly conclusively, on the basis of radiocarbon and thermoluminescence dating as well as artefactual evidence, that the site was occupied in the closing centuries of the pre-Roman Iron Age, perhaps extending into the early Roman period. The case for regarding the site as an important local centre in the earlier Iron Age is thus correspondingly enhanced, along with the possibility that the hierarchical arrangement of enclosures, exemplified most notably in the nuclear forts of the early historic period, may too have had its origins in an earlier social order.

Crannogs

Crannogs have been recognized in the lochs of south-western Scotland since the pioneer days of lake-dwelling research, among which Buiston (Figure 8.4, 1) and Lochlee (Figure 8.4, 2) in Ayrshire, extensively reported by Robert Munro (1882), are conventionally regarded as classic

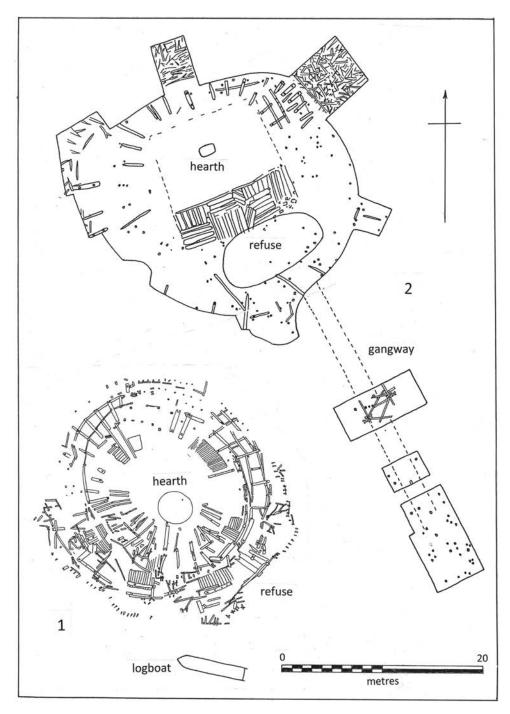


FIGURE 8.4 Munro's 1882 plans of Buiston (1) and Lochlee (2) crannogs *Source:* Drawings by D. W. Harding.

examples of early historic settlement in the region. These, together with a concentration of sites in the lochs of Dumfries and Galloway, fall within Jon Henderson's (1998a) South-Western or Solway-Clyde distribution. Some, like Milton Loch I and II and Loch Arthur have radiocarbon dates indicating occupation in the later prehistoric period. Others, like Milton Loch III and perhaps Barean Loch on the basis of radiocarbon dates might be assigned to the early historic period (Crone, 1993). Of those reported by Munro, the Black Loch at Inch (formerly Loch Inch Cryndil), yielded a composite bone comb with ring-and-dot ornament, suggesting occupation in the later first millennium AD. Though commonly attributed to the early historic period, Lochlee produced little evidence of occupation between the Roman Iron Age and the ninth-century AD. Buiston crannog (Crone, 2000) is unique in having both radiocarbon dates and an abundance of artefactual evidence supporting its attribution to an early historic horizon.

In fact, Buiston also has the benefit of dendrochronological dating, which not only qualifies the evidence of radiocarbon values within a problematic range on the calibration graph, but also permits much greater precision in the assessment of the duration and structural episodes of its principal buildings. The initial construction of the artificial mound at Buiston evidently took place in the first or second centuries AD, but virtually nothing, structural or artefactual, survived from this period of use. The later occupation may now be assigned to a relatively short occupational sequence between the later sixth and mid-seventh centuries, though the removal of 'thirteen cart-loads' of material from the site when the loch was reclaimed in the late nineteenth century (Munro, 1882: 190) may have destroyed the latest occupation levels. The excavators argued that the houses of Phases II and IV, apparently spanning 475 radiocarbon years, in reality from dendrochronological assessment only lasted between 26 and 33 years (Barber and Crone, 2001). Unlike some crannogs that artificially reinforce a natural rocky outcrop on the loch bed, Buiston had been built on an island of stony rubble, timber, brushwood and turf on the loch sediments, so that its foundations were inherently unstable from the outset. Nevertheless, the successive surrounding fencelines of substantial stakes of the later occupation, themselves too of relatively short duration, were not intended to buttress the mound, but served as a stockaded perimeter for the compound. The technique of tying the external stockade with radial timbers into the crannog mound, and the construction of the perimeter walkway is closely paralleled at Lochlee, some 10 miles distant from Buiston, leading Crone to suggest that the two settlements might have been the work of related, contemporary communities (Crone, 2000: 106), by contrast with the crannog in Loch Glashan, Argyll, for instance, which incorporated different construction techniques. Tempting though this idea might be, the artefactual remains from Lochlee, with the exception of the much later ring-pin, provide little encouragement for believing that its construction was later than the first or second centuries AD. As regards access, there was no causeway at Buiston leading from the shore to the crannog, which must therefore have been approached by boat. Log-boats were recovered both from Munro's and the more recent excavations.

A further important outcome of the 1989–90 excavations was the re-appraisal of the evidence for a principal oval house occupying with its walkway the entire island. Crone argued that the supposed outer wall of this structure was in fact one of the succession of perimeter stockades, and that the internal round-house was therefore not nearly as large as formerly inferred, being in its developed plan no more than 8 metres in diameter. The house itself was of stake-wall construction with no surviving evidence of daub, so that organic cladding of the

wattle walls is inferred. An internal hearth of rectangular or trapezoidal plan, securely founded in a clay floor, was rebuilt on several occasions. Evidence for joinery was well preserved in the sodden conditions of the crannog, including sill-beams into which panels of wattling for internal partitions were jointed. Closest in technique of construction to the Buiston houses are those from Northern Irish sites like Moynagh Lough, but the much greater size of the broadly contemporary Irish sites is such as to suggest their use by a rather different social unit. On the basis of Munro's plan, Bersu (1977) had pointed to Buiston and Lochlee as the closest analogies for his multi-ringed houses at Ballacagen and Ballanorris in the Isle of Man, dated by him to the early centuries AD, but possibly still in occupation somewhat later. In detail, however, the Manx sites are singular, and any relationship is hardly close.

Evidence for the economic basis of the Buiston community included barley, oats and flax, though it was not possible in the case of the latter to determine whether it was grown for oil or for textile fibre. The presence of rotary querns indicates the processing of grain, and the discovery of two ards endorses the probability that the occupants were engaged in cereal cultivation. The faunal evidence was limited, but included cattle, sheep and pigs; two wooden churn lids and items of equipment ancillary to weaving indicated a range of secondary products. Natural resources like nuts, fruits and berries were exploited. Metalworking was carried out on a limited scale, witnessed by stone ingot moulds and three crucibles, but in quantities that scarcely match those of major centres of production like Dunadd or the Mote of Mark. External contacts are nevertheless testified by a range of imported goods, including E-ware vessels, in which it is possible that exotic spices and other goods may have arrived. One contained traces of dyer's madder, a prized source of purple dye not then native to Britain. Several other items, notably the hanging-bowl, annular brooch and coin (an ancient forgery) all derive from an Anglo-Saxon source. Other prestigious goods from Munro's investigations included two gold spiral finger-rings.

What all this amounts to in terms of the status of the Buiston crannog settlement, or by inference of others of comparable size and date, remains equivocal. Evidence for metalworking, and the quality of the material assemblage, argues for a high-status community, but there is little in the structural remains or in the evidence for food-producing economy, to suggest that this was more than the homestead of a wealthy farming family, assuming that the site was occupied permanently rather than seasonally. The scale of the site does not equate with the major Irish crannogs, such as Lagore or Moynagh Lough, which are nearly four times the size of Buiston, or Ballinderry 2 (Hencken, 1942), which is no less than ten times larger in area. Neither does the range and wealth of its material assemblage match the Irish royal crannogs like Lagore (Hencken, 1950; Lynn, 1986) and Ballinderry (Hencken, 1936, 1942). In a hierarchy of settlement, Buiston, therefore, might rank in a second tier, and as the homestead of a family of some status rather than as a community settlement.

Long-distance trade

There can be little doubt that, with the final breakdown of Roman administration in Britain, the political geography of Northern Britain would have been in a state of dynamic change, with rival kingdoms vying to establish their authority. One means of asserting that authority was through the control of imports and external communications, and there is considerable archaeological evidence for such external trade and exchange along the western seaways between the fifth and seventh centuries, in the form of imports of pottery, glass and other

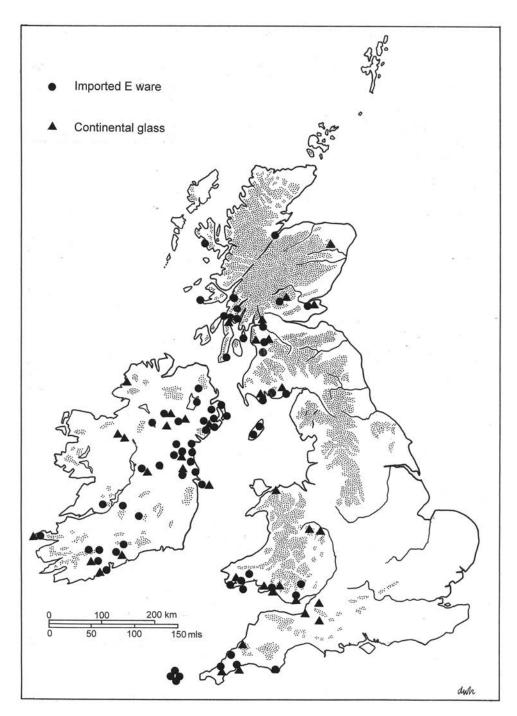
exotic items (Campbell, 2007). The nature of these imports has been much debated, whether the product of mercantile trade, of cabotage along the western seaways, of imports controlled by and thence redistributed from key centres, or simply the scattered outcome of a handful of merchant venturers. The products themselves are almost as much an issue of debate as are the goods offered in reciprocation. It is, however, on the pottery and glass containers that archaeological attention has conventionally focused.

Imported pottery of the post-Roman period was classified many years ago as a series A-F (Thomas, A. C., 1959). Two groups of imports have been identified, overlapping and successive in their chronological currency, the first deriving from the eastern Mediterranean or north Africa, the second from sources in western continental Europe (Lane, 1994; Campbell, 1996a, 1996b). A major component among the imports are amphorae, classified as B-ware with particular sub-groups resulting from various centres in the eastern Mediterranean over a considerable span of time. Their association with a class of tableware known as Phocaean red slipware allows the dating of these imports to south-western Britain to be assigned to a bracket from the later fifth to the mid-sixth centuries AD. The overall distribution of these wares, with concentrations in southern Spain and in south-western Britain, rather than a gradual fall-off in density of distribution with distance from the Mediterranean source, looks like targeted trade. This has prompted the suggestion that Mediterranean products - wine, olive oil and perhaps more exotic items such as perfumes, spices and silks - were being introduced in exchange for tin, and perhaps lead and silver, from south-western Britain. In this model, any examples from Ireland or western Britain, such as the amphorae sherds from Whithorn or Dumbarton Rock, would thus be the result of secondary distribution from south-western Britain.

In Northern Britain, it was the subsequent continental imports (Figure 8.5) that appear in greater quantities, though in absolute terms these remain fairly modest. E-ware, comprising coarse-gritted white or grey ware jars, bowls, beakers and occasionally jugs, has a much denser distribution across Ireland and south-west Scotland, with some secondary transmission to east coast sites between the Forth and the Tay. There is a marked absence of instances of E-ware in North Wales, Lancashire and Cheshire or in Cumbria, suggesting that the Dee, Mersey or Morecambe Bay were not significant ports of entry at this time. Its continental source is much debated but must have been in west-central France around the Loire or the Charente regions. E-ware was conventionally regarded as kitchenware, but more detailed analysis showed little evidence of its use in cooking (Campbell, 1996a). Instead, it was evidently used for the import of exotic goods, such as plants used for dyes, and possibly also for exotic spices and herbs like coriander and dill.

Glass too, principally conical beakers but occasionally bowls, was imported from production centres in western France or the Rhineland. A distinctive element of the high-quality beakers is the decoration with opaque white-trailed ornament. These glass vessels are sometimes associated with late sixth-century D-ware, which is very rare in Britain, and in Britain was more probably introduced together with the majority of E-ware imports in the seventh century. Whether glass was imported as whole vessels, or as cullet for recycling in other ornaments, has been much debated, but some at least must have arrived as intact vessels (Campbell, 1996a: 93, 2000).

We should of course consider these imports in the context of early historic trading and exchange patterns. Unlike the Anglo-Saxon world, there is no evidence in the Celtic north



 $\textbf{FIGURE 8.5} \ \ \mathrm{Distribution} \ \ \mathrm{of} \ \mathrm{E-ware} \ \ \mathrm{and} \ \ \mathrm{Continental} \ \ \mathrm{glass} \ \ \mathrm{in} \ \mathrm{Britain} \ \ \mathrm{and} \ \ \mathrm{Ireland}$

Source: Drawing by D. W. Harding, adapted from Campbell (1996a, 2007), Lane and Campbell (2000), Alcock (2003) and Ingemark (2014).

and west for the development of trading emporia or towns, or of a money-based market economy and merchant class. Indeed, the emergence of Anglo-Saxon trading ports in the eighth century doubtless contributed, by diverting continental sources of supply, to the demise of the Atlantic sea-borne network. Imports would therefore most probably have been controlled by major centres under royal patronage, or possibly by monastic communities with their own long-distance connections. Campbell (1996b) has shown how sites whose royal status is attested by documentary sources appear to have exercised some control not only over imports, but also over the production of personal jewellery or glass and other precious or prestigious goods. Other sites, not affirmed as royal in documentary sources, may nevertheless have enjoyed proximate status in a hierarchy of control over production and exchange. Sites like Dunadd would plainly fall into the category of high-status centres in this model, with sites like Mote of Mark, Buiston crannog and Trusty's Hill perhaps ranking in a second order. The position of Whithorn in this hierarchy is unclear, though it evidently enjoyed special status. Changes nevertheless are evident from the sixth into the seventh centuries, with the Anglian expansion and the advent of monasticism. The redistribution process, as Mytum (1992: 266) has underlined, may serve to endorse relationships with social peers, or may re-affirm asymmetrical relationships with a system of clientship. The influence of abstract ideas or artistic styles from both Mediterranean and continental sources is also archaeologically difficult to estimate. What was being exported in exchange for imported goods is again hard to assess, though it is easy to fall back on the staples of the pre-Roman Iron Age, reported by Strabo and others, raw materials, hides and furs, and slaves. The traditional story of St Patrick, a Romanized Briton who was transported to Ireland by slave-traders before escaping captivity to begin his mission, is doubtless just one enduring image of the widespread practice of slave-trading in the centuries following the collapse of Roman rule.

The archaeology of early Christianity

The earliest archaeological evidence for Christianity in southern Scotland pre-dates the Columban mission by more than a century. It was in fact an extension or survival of Roman Christianity and is conventionally associated with the establishment of Ninian from Carlisle as bishop at Whithorn. The so-named Latinus stone from Whithorn (Figure 8.6), dating to the mid-fifth century, has generally been regarded as a memorial stone, though Charles Thomas argued that it commemorated the establishment here of a sinus, 'a place of refuge, care or shelter', and thus figuratively a church. He insisted, however, that there was no implication of the establishment of a monastic settlement here in the fifth century (Thomas, A. C., 1992). The alternative suggestion (Craig, 1997) that the si(g)nus refers to the chi-rho symbol at the head of the inscription is ingenious but takes liberties with the Latin spelling. Slightly later are the inscriptions from Kirkmadrine, one of which commemorates sacerdotes, priests or bishops, who may have had links with the Gaulish tradition of St Martin of Tours, or who may even have been monastic missionaries. The archaeological evidence for an early monastic centre at Whithorn is still highly speculative, though the quantity of imported pottery and glass, together with evidence for metalworking and agriculture plainly points to a community of some importance on the site from the early sixth century. Hill's excavations (Hill, P., 1997) certainly located sections of



FIGURE 8.6 The Latinus stone, Whithorn, Wigtownshire. Height of stone c. 157 centimetres. Source: Drawing by D. W. Harding.

enclosure ditch, and the progressive expansion of the site to include secular buildings and cemetery seems plausible, though the fundamental premise, that the monasterium itself was on the crest of the hill, and inaccessible or destroyed beneath the later church buildings, is archaeologically undemonstrable. The rectangular or sub-rectangular buildings left minimal traces of their foundations, and were identified from the hollows and platforms on which they were built. Averaging around 8 metres by 5, their walls were of wattling based variously on stake-holes or narrow sill-beams, some with internal divisions and hearths. Two distinct forms of interment characterized the earlier cemetery at Whithorn, lintel-graves, in which the grave is lined and capped with stone or timber, effectively using the same technique as the long cist cemeteries

north and south of the Firth of Forth, and log coffin burials, in which massive split tree trunks were used to contain the extended inhumation. The transition from the former to the latter rite, it was suggested (Hill, P., 1997: 70), may have corresponded to a significant change in status of the communities concerned.

Long cist cemeteries (Figure 8.7) are widely distributed in south-eastern Scotland, substantially south of the Forth but with a significant number in coastal Fife, and are broadly assigned to the mid-first millennium AD. The form of burial, an extended inhumation in a long, stone-built cist, however, is itself hardly diagnostic; indeed Stevenson's verdict was that 'long cist graves seem to be part of a wider phenomenon over much of late Roman and sub-Roman Europe' (Stevenson, R.B.K., 1952, 110). A subsequent assessment concluded that 'burial in long graves and cists was prevalent throughout much of Scotland from sometime between the second and fourth centuries AD' (Greig et al., 2000: 608), though the form of interment can be variable, as at Winton House, East Lothian (Dalland, 1991). Even in regular cemeteries, the construction of the graves showed minor variations, some being marginally wedge-shaped or expanded around the shoulders into a conventional coffin shape. In some instances, the floor of the cist was paved, in others not; likewise the form of covering slab has sometimes been suggested as a basis for sub-division. The graves were sometimes seemingly grouped into clusters, or more strikingly ordered into rows or alignments, which seems to indicate social or community affiliations. But, as Maldonado (2013) has argued with reference to radiocarbon-dated graves from the Thorneybank cemetery, there is no expectation of linear or radial expansion; instead clusters may have developed simultaneously across the cemetery. Almost invariably the graves lack grave-goods, which has generally been taken as an indication that they were Christian, though burials of the preceding Iron Age, like those at Broxmouth, East Lothian, generally lack grave-goods too. Their orientation was commonly east-west or veering from north-east to south-east, with the head at the west end. Most commentators have emphasized that this likewise is no guarantee that they were Christian interments, since pagan cemeteries not infrequently adopted the same orientation. So while it is generally assumed that long cist cemeteries were predominantly Christian and, in some later instances, were patently so from their site associations, their appearance certainly was not coincident with or evidence of conversion to Christianity, as it is clear that long cist burial had been adopted from earlier in the first millennium.

For the early discoveries like Parkburn, Midlothian (Henshall, 1956), dating evidence was minimal, though the excavator's assessment of use from the fifth to eighth or perhaps ninth centuries AD hardly requires revision in the light of subsequent research. The cemetery near the Catstane at Edinburgh airport, first discovered in the 1860s and further excavated in 1977 (Cowie, 1978), produced several radiocarbon dates, indicating that it may have been among the earliest of the long cist cemeteries, beginning perhaps as early as the later fifth century, but more probably in the sixth. The calibrated range at two sigma spans the later fifth to midseventh centuries (Dalland, 1992: 203–4; Greig *et al.*, 2000: 610). The dedicatory inscription on the Catstane itself has been assigned on epigraphic grounds to the late fifth or sixth centuries AD (Rutherford and Ritchie, 1974), so that in this instance archaeological and epigraphic evidence appears to converge. Three radiocarbon dates from a smaller long cist cemetery at Longniddry, East Lothian (Dalland, 1992), yielded a calibrated span almost identical to the Catstane cemetery.

Among the most informative of the long cist cemeteries in the Lothians is that from Thornybank, Dalkeith (Rees, A., 2002). The stone-lined, long cist burials were arranged in rows



FIGURE 8.7 Distribution of long cist cemeteries in Scotland

Source: Drawing by D. W. Harding, adapted from Proudfoot (1996) and Maldonado (2013).

with similar orientation, mostly in the northern half of the cemetery, whereas some thirty-eight simple graves, some of which produced positive traces of wooden or leather coffins, were discovered in irregular, small groups across the cemetery. Unfortunately, the great majority of the thirty radiocarbon dates from the site, which span the fourth to seventh centuries AD, came from stone-lined cist graves, so that the chronological relationship between the two rites of deposition remains unclear. Two of the simple graves, however, were enclosed by shallow square ditches, in one case with a low cairn over the burial. Another simple grave had four postholes at its corners, suggesting uniquely in Britain some form of mortuary structure over the grave. The possibility that the simple burials and square-ditched enclosures derive from an earlier tradition, perhaps ultimately from earlier Iron Age practices, might be suggested by the presence on the site of a ring-groove house, a pit-alignment and a length of palisade, but necessarily remains unproven.

During the seventh century, the so-called Petrus stone commemorates a church dedicated to St Peter at Whithorn, but by the late seventh or early eighth century, as may be inferred from Bede's *Ecclesiastical History*, Whithorn had been taken over as a Northumbrian bishopric. Excavations revealed a sequence of structures, probably not the only group within the re-designed complex, the focus of which was a pair of timber oratories, subsequently combined to form a single, bicameral timber church. Adjacent to it was a burial chapel, which boasted stone foundations and window glass of the kind employed in the Northumbrian monastic sites of Monkwearmouth and Jarrow. Parallel to these buildings beyond the inner enclosure wall was a line of timber halls, which the excavator interpreted as guest quarters. Beyond these again were smaller rectangular buildings that displayed close structural parallels with timber buildings from Church Close, Hartlepool (Daniels, 1988). The presence of Anglo-Saxon coins at Whithorn reinforces the Northumbrian connection in the eighth and ninth centuries.

The site at Hoddom in Dumfries and Galloway may also have had earlier ecclesiastical associations, being traditionally associated with St Kentigern. Fragments of monumental sculpture, recorded locally over many years, include some pieces that were compared to material from Hexham and Dacre of the eighth century (Cramp, 1960). This extensive site, enclosing 8 hectares in a bend of the river Annan with bank, palisade and ditch, also encloses the old parish church, the origins of which may be traced to the eighth century. Rescue excavation in advance of gravel quarrying in 1991 (Lowe, 2006) investigated a series of stone and timber buildings around the perimeter of the enclosure that included various forms of kiln barns containing corn-drying ovens. One of these was a semi-sunken rectangular building that incorporated re-used Roman stone in its fabric, including two fragmentary inscribed slabs, which could have come from the Roman fort at Birrens not far distant. A radiocarbon date from a structural timber, calibrating around AD 600, initially suggested that this building was part of an early ecclesiastical settlement, but in the final report, this date was regarded as anomalous and the structure was re-assigned to the later sequence of agricultural buildings.

Timber halls and rectangular buildings

Like circular buildings, rectangular timber structures can be built using a variety of different foundations, each leaving its distinctive pattern in the archaeological record. Whether any of these is characteristic or diagnostic of any particular cultural or historically recorded group is arguable, just as it would be for any prehistoric style of vernacular architecture. The two most

readily recognized structural techniques, wall-trenches, in which upright posts are bedded at intervals, and earth-fast postholes are both in evidence, and are no more than the equivalent in rectangular plans to ring-groove and post-ring construction of circular houses. Whether other types of foundation, of a kind such as sill-beams that may leave no archaeological trace, were employed, in isolation or in combination with either of these, remains uncertain. But the curiously open-ended plan of one of the Phase 7 buildings at Dunbar (Perry, 2000) certainly suggests that this may have been the case, since otherwise, as the excavator observed, the building would have been improbably exposed and vulnerable to the north-easterly winds. If this was the case, the question arises why a single building should incorporate two different foundation techniques? The answer might lie in the uses to which the building was put. If livestock were stalled at one end, as in the early Welsh long-houses, then a construction technique may have been employed which allowed that end of the building effectively to be dismantled for the purposes of periodic mucking-out (Geraint Coles, pers.com).

Wall-trench, earth-fast postholes, sill-beam construction and sunken foundations should all be regarded a priori as constructional techniques rather than diagnostic of any one cultural group. Communities in time and space may exercise a preference for one or other technique for a variety of reasons, perhaps related to function, or to the nature of the topography or terrain in which they were used. Despite the growing number of rectangular buildings of Neolithic date from Britain and Ireland, it is still tempting to see certain specialized techniques like the so-called 'open book' wall-trenches at the gable ends of long, rectangular buildings, together with annexes and buttressing, as characteristic of Anglian settlements in Northumbria and southern Scotland. Buttressing evidently was an Anglian trait, and presumably implies an upper storey or colonnade along the long wall of buildings in which the entrances were almost invariably located.

Any analysis of rectangular 'halls' and houses (Figure 8.8) must begin with the site of Yeavering, Northumberland (Hope-Taylor, 1977). Though the standard of the 1950s excavation was high, radiometric dating was not applied, and the site's dating was based as much upon historical as on archaeological criteria. There remains therefore considerable debate as to the nature of the earliest post-Roman occupation at Yeavering, and whether it preceded the documented Anglian settlement of Northumbria (Scull, 1991; Frodsham, 1999). Acknowledging the tentative nature of the evidence (Alcock, 1988: 7-8), it seems likely that the earliest phases of occupation were British rather than Anglian. Yeavering has been identified as the seventh century royal centre ad Gefrin named in Bede's Ecclesiastical History, and its archaeological remains, especially the unusual timber grandstand, certainly suggests that it was an important place of assembly. The twin-palisaded enclosure, with its distinctive rounded entrance terminals, is unlike the simple hairpin terminals of earlier Iron Age twin-palisaded enclosures, and the apparent absence of evidence for activity internally makes the Yeavering enclosure unique and enigmatic. Its function could have been for corralling cattle or perhaps horses, perhaps during major seasonal gatherings. The Yeavering rectangular timber buildings (Figure 8.8, 1-3) have become archetypes for halls of putatively high status. Their plank-built construction, opposed entrances in the long walls of the building, and annexes are certainly distinctive. Unfortunately, the truncated stratigraphy and absence of domestic debris makes it difficult to reconstruct the function of individual buildings or the economic basis of the settlement as a whole. The site displays several periods of structural modification, apparently being destroyed by fire and rebuilt on at least one occasion, before abandonment at some time towards the end of the seventh century.

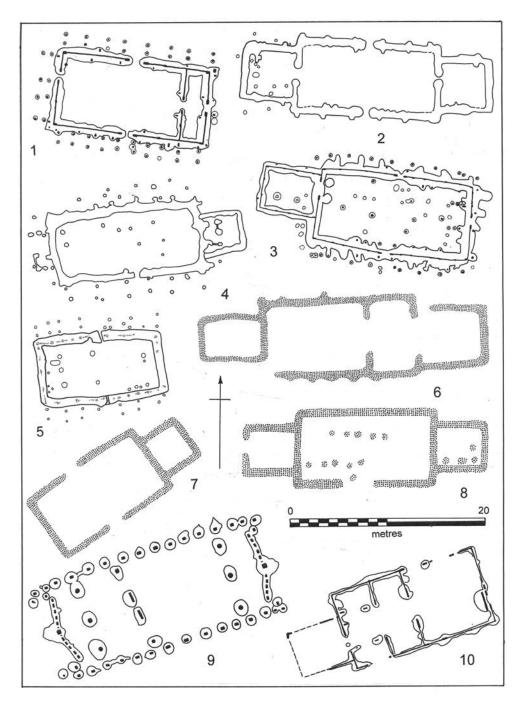


FIGURE 8.8 Halls and houses of the Anglian period, 1, Yeavering, Northumberland, C3; 2, Yeavering, Northumberland, A1b; 3, Yeavering, Northumberland, C4b; 4, Thirlings, Northumberland, C; 5, Thirlings, Northumberland, A; 6, Milfield, Northumberland; 7, Sprouston, Roxburghshire, E2; 8, Sprouston, Roxburghshire, F; 9, Doon Hill, East Lothian, A; 10, Doon Hill, East Lothian, B

Source: Drawings by D. W. Harding, adapted from Hope-Taylor (1977), O'Brien and Miket (1991), Gates and O'Brien (1988), Smith (1991), and Reynolds (1980).

The very location of Yeavering on the Milfield plain is suggestive of the site's special importance. Overlooked by the 5 hectare Iron Age hillfort on Yeavering Bell, the plain was evidently a ceremonial centre from Neolithic times, as witnessed by a concentration of henge monuments and related sites (Harding, A. F., 1981). Whilst the issue of continuity is contentious, Bradley (1987) was doubtless right in believing that the site of the Yeavering 'palace' was deliberately chosen in the early historic period to invoke this tradition to legitimize its status. Survey has indicated that the small ditched enclosure at the eastern summit of Yeavering Bell post-dates the occupation of the hillfort, and could conceivably belong to an early historic reuse of the hillfort site itself (Frodsham, 1999: 198).

Within two miles of Yeavering, to the north-east and north-north-east, lie two more important settlements of the period, at Thirlings and at Milfield. Milfield, equated historically with Bede's royal site Maelmin, was evidently a settlement of some importance in view of its massive, polygonal, double palisade enclosing 12 hectares, within which air-photographs have revealed a suite of 'buttressed' timber halls (eg Figure 8.8, 6; Gates and O'Brien, 1988). Earlier than this major enclosure is a fainter crop-mark indicating a palisaded enclosure that could well precede the Anglian phase of settlement on the site. A cemetery outwith the major twin-palisaded enclosure may nevertheless be broadly contemporary with its occupation. At Thirlings (O'Brien, 1982; O'Brien and Miket, 1991) there was no major enclosure, so that the site is presumed to be of subordinate status to its neighbours, though one rectangular house was located within a rectilinear timber stockade. The largest of the buildings (Figure 8.8, 4), at 15 metres by 5, with a wall-trench a metre deep, was of 'hall' proportions; it also had a small annexe at one end, and 'buttress' posts flanking both its long walls. Five other wall-trench buildings and several rectangular, post-built structures were generally smaller and less elaborate, though some displayed evidence of buttresses and internal divisions (Figure 8.8, 5). Radiocarbon dates indicated an early occupation of the site, perhaps from the late fifth to the seventh centuries.

Two further sites in close proximity, at Lanton Quarry (Waddington, 2009) and Cheviot Quarry (Johnson and Waddington, 2008) were also distinguished by rectangular or subrectangular houses of post-built construction, and on a lesser scale than the rectangular 'halls' of the Yeavering class. The important additional dimension provided by these sites, however, is their dating, suggesting that they were already in existence before the Anglian settlement of the region. At Cheviot Quarry, radiocarbon dating indicated for Building 2 an envelope of occupation by a 'pre-existing British population' (Johnson and Waddington, 2008: 297) between AD 330-570, though the absence of material finds unfortunately precluded identification of any distinctive cultural assemblage. At Lanton Quarry a post-built round-house, itself cut by a later Grubenhaus, returned a date of AD 420-640 (Beta-231339), suggesting a 'British' or 'Votadinian' presence before the establishment of the Anglian village of sub-rectangular buildings.

Elements of the Yeavering model are evident elsewhere, notably at the complex and doubtless multi-period site of Sprouston on the southern banks of the Tweed (Smith, 1991). Here too a major component is a double-palisaded enclosure, of comparable size but lacking on airphotographs the distinctive entrance terminals of the Yeavering model. At Sprouston, however, there appears to have been a smaller palisaded enclosure in a preceding phase, with palisades more widely spaced and less regularly twinned, which nevertheless implies a measure of site continuity, possibly from the earlier post-Roman period in view of the layout of the fieldsystem with which it is apparently associated. As at Yeavering the concentration of rectilinear timber buildings lies outwith the palisaded enclosure and to its south-west, within what appears to have been an ordered landscape, divided by a system of trackways radiating from the

palisaded enclosure. To the south of the settlement lies a cemetery of several hundred graves, aligned in multiple rows and grouped around a structure which has been tentatively interpreted as an early Christian church or oratory. Apart from the major halls (Figure 8.8, 7–8), both trench-built and post-built, there are at Sprouston numerous lesser rectangular buildings, as well as what appear from crop-marks to be at least two groups of *Grubenhäuser*. Even allowing for multiple phases of occupation resulting in an air-photographic palimpsest, Sprouston was evidently an important site with a range of activities represented in the diversity of its physical remains. The palisaded enclosure, as at Yeavering, appears to be indicative of the site's status, though it does not enclose the focus of settlement as such.

At Doon Hill, East Lothian, the palisade does enclose the principal buildings, so that if this site too is deemed to be of high status, it is nevertheless different from Sprouston and Yeavering. There was also evidence of a small inhumation cemetery immediately beyond the enclosure boundary beside its main gate. Here the palisade is single, and polygonal in its outline, a plan which distinguishes it from the normal pre-Roman pattern, but which is by no means unique in the post-Roman period. Within the enclosure two successive rectangular halls were recognized, the earlier post-built and the later founded in wall-trenches (Figure 8.8, 9-10). The later building had an annexe at one end in the manner of the Yeavering and Sprouston halls, but with more evidence for internal division of space. The earlier hall was post-built for the most part, with wall-trenching used only in the gable-end walls, which in plan formed an obtuse angle about a central posthole. A similar feature was detected on a crop-mark at Sprouston, but detached by some distance from the main focus of settlement. Hall B at Doon Hill has never been in doubt as Anglian, but the dating of Hall A was thrown into question by its apparent similarities to the rectangular hall at Balbridie, Aberdeenshire, which proved on excavation to be Neolithic (Reynolds, 1980). The case for regarding Hall A as Neolithic (Smith, I., 1991: 267-9), directly but coincidentally underlying its Anglian successor, though ingenious, surely stretches credibility. Similarities between Doon Hill A and Balbridie may have been over-emphasized, and important constructional differences understated (Walker, 2003). Hope-Taylor (1980) had argued vigorously for an early historic date for both buildings, and it has been suggested (Lowe, 1999: 35) that abraded Roman pottery providing a clear terminus post quem for its construction was recovered from the postholes of the earlier as well as the later hall. Hence the balance of probabilities still points to the Doon Hill halls as closely successive, with Hall A being founded by the local Gododdin and Hall B representing the take-over of that native site by an intrusive Anglian élite (Ralston and Armit, 1997: 227).

The existence of palisaded enclosures with rectangular halls raises the possibility that other palisaded enclosures, where rectangular buildings are not evident on air-photographs, and assigned in consequence to the earlier Iron Age series, could in fact have been occupied in the post-Roman Iron Age. Only where the outline is polygonal, or comprises a close-set triple alignment, as at Hogbridge, Peeblesshire, does the plan depart sufficiently from the stereotypical early Iron Age form to alert us to the possibility of a later date.

Among more tentative examples, the crop-mark site at Whitekirk, East Lothian (Brown, 1983), includes rectangular buildings which might be considered analogous to early historic timber halls. Their size – the larger is around 12 metres by 11 – is at the top end of the range of those hitherto considered, but their slightly bowing walls is certainly not without precedent at Sprouston and Yeavering. Their plans appear to include an internal division towards one end, rather than an annexe of lesser width than the main hall. The buildings lie adjacent to a series of rectilinear enclosures, one corner of which straddles the larger of the two buildings,

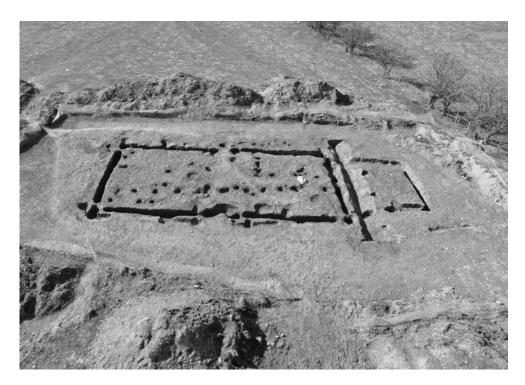


FIGURE 8.9 Lockerbie Academy Anglian hall

Source: Crown Copyright: Historic Environment Scotland.

with which they are evidently not contemporary. Two smaller rectilinear buildings lie within the area of the enclosures. These, and other air-photographic sites, including some north of the Forth, may well be of the early historic period, but there is at present no sound archaeological basis for linking them to any particular period or historical horizon.

One of the most striking plans of an Anglian timber hall is that recovered at Lockerbie in 2006 (Figure 8.9; Kirby, 2011). The main room, measuring 14 metres by 8 metres, was defined by a substantial wall-trench, reinforced by postholes at the corners and flanking the two opposed entrances in the long walls. An annexe, 5 metres by 5.8 metres, was added to its northern end. There was no artefactual evidence to date or define its occupation, but its ground-plan plainly proclaims its Anglian associations and a set of radiocarbon dates indicated that it belonged to the sixth and earlier seventh centuries. A series of postholes within and beside the hall, but on a marginal different orientation, was best interpreted as an immediate precursor, though radiocarbon dates from its postholes were statistically indistinguishable from the period of the hall itself. Accordingly, Lockerbie affords valuable new light on the advance of Anglian influence into south-west Scotland.

Sunken buildings (Grubenhäuser)

The use of semi-subterranean foundations, exemplified in various forms of domestic architecture of the early Iron Age, especially in eastern Scotland as we have seen, have their counterparts in the post-Roman period in rectangular or sub-rectangular structures, notably in southern Scotland and north-eastern England. Some of these (Figure 8.10), particularly those in which numbers of loom-weights have been discovered, bear obvious comparison with the *Grubenhäuser* of Anglo-Saxon England, first recognized by Leeds in his pioneering excavations at Sutton Courtenay in Berkshire, though the sub-rectangular form is not an exclusively Anglo-Saxon phenomenon. There is, furthermore, quite a wide range of size in the buildings in question, so that their classification as a single group might need to be re-examined.

Several buildings approximating to the *Grubenhaus* model have been excavated or identified by air-photography in south-eastern Scotland and the Borders. An example excavated at New Bewick in Northumberland (Figure 8.10, 4; Gates and O'Brien, 1988), just south of the Milfield complex, was one of a dozen such features revealed by air-photography in close proximity to a ditched enclosure of uncertain date. It proved to be of standard size and construction at nearly 5 metres by 4, with postholes at each gable end. It also yielded fragments of two dozen or more clay loom-weights, indicative of weaving as one of the principal functions

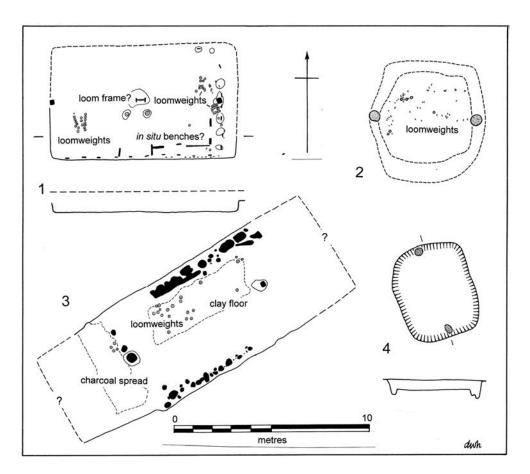


FIGURE 8.10 *Grubenhäuser*: comparative plans, 1, Upton, Northants; 2, Ratho, Midlothian; 3, Dunbar, East Lothian; 4, New Bewick, Northumberland

Source: Drawings by D. W. Harding, adapted from Jackson et al. (1969), Smith (1995), Perry (2000) and Gates and O'Brien (1998).

of the building. A similar function can be inferred for the nearly square building of similar proportions from Ratho, Edinburgh (Figure 8.10, 2; Smith, A., 1995), in close proximity to two small, rectangular, wall-trench buildings. In the case of the Ratho Grubenhaus the main roofsupporting posts appear to have been midway along the marginally longer walls. The function of the building was again indicated by fragments of no less than sixty-eight clay loom-weights. Significantly, the floor of the weaving-shed had been extensively reinforced with small pebbles, indicating that the base of the pit was indeed the floor, rather than simply a cavity beneath a suspended floor. Though this issue may still be open to debate in some instances, it does appear likely that the purpose of sunken foundations of Grubenhäuser was to provide greater headroom with minimal upstanding walls, an objective that would plainly be vitiated by introducing a suspended floor. If on the other hand under-floor storage was the objective, as has been implied for some of the earlier Iron Age round-houses with sunken foundations, then substantial walls would still be required. Radiocarbon dates from Ratho point to the use of the weaving-shed in the seventh century: lengths of palisade trench, assumed by the excavator to be contemporary, could equally belong to an earlier phase of occupation.

The function of Grubenhäuser was discussed some years ago by Nowell Myres in the context of the building from Upton, Northants (Figure 8.10, 1; Jackson et al., 1969). Upton not only produced a set of loom-weights that had evidently fallen from an in situ loom, but also yielded the carbonized planks of in situ furniture. At 9 metres by 5, the Upton building was among the larger Grubenhäuser, but is by no means unusual in this regard. At Castle Park, Dunbar, a rectangular, sunken building, nearly 6 metres in width and more than 13 metres in length, appears to have had its roof supported on a ridge beam, either with gabled or hipped ends (Figure 8.10, 3). Loom-weights again are indicative of weaving, but in a building of this size these activities were evidently being conducted on a significant scale. The dating of the building to Phase 7, whose other rectangular, trench-walled houses are dated on the basis of radiocarbon samples from mid-sixth to early seventh centuries, seems equivocal. A single radiocarbon date from what appears to have been structural timber from the Grubenhaus points to a calibrated span between the third and sixth centuries. On the other hand, it was recorded as cutting through structures that are assigned to two successive phases, though the excavator acknowledged problems with stratigraphy (Perry, 2000: 47-8). Plainly, the early presence of these structures at Dunbar is crucial to a proper understanding of the early post-Roman archaeology of the region, and again indicates the importance of evaluation that is not predetermined by historical imperatives.

Similar structures may be indicated by amorphous blobs on air-photographs, as at Thirlings, Milfield and Sprouston, among an increasing number of sites. The excavated evidence seems to indicate their use as workshops or ancillary buildings, rather than as domestic dwellings. But there was evidently a good deal of variation in their size and construction, and they could well have been used for a variety of different purposes over a wider geographical distribution and a longer period of time than was formerly imagined.

Archaeology and Anglian expansion

Evidence for the Anglian or Northumbrian expansion into lowland Scotland is based primarily on documentary rather than archaeological sources, annals, genealogies, historical and quasi-historical sources such as Bede's Historia Ecclesiastica and Nennius' Historia Brittonum, biographies like Eddius Stephanus' Life of St Wilfred, and the epic poem Y Gododdin. The

historical value of these is plainly highly variable and in some cases questionable, but the authenticity of the principal events, places and protagonists that they record need not be seriously challenged. Any reconstruction of the period based solely on the archaeological record by comparison would be sparse on episodic detail and *dramatis personae*, but perhaps more informative of settlements, burials and material culture. A crucial contribution to the interdisciplinary tapestry is that of place-names (Figure 8.11), which attest the Anglian expansion northwards into East Lothian and to a lesser degree in Cumbria (Nicolaisen, 1976). Had the period not been text-aided, or without the evidence of place-names, the Anglian expansion and conflict with their northern neighbours, predicated upon the evidence of archaeology alone, would doubtless have been dismissed as diffusionist invention.

Archaeologically, the appearance of large timber halls and some Grübenhaüser would not unreasonably be attributed to Anglian settlers, though some rectangular buildings may have pre-dated their advent, and others may be found well beyond any plausible extent of Anglian settlement. The correlation, therefore, is not absolute, and the structural types in consequence hardly diagnostic. The distribution of burials and cemeteries might be regarded as a more reliable indication of Anglian settlement. Burials of probable Anglian attribution of the sixth or early seventh centuries occur quite widely in north-eastern England, though most are relatively poorly furnished and few in number of graves in any one group. The group at Milfield North actually re-used the site of a Neolithic henge (Scull and Harding, 1990). More extensive cemeteries are known at Norton in Teesside, and at Yeavering itself, though in the case of the latter there is some ambiguity over the identification of Anglian and native British burials. Weapons and brooches from the cemetery at Greenbank, Darlington (Pococke and Miket, 1976), were unequivocally Anglian, and the extended inhumation from Castle Eden in County Durham included one of the most northerly examples of a glass claw beaker. Further north and west there are possible Anglian burials in the North Tyne valley and in the upper Eden valley, but north of the Tweed such distinctive burials are hardly known. It is generally assumed that the reason for this is that only pagan Anglian burials contain diagnostic gravegoods, and that the further expansion of Anglian settlement into southern Scotland post-dated the conversion to Christianity.

Occasional finds may signal an Anglian presence. The small gold pyramid finial set with garnets from Dalmeny, Midlothian, is sometimes assumed to have been from a warrior-burial, and the gold stud with garnets set in *cloisonné* from Prestonkirk, East Lothian, is likewise probably from a rich sword assembly, in this case perhaps dating rather earlier in the seventh century. Among important finds of the early Christian period, probably of later seventh century-date, is the tiny fragment of a pectoral cross, made of gold leaf with red garnet settings, from an unstratified context in the excavations at Castle Park, Dunbar. Stylistically it resembles examples from Anglo-Saxon contexts, and its closest parallel is the pectoral cross of St Cuthbert in the Durham Cathedral Museum.

Among field monuments once attributed to the Anglian expansion into southern Scotland are cultivation terraces (RCAHMS, 1967: 38–9). Subsequent research (RCAHMS, 1997) has emphasized that the character of these terraces is largely a factor of cultivation practice and angle of slope, so that it would be unwise to assign date on the basis of surface morphology. Absolute dating or dating by artefactual association is unlikely, and stratigraphic relationships in the developing landscape sequence are not always clear. It now seems probable that the earliest cultivation terraces date from the later prehistoric period, in some cases remaining in use through Roman and post-Roman times. Striking examples with steep risers and narrow

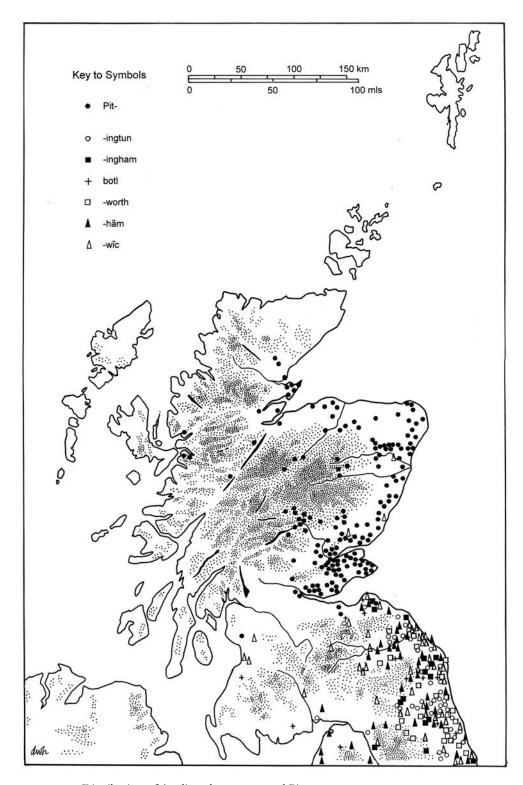


FIGURE 8.11 Distribution of Anglian place-names and Pit-names

Source: Drawing by D. W. Harding, adapted from Jackson (1955) and Nicolaisen (1976).

280 The later Iron Age

treads, like those at Romanno Bridge, Peeblesshire, have almost certainly been exaggerated by Medieval agriculture. Cultivation terraces, therefore, were doubtless in use in the later Iron Age in southern Scotland, but any close correlation with Anglian colonization should now be disregarded.

In south-west Scotland the appearance of Anglian crosses and sculpture, and the establishment of monastic settlements, is doubtless evidence of Northumbrian political influence. But these changes could have been brought about by the conversion of the ruling élite or by intermarriage between ruling dynasties, without signifying any major influx of settlers. By the eighth century the influence of Northumbrian Christianity extended far beyond the confines of the political kingdom within which it was based, acting also as an agent of innovation from continental Europe. The development of the Hiberno-Saxon art style, with its residual 'Celtic' elements combining with Germanic interlace and more exotic Mediterranean influences, and the vexed question of its origins, lies beyond the scope of the present study.

CENTRAL AND EASTERN SCOTLAND

Burials: long cists, cairns and ditched barrow cemeteries

Long cist cemeteries have already been introduced in the context of early Christianity in southern Scotland. Their distribution (Figure 8.7), as we have noted, was once centred on the Lothians (Henshall, 1956), but with increasing numbers extending into coastal Fife and Tayside as a result of research since the 1970s. The markedly estuarine distribution around the Forth and the Tay is a clear demonstration of the principle of geography uniting rather than dividing coastal communities. Most cemeteries appear not to have been enclosed, though the very partial examination of many sites must make this a qualified assertion. Cist burial undoubtedly preceded the advent of Christianity north of the Forth as to the south, as the cist from Craigie, Dundee, attests (Sheridan, 2004: 176). The origins of cemeteries too may be pre-Christian (Proudfoot, 1996; Greig et al., 2000), but the apparent association of developed cemeteries in Thomas' classification (Thomas, A. C., 1971: 51) with early Christian ecclesiastical foundations in Fife affirms their potential relationship. Defining a cemetery in the absence of an enclosure remains a subjective issue, of course, since all cemeteries must begin with initial burials, and the key factor, dedication of space, is hardly amenable to archaeological recognition without an enclosure. The practice of long cist cemeteries nevertheless could still be seen as spreading from the Lothians north of the Forth over time, thereby approximating to Thomas' model of the northward advance of Christianity (Thomas, A. C., 1968: 107-8; Burt, 1997: 65).

As with burials south of the Forth, modern scholarship has emphasized the diversity of practice, including barrow- and cairn-burial and simple graves. Winlow (2011) stressed the fact that a fifth of known sites involved single graves, with around a half having fewer than half a dozen burials. Within larger cemeteries, growth appears to have been random rather than linear or radial. A major cemetery, excavated in the 1970s, at Hallow Hill, St Andrews (Proudfoot, 1996), produced some twenty radiocarbon dates spanning the sixth to ninth centuries AD. Of 145 burials, the majority were long cists, but with some in graves outlined by boulders rather than sandstone slabs, and with a small group of simple 'dug' graves that may have contained wooden coffins, of which all trace had gone. The cemetery was not enclosed, and its full limit could not be established, but the burials could have totalled several hundred in

all. Among burials uncovered in the vicinity in the nineteenth century was a child's cist with at least one glass vessel and other fragmentary artefacts, whilst the 1970s excavations included a two-tiered burial, the lower of which was that of a child with Roman artefacts among the grave-goods. The items included a seal-box decorated in *millefiori*, an object intended for official use rather than as a personal trinket. A Roman finger-ring and silver bracelet were both broken fragments, and together with a complete brooch, could have been treasured over many generations before being finally deposited in the grave. Contrary perhaps to expectations of an earlier, pre-Christian, post-Roman date, the radiocarbon dates for the composite tiered cist are not significantly different from the rest of the graves in the cemetery. The excavator nevertheless argued for an older tradition of sanctity on the site, perhaps represented by a rectangular post-built structure of uncertain date and function, and one pit in particular which yielded a radiocarbon date around the end of the first millennium BC. In principle, it seems possible that the early Christian long cist cemeteries of south-eastern Scotland did develop out of an older, less clearly formalized tradition from the pre-Christian era.

The cemetery at Lundin Links (Greig et al., 2000) likewise had a long history of discoveries since the nineteenth century. The more recent work, which exposed more than a dozen long cist burials, produced radiocarbon dates between the fourth and late fifth centuries AD, indicating its chronological priority in the series. Yet excavations in the 1960s had uncovered a variety of different burial rites, including extended inhumations in long cists that had been covered with low cairns, some round and some oblong, defined by boulder kerbs. Two groups of burials at Lundin Links were of particular interest. The so-called 'horned cairn complex' contained no less than eight skeletons, all certainly or probably female, and some apparently displaying congenital abnormalities, which suggested familial relationships. A second complex burial, described as the 'dumb-bell' but effectively being two round cairns conjoined by a rectangular cairn, contained a female burial beneath the rectangular element and male burials in the round cairns at either end. Evidently, some selectivity was taking place in the choice of funerary monument, perhaps reflecting social status or role within the community. Notwithstanding limitations regarding the earlier radiocarbon dates from the site, the sequence obtained in 1999 would be consistent with the site's use between the early fifth and seventh centuries AD.

Among more recent excavations was the rescue programme at Auchterforfar, Angus (Dunbar and Maldonado, 2012), where twenty long cists from what was probably a larger cemetery were recovered from quarrying. The layout suggested clusters rather than the more formal linear rows of the Lothian cemeteries. Radiocarbon dates suggested their currency between the early fifth and late sixth centuries and again between the mid-sixth and mid-seventh.

In marked contrast to the cist-grave cemeteries, a female multiple burial from Hawkhill, Angus (Rees, 2009), may well represent a special ritual deposit. Around the end of the presumably earlier souterrain was a curving alignment of post-pits that appeared to provide a backdrop for a burial pit in which three female burials had been deposited. An elderly woman in extended posture appeared to be the principal interment, accompanied by two younger women, one of whom was placed with her head resting on the lap of the older woman. Similar arrangements are not unknown in earlier prehistory (Harding, 2015) and have prompted the suggestion that ritual sacrifice or self-sacrifice may have been observed on rare occasions in the British Iron Age. Radiocarbon dating of the Hawkhill grave, however, indicating a likely deposit in the seventh or eighth centuries AD, would make this a very late occurrence of such practices.

A distinctive form of burial in parts of eastern Scotland, initially recognized around the Lunan valley in Angus, but also known further north in the Moray Firth region, is the squareditched barrow, revealed by air-photographic survey since the 1970s. Assumed at first to have been related to the earlier Iron Age Yorkshire series, the square-ditched barrows of eastern Scotland are now well established as one class of burial of the later Iron Age. Unfortunately, squared-ditched barrows have so far yielded little artefactual evidence for dating. At Boysack Mills in Angus (Murray and Ralston, 1997), the radiocarbon dates were not conclusive, but one square-ditched barrow burial did include an iron projecting ring-headed pin, which might indicate a dating in the opening centuries of the first millennium AD. A major advance in understanding later Iron Age burial rites in eastern Scotland was the excavation at Redcastle, overlooking Lunan Bay (Figure 9.1; Alexander, 2005), not least because it demonstrated the close association of variant forms of burial. The cemetery comprised at least five squareditched barrows, each distinguished by causeways across the ditches at their corners and each with a central burial. In addition, however, there were two round barrows and nine unenclosed burials. All were extended inhumations, the majority set within long cists of local sandstone aligned approximately south-west to north-east. None of the burials contained grave-goods. Radiocarbon dates showed no clear chronological distinction between round and square-ditch barrows, which spanned a broad range from the third or fourth centuries AD to the seventh and possibly beyond. Long cists without visible covering seemingly were fashionable throughout the use of the site. An adjacent souterrain proved to have no stone lining, capstones or paving and was therefore of the Dalladies type; postholes indicated the probability of wooden



FIGURE 9.1 Excavated cemetery with square-ditched barrows, Redcastle, Angus

Source: Crown Copyright: Historic Environment Scotland.

construction. Within its entrance were found fragments of a Roman glass vessel, and artefactual dating suggests use in the second and third centuries, with abandonment by the early fourth. The souterrain therefore was evidently not contemporary with the cemetery, though the latter could still have served an adjacent settlement that continued in occupation after the demise of the souterrain.

Square-ditched and round barrows, sometimes accompanied by unenclosed simple graves, are therefore now an established part of the later Iron Age funerary landscape in eastern Scotland. At Forteviot (Poller, 2007; Campbell and Gondek, 2009; Campbell, 2010), all three were represented, together with an apparent log coffin rite in one of the unenclosed graves. The square-ditched barrows were conjoined pairs, though rather different in size, the smaller pair lacking corner causeways. The larger conjoined pair each had settings of four posts around the central grave. Once again, the associated material remains were minimal. The small cemetery at Bankhead of Kinloch farm in Perthshire likewise included round and square barrows in alignment, with one conjoined pair (Cook, 2012), again with no artefacts in the graves. The absence of grave-goods, of course, has conventionally been taken as a mark of Christian burial, but this can be no more than an inference. Given the relatively small number of burials, the cemeteries can hardly have been demographically inclusive. Furthermore, the diversity of grave form must reflect discrimination in individuals interred, though whether on the basis of age, sex, rank, sect or occupation is unclear. The presence of post settings at Forteviot perhaps suggests that the enclosing ditches, rather than being quarries for memorial mounds, were required by the funerary ritual for temporary structures that elsewhere left no archaeological trace.

A combination of circular and rectilinear plans characterizes two extant barrow cemeteries in Inverness-shire, at Garbeg and Whitebridge (Ashmore, 1980; Stevenson, 1984). The square barrows all feature causeways across their ditches at the corners, and one notably has large stones set upright at the corners. In effect, had the Garbeg barrows been ploughed level, they could well have appeared from air-survey very much like the barrow cemetery at Redcastle. Within one of the excavated square-ditched barrows was uncovered a rectangular setting of boulders, itself overlying an extended grave pit (Wedderburn and Grime, 1984) in a manner which has prompted comparison with the timber 'mortuary structure' at Thornybank, Dalkeith. A similar elongated pit underlay one of the penannular barrows, in the top of which the remains of a Class I symbol stone was recovered. Among northern outliers of the square and circular barrow group are older finds from Ackergill in Caithness. Here, seven rectangular cairns in alignment were retained within slabbed kerbs, with occasional uprights along their sides or at their corners. The burial rite was, like the south-eastern cemeteries, extended inhumation in long cists, among which were also examples of a double cist and a tiered cist. The cemetery also included a circular barrow, and two simple cist graves on the same alignment, and hence perhaps contemporary with the barrow cemetery, one of which was associated with a Class I symbol stone with an ogham inscription.

In sum, later Iron Age burials in central and eastern Scotland included more than one distinctive mode of deposition. The burial rite itself is predominantly extended inhumation, either within a simple grave, possibly within a coffin made of perishable materials, or within a stone-lined long cist, of which there can be variant forms. North of the Forth, and especially in Angus, these may be covered by a low barrow mound or cairn, with a surrounding ditch of circular or more distinctively square or rectilinear plan. The long cist cemeteries regularly contained graves arranged in orderly rows, closely adjacent but seldom if ever intersecting, which must signify some above-ground marker, most probably of wood. There can be little

doubt that the later burials at any rate were Christian interments. Furthermore, the numbers of graves, running into several hundreds, implies that by the mid-first millennium AD this had become a standard method of disposal of the dead, rather than the selective burial of a strictly limited social group.

Hitherto scholars working within an historical paradigm have set out to identify Pictish burials, and have found difficulties in identifying an archaeological type which matched the presumed date and distribution area of an inferred Pictish heartland. Long cist cemeteries are concentrated too much south of the Forth; square-ditched barrows and cairns have localized but disparate distributions, and their dating in some instances remains equivocal. While so many questions regarding the basic data remain unanswered, and as new evidence continues to be uncovered, it might be better not to presuppose any historical attributions.

Hillforts and citadels

In southern and south-eastern Scotland, we have already seen that earlier Iron Age hillforts were in several cases re-occupied in the post-Roman period. Even more so might occupation of traditional community centres have persisted in regions north of the Forth. At Craig Phadrig, Inverness (Small and Cottam, 1972), the presence of imported pottery and a fragment of mould for a hanging-bowl escutcheon implies high-status re-occupation of the site. Stevenson dated the mould to around AD 600, and suggested the presence of a workshop, though there was no direct evidence of metalworking. Casual finds from East Lomond Hill in Fife (RCAHMS, 1933: no. 244) could well indicate early historic occupation. Small-scale investigation of the interior of the Mither Tap of Bennachie (Atkinson, 2007) produced evidence of activity in the mid-first millennium AD. In Strathdon, several small hillforts have yielded radiocarbon dates centring on the later Iron Age (Cook, 2011). There is every reason to suppose that earlier sites would have been attractive for later use, both on account of their natural topographical advantages and because of their traditional significance as centres of authority. Equally, however, sites may have been newly fortified in the early historic period (Cook, 2013).

The hillfort on Clatchard Craig, Fife (Figure 8.2, 4; Close-Brooks, 1986), from surface survey had all the appearances of being an early Iron Age hillfort, its citadel resembling an oblong fort of that period. Excavations in the 1950s in advance of destruction by quarrying in fact proved that its defensive ramparts, involving at least four lines of enclosure, some of which almost certainly embodied sub-phases of structural modification, belonged principally to the early historic period. No ditches were recognizable on the rocky terrain, and no entrance was ever satisfactorily identified. Differences in construction techniques, involving stone facing and timber-lacing, with burnt timbers conspicuous in the core of Rampart 3, implies a long sequence of occupation. Rampart 2 significantly did not follow the contours of the hill, which appeared to indicate that it was not part of the same design as any of the other earthworks. Yet the radiocarbon dates for the innermost, second and third circuits are indistinguishable around the sixth and seventh centuries AD. Samples from the innermost and third ramparts were almost certainly from structural timbers. From the second, material like the Roman mortared stone and sherd of samian incorporated into the rampart core may have been residual from earlier occupation, so that it affords no more than a terminus post quem for the rampart's construction and use. The conclusion was thus that the innermost and third enclosures were contemporary, even though more widely spaced than is usual. They were also regarded as the earliest on the site, whilst the second rampart was assumed to be later. In the absence of radiocarbon samples, the dating of the outermost defences depended upon interpretation of the stratigraphic relationship in section between ramparts 3 and 4, which was far from definitive. Close-Brooks favoured the view that the outer ramparts were contemporary with or later than Enclosures 1 and 3, but the relationship is between episodes of collapse, which need not be a reliable guide to the sequence of construction. Furthermore, as the report observed, Rampart 3 in two of the excavated sections could well be interpreted as representing more than one phase of construction.

In consequence, a case might still be made for the existence of an early Iron Age phase of enclosure, which would certainly be consistent with the material assemblage from the site. Coarse wares from Clatchard Craig might be compared to the pottery from the Broxmouth hillfort. Fragments of saddle quern would likewise argue for activity on the site before the second century BC or thereabouts, and fragments of shale bracelet and several spindle-whorls could as easily be early Iron Age as later. A cast bronze ornament in the form of openwork trumpets, together with the sherd of samian, could indicate activity on the site in the second century AD. Thereafter early historic occupation was well attested by imported E-ware and a number of diagnostic artefacts, including fragments of moulds for the manufacture of pins and penannular brooches, a silver ingot, and a bronze disc decorated with interlocking peltae 'in hanging bowl style' (Close-Brooks, 1986: 146). A final phase of occupation on the summit plateau was represented by the only surviving structural evidence from the site, a rectangular hearth, some intermittent paving and a pivot-stone that the excavators believed to have been in situ, which could have been the only surviving evidence of a rectangular building. If an early Iron Age phase of occupation had been demonstrated, then the site might well have fallen within Feachem's class of citadel forts, re-used in the early historic period.

Other hillforts in which a sequence of constructional phases is evident from ground survey might likewise have been occupied or re-occupied into early historic times. For Norman's Law in Fife (RCAHMS, 1933: no. 193), conventional wisdom regards the small oval 'citadel' on the summit as the latest defensive phase on the site, dating to the early historic period. The larger enclosure of the hilltop, with the still larger annexe which takes in the southern and south-western flanks of the hill, are generally assigned to the earlier Iron Age, though it remains unclear whether these are part of a contemporary system. Several house circles are visible, including some within the citadel, where they are hardly likely to have survived had they been residual from an earlier phase of occupation. At Dunsinane, Perthshire (RCAHMS, 1994: 56), house foundations are visible in the lower annexe but would hardly be expected to have survived nineteenth-century investigations in the summit citadel. Again the fortifications are apparently multi-period, the latest phase being represented by a massive wall up to 9 metres in thickness, enclosing little more than 50 metres by 25. On its north side, the citadel earthworks appear to block an earlier trackway, which lower down the hill to the north-west leads through the outer enclosure. It is therefore reasonable to argue that the outermost enclosure was earlier than the citadel in its final form, and that its walls may even have been robbed in the construction of the summit enclosures. The citadel itself could nevertheless be the product of cumulative construction, and 'almost certainly occupies the site of an earlier fort' (RCAHMS, 1994: 55).

In some instances, the final 'citadel' enclosure on these cumulative sites resembles a stone-walled dun in the Atlantic tradition, as in the case of Dumyat, Stirlingshire, one of Feachem's (1955) original 'citadel' forts, linked conventionally through its name (Watson, 1926) with the historical Maeatae. A similar sequence, with a stone-built dun or 'ring-fort' as the latest element, may be represented at Turin Hill in Angus (Feachem, 1955: 74–5; Alexander and Ralston, 1999). The concept of the ring-fort, borrowed from Irish terminology, where it is applied to

innumerable small enclosures spanning a broad chronological range from later prehistory to the Medieval period (Lynn, 1983), should not, however, imply any direct cultural connections.

What is needed to confirm or refute the tentative attribution of the latest phases of these fortifications to an early historic horizon is a programme of selective and limited test excavation (combined with initial geophysical survey), expressly targeted at obtaining samples for dating, along the lines of Alcock's 'reconnaissance excavations', an exercise which need not be unduly expensive or intrusive (Alcock et al., 1986, 1989; Alcock and Alcock, 1987, 1990, 1992). Just such an exercise has been implemented as part of the Strathearn Environs and Royal Forteviot (SERF) Project, though the results of course may raise as many new questions as they resolve. At the eastern end of Strathearn, the earthworks at Moredun could well include a post-Roman phase of enclosure.

The idea of early historic citadels being located inside older Iron Age fortified enclosures raises the question how novel was the hierarchical structure implied by the more celebrated nuclear forts? The fact that the earlier earthworks may have fallen into disrepair as defensive barriers does not preclude their continuing use as spatial boundaries in a hierarchical social system. Viewed in this light, the nuclear forts would then be the culmination of a process of social development, rather than a radical innovation of the early historic period.

Nuclear forts

We have already noted that the concept of the nuclear fort, first advanced by Stevenson (1949b) in the context of Dalmahoy, Midlothian, became central to any study of fortifications of the early historic period. Excavation by Alcock at Dundurn (Figure 9.2) and re-appraisal of Dunadd challenged the view that the outworks of nuclear forts were necessarily constructed at the same time as the initial occupation of the citadel; the outer enclosures could instead have been cumulative over time. Assuming that such outworks were intended to reinforce the natural hierarchy of plateaux around the summit, this need not imply that the nuclear concept was not integral to the site from the outset, since non-defensive divisions could have been demarcated without leaving any earth-fast traces archaeologically.

In some cases, as we have seen, earlier Iron Age fortifications may have been re-occupied in early historic times; they may even have lent themselves to re-use as nuclear forts. Feachem's injudicious assertion, however, that Dunadd and Dundurn were most probably early Iron Age hillforts 'possibly repaired or improved by undiscriminating or desperate persons until as late as the seventh century' (Feachem, 1966: 85) prompted indignant repudiation by Alcock, not just for the two sites in question (Alcock et al., 1989: 209), but for all the major early historic fortifications that he identified from documentary sources (Alcock, 1981: 178). Subsequent research at Dunadd (Lane and Campbell, 2000) has pointed to Iron Age activity and even a walled enclosure on the site, so that earlier occupation of these prominent locations should not be discounted. But Alcock's essential premise, that these early historic 'royal' sites were selected expressly to satisfy a purpose that had progressed beyond the role of earlier Iron Age hillforts, still seems to be a reasonable inference. The evidence of imported pottery and metalwork production, for example, endorses the inference drawn from historical sources that nuclear forts were important political and administrative centres, even under royal control. In terms of area, they are small by comparison with major hillforts of the later prehistoric period in some regions, especially those in southern and south-eastern Scotland. North of the Forth, however, early Iron Age hillforts do not attain anything like the same size, in terms of area enclosed at any rate, and Feachem's 'minor oppida' of 6 acres or more are relatively few and far between. Nevertheless, these sites have a capacity for community occupation, which seems to



FIGURE 9.2 Dundurn, Perthshire, nuclear fort, air-photograph

Source: Photograph by D. W. Harding.

be deliberately eschewed by the craggy topography of the early historic nuclear forts. Though defended by palisades or enclosure walls as well as by natural topography, nuclear forts are generally regarded as strongholds between which kings progressed in order to secure their territory and exact their dues from a subordinate aristocracy. Some like Dunadd may indeed have functioned as capitals, but this can only have been true of the paramount centres.

Alcock's excavations of 1976–7 at Dundurn (Alcock et al., 1989), though very limited in scale (and sometimes at the time, when larger area excavation was fashionable, deprecated as 'key-holing'), in fact yielded a disproportionate wealth of information regarding the status and external connections of its occupants. Two imported pottery sherds, minimal in themselves, were identified, one as E-ware, the other as probably Rhenish. Two small fragments of glass were likewise recognized as imports, one probably from a beaker from the Rhineland or southern Gaul. Whilst Dundurn's location in Strathearn and its eastern access to the Firth of Tay might suggest trading contacts via the North Sea with the Continent, the distribution of E-ware (Figure 8.5) makes clear the primacy of the western route into Atlantic Scotland and Ireland, so that secondary trade or exchange from Strathclyde is perhaps a more probable alternative. Two other high-status artefacts from Dundurn, however, suggest other cultural contacts. An ornamental pendant in silvered bronze depicted a beast biting its forepaw, for which the excavator cited stylistic comparisons with the Book of Durrow and the Sutton Hoo gold buckle. Second, a fragment of mould had traces of two animals in ribbon style, apparently to be rendered in filigree or a cast imitation of it. The archaeological contexts of these items indicated that they dated from the seventh century at Dundurn, a surprisingly early period for this Germanic style to appear north of the Forth, and well before the conventional introduction of animals and interlace on cross-slabs of Class II (Alcock et al., 1989: 216-17). Finally, a decorative glass boss with inlaid discs and spirals, of eighth- or ninth-century date, prompted comparison with the early boss style on stone crosses, though whether implying Pictish or Scottish influence was left open.

As regards its basic economy, cattle were predominant at Dundurn, over pig, with sheep evidently a minor component of the pastoral regime. Cereal cultivation was practised in some degree, though the evidence from excavation was minimal. An outstanding problem of Dundurn and allied sites, however, is the nature of their occupation, as it may be deduced from the archaeological evidence rather than from documentary sources. There is little direct evidence for structures within either citadel or lesser enclosures, though there is certainly abundant evidence of activity in terms of artefacts and occupational deposits. Explaining their absence as a result of the use of timber and turf in surface-built rather than earth-fast methods of construction seems scarcely consistent with the case for the high status of nuclear forts, unless the site was only in use periodically. Nor is it consistent with the increasingly substantial body of evidence for early historic buildings in the Atlantic north and west, or from southern and south-eastern Scotland. R.B.K. Stevenson (1949b: 197-8) regarded the outer enclosures in particular as suitable for gathering stock for protection, and presumably for other seasonal gatherings, but such a functional explanation might undermine the concept of a hierarchy of enclosures, in which the subordinate enclosures were presumably assigned to lesser ranks and their retinues. Despite the briefest historical references to sieges of Dunadd and Dundurn, it is not even clear how permanent the occupation of such sites was; if their principal role was for periodic assemblies during a royal progression, then the number of permanent structures might well be minimal. Major issues regarding the archaeological evidence of nuclear forts remain to be addressed, in no small part because they have been subordinated to an agenda determined by the historical evidence.

Promontory forts

Along the north-eastern coast of Moray, Banff and Buchan, promontories were favoured as defensive locations in the early historic period, perhaps indicative of the importance of seaborne communications at this time. Pre-eminent among these sites was Burghead in Moray,

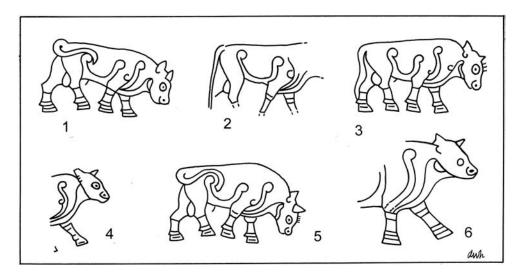


FIGURE 9.3 Carvings of bulls from Burghead, Morayshire

Source: Drawings by D. W. Harding, adapted from Allen and Anderson (1903).

at 3 hectares, one of the larger enclosed sites in the region. It was defended on its landward side by three banks and ditches that were destroyed in the early nineteenth century with the creation of the modern village and harbour. The date of these defences remains uncertain, despite more recent investigations; they could have originated in the earlier Iron Age, or could have been built or adapted in the later Iron Age. Within the area thus cut off the natural topography divides into a lower and upper compound, each enclosed by further walls to create an upper citadel and lower annexe. From the rubble of these walls apparently came the celebrated plaques with images of bulls (Figure 9.3) in various moods from quiescence to aggression, which presumably had once endowed the defences or an adjacent shrine with ritual or symbolic significance. In the lower compound was a rock-cut cistern or well, approached by a flight of steps and, despite later modifications, probably originating from the early historic occupation of the site. Regrettably, the buildings reportedly uncovered in the lower compound in the late nineteenth century were not properly recorded, and recent geophysical survey has indicated that the area may have suffered interference in early modern times.

In the later 1960s, Small (1969) opened sections through the western defences of the upper compound at Burghead. Here the wall on the cliff-edge was more than 8 metres thick at its base, faced with large boulders externally and with a neat, coursed dry-stone wall internally, which still survived to a height of 3 metres. The revetment wall was tied into the rubble core with a framework of longitudinal and transverse timbers that seemingly did not extend through the wall's full width, and which, in contrast to the recorded evidence of the boundary wall of the lower compound, used no iron nails in its construction. The major contribution of this limited research programme, however, was the establishment through radiocarbon dating of the early historic date of the rampart. This was probably built between the fourth and sixth centuries AD, an assessment that is broadly supported by subsequent dating and environmental analysis (Edwards and Ralston, 1978). Some disquiet was generated by the fact that the latest of the radiocarbon dates for the Burghead rampart suggested an improbably long period of maintenance (Alcock, 1984: 21), but this anomaly could perhaps be accounted for by a later episode of repair, after an interval of abandonment, of the original wall. The rampart was evidently destroyed around the ninth century by fire, an event generally attributed to Norse agency, though archaeological evidence for this is lacking.

The bull carvings are plainly in the symbol stone style, and the site is therefore conventionally regarded as a Pictish royal centre, though it is not identified as such in any documentary record. Though only six plaques survive, the antiquarian records suggest that there could have been thirty or more, symbols of power suggesting that the site was of high social and political status. Evidence for an early Christian site in close proximity, including fragments from a slabshrine, would be consistent with Burghead's importance as a major political and ritual centre in the later Iron Age.

Eastward along the coast at Portknockie excavations in the late 1970s (Ralston, 1980, 1987) examined the much smaller promontory fort at Green Castle, again demonstrating that its principal timber-laced rampart was of early historic date. This wall extended along the edge of the promontory, presumably originally enclosing a considerable part of it, rather than simply cutting off access across its neck. The burnt timbers, longitudinal as well as transverse, were well preserved, with some evidence for vertical timbers, though not bedded in postholes. Most of the timbers were roughly squared, and there was abundant evidence for mortise joints, suggesting even that some timbers had been re-used. Later prehistoric activity on the headland is indicated by a palisade underlying the early historic defences, but evidence of agriculture, post-dating the Iron Age use of the promontory and preceding the early historic phase of fortification (Edwards and Ralston, 1978: 208-9), suggests that any relationship between the two structural phases was largely fortuitous. Radiocarbon dates for Green Castle place the construction of its principal defences firmly within the second half of the first millennium AD.

Still more inaccessible than these promontory forts was the stack fort at Dunnicaer, Aberdeenshire, just north of Dunottar. The site was noted for the discovery in 1832 of simple symbol stones, apparently from perimeter walls that now appear to have been timber-framed, while initial indications of dating for samples from the current excavations indicate occupation as early as the third-fourth centuries AD.

Settlements and domestic buildings

Accepting the current evidence that souterrains generally did not remain in use beyond the third century, it is nevertheless important to note that souterrain settlements apparently continued in occupation after the demise of souterrains themselves. Watkins believed that this might indicate progressive centralization of power, with grain storage on a sizeable scale being transferred from local to regional level as part of a process of social and political development in the mid-first millennium AD. Wainwright equally had stressed occupational continuity after the abandonment of the souterrains at Carlungie and Ardestie (Wainwright, 1963). Yet the structural remains at these sites (Figure 9.4) suggest that a process of change was already under way at Ardestie and Carlungie before the abandonment of souterrains in the late second or early third centuries AD. Because of their small size and rather irregular construction, the agglomerated stone structures at both these sites have been regarded as workshops or ancillary stores (Watkins, 1984a: 77-8), rather than the primary dwellings of the site's occupants, which were presumed to have been larger, timber-built structures along the lines of those inferred at Newmill. In fact, the Carlungie and Ardestie buildings would be entirely in keeping with the

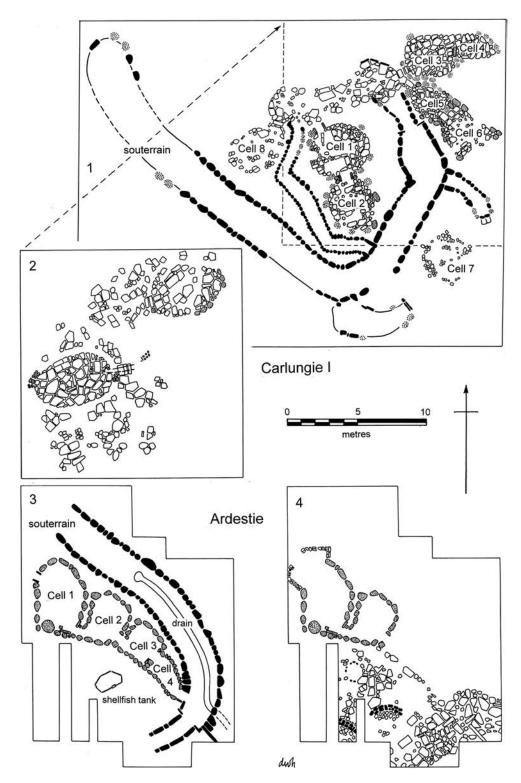


FIGURE 9.4 Souterrain settlements in Angus, 1, Carlungie 1 souterrain phase; 2, Carlugie 1 post-souterrain phase; 3, Ardestie souterrain phase; 4, Ardestie, post-souterrain phase

Source: Drawings by D. W. Harding, adapted from Wainwright (1963).

kind of small, cellular buildings which characterize the post-monumental phase of architecture in the Northern and Western Isles, among which some at any rate must have been used as domestic houses. The post-souterrain phases at Carlungie and Ardestie, however, are represented by even more ephemeral structural remains, as a result of agricultural damage, and are in consequence of the kind which might easily have evaded recognition or adequate recording on many excavations. They should not be dismissed as evidence of insubstantial occupation, however, and at Carlungie, the oval, stone-walled, post-souterrain buildings were in fact larger in area than the cellular buildings contemporary with the souterrain.

With notable exceptions like Carlungie and Ardestie, the dominant medium of construction was evidently timber, which leaves the clearest archaeological traces where the foundations are earth-fast in postholes or bedding trenches. One reason why foundations of domestic buildings might have been archaeologically more ephemeral would be the adoption of rectangular plans, allowing alternative construction techniques such as the use of sill-beams, at or only marginally below ground level, into which upright timbers would be jointed. Alternatively, the log cabin method of construction may entail the use of some vertical posts but so minimally as to render recognition of plans more contentious. Rectangular buildings could nevertheless have been built using a wall-trench, the rectilinear equivalent of a ring-groove, as at Thornybank, Midlothian. Alternatively, they could have been partially sunken into the ground in the manner of Anglo-Saxon Grubenhäuser, which should be readily detectable, despite the absence of postholes to support the roof other than those at either gable ends. At what point rectangularity in domestic architecture came to replace the older prehistoric tradition of circular building remains unclear, but certainly, in the Atlantic Iron Age, sub-rectangular plans appear alongside the circular tradition by the middle of the first millennium AD.

One regional group of rectangular buildings for which a pre-Improvement date was indicated by their stratigraphic relationships in the landscape is the so-called Pitcarmick house, named after a type-site in north-east Perthshire (RCAHMS, 1990: 12-13). Ranging in length from 10 to 30 metres overall, these buildings are of sub-rectangular plan, having rounded ends or slightly bowing walls. Internally, they may have sunken floors at their narrower end, prompting the suggestion of use as a byre. Typically, lesser units are attached to the main building, in a manner reminiscent of early modern black house settlements in the Hebrides. Excavation of the larger of two such buildings investigated at North Pitcarmick (Carver et al., 2012) revealed a sequence of structural phases, of which the latest yielded sherds of thirteenth-century date. Radiocarbon samples from both houses nevertheless indicated occupation in the later first millennium AD, with the possibility that the type originated somewhat earlier.

Air-photography may contribute to the identification of new sites that could radically change the picture of early historic settlement in eastern Scotland, but air-photography cannot furnish dates. Maxwell (1987: 33-4) was rightly cautious in assigning an early historic context to a series of rectangular crop-marks, potentially indicative of timber structures averaging some 25 metres in length by 9 metres in width, which had been located variously from the estuary of the Forth through Strathearn and Tayside to the Moray Firth. Generally occurring in isolation, one site at Lathrisk in Fife had several such structures in close proximity. Their similarity in plan to the timber halls of the Yeavering and Doon Hill type, especially the apparent annexes occasionally visible at one end, certainly prompts an early historic attribution. But the lesson of Balbridie, where a site of apparently similar plan proved through radiocarbon dating to be Neolithic, has quite properly induced a reluctance to burn fingers twice.

Continuity from earlier settlement types into the mid-first millennium is certainly in evidence in eastern Scotland. At Easter Kinnear in north-east Fife, excavations at two adjacent sites, called Easter Kinnear and Hawkhill to distinguish them (Driscoll, 1997), demonstrated that the semi-subterranean or scooped and revetted form of house continued to be built into the early historic period. Recognized as amorphous 'blobs' from air-photography, these buildings, which proved to be sub-circular, oval or tending towards sub-rectangular in plan, could be founded more than a metre into the ground, revetted and sometimes paved with substantial, water-worn boulders. There was no evidence for primary furniture such as hearths, and it remains arguable whether the floor of the building was originally subterranean, or whether this represents storage space below a suspended floor at ground level. The Easter Kinnear house was subsequently filled in, and a series of post and wattled rectilinear buildings was constructed on the same foundations. The artefactual assemblage was hardly definitive, but radiocarbon dates suggest an occupation in the sixth and seventh centuries AD. The Hawkhill settlement was assumed to be broadly contemporary, though here the sequence culminated in a rectangular, stone-built long-house of the eleventh or twelfth centuries. In fact, the later Iron Age date was not based upon any definitive evidence so much as analogy with nearby Easter Kinnear, and with Hawkhill, Angus, affording evidence of scooped houses from the earlier Iron Age, Hawkhill, Fife, could well have been earlier. Evidently there were changes afoot in domestic building before the mid-first millennium AD, the long-standing tradition of round-houses in their various divergent forms giving way to structures which archaeologically may leave rather more ephemeral traces than the earth-fast timber-framed round-houses of the earlier Iron Age. Function is not easy to determine with confidence, but there is every reason to suppose that these scooped foundations represent domestic structures or groups of domestic structures.

Further north, Birnie was evidently still occupied, or re-occupied, into the post-Roman later Iron Age, but the structural remains were much less substantial, generally involving sunken areas, hearths or cobbled flooring, but with minimal evidence of earth-fast foundations for walls or roof-supports. Ephemeral though the surviving remains may be, it is hard to avoid the conclusion that their superimposition directly upon the site of the para-Roman settlement is further testimony to the former's regional importance.

Symbol stones and symbol-ornamented artefacts

There can be few systems of archaeological classifications as enduring as the basic division of symbol stones into Class I, Class II and Class III. Devised by Joseph Anderson for his Rhind lectures of 1892, the scheme was published in 1903 in *The Early Christian Monuments of Scotland*, with a comprehensive catalogue by Romilly Allen. The typology was simple enough. Class I stones were essentially undressed monoliths with incised symbols, abstract or animal motifs. Class II stones were cross-slabs, the same symbols combining with but not intruding upon a central cross, the whole being executed in relief. Class III maintained the cross but omitted the other symbols; these stones fall beyond the scope of the present study. Essentially, the typological sequence was seen as corresponding to a chronological progression from around the seventh to twelfth centuries, a perception that has remained substantially unchanged, with a concession to the possibility of the series starting in the sixth century. There have, of course, been numerous important contributions over many years, both to issues of classification and to the study of the stylistic origins and affinities of the symbols, mainly from an art-historical perspective. Specialists and non-specialists alike have also been absorbed with the question of

the 'meaning' of symbol stones in a way that, rightly or wrongly, has seldom pre-occupied students of earlier Celtic art or, indeed, of the arts of early Christian Ireland.

A first issue that needs to be addressed is whether the symbol stones constitute a discrete class of field monument at all, or whether, as Clarke (2007) cogently argued, Class I stones are not so much symbol stones as stones with symbols. Many of the undressed stones could be regarded as earlier standing stones that have been re-used, their former meaning and potency thereby doubtless being re-invoked, with the addition of symbols, some zoomorphic or ornithomorphic, others abstract, that surely had ritual or symbolic significance. The fact that symbols are also applied to other distinctive artefacts like the Norrie's Law plaques or the Whitecleugh silver chain ring or, indeed, to building slabs like the Burghead bulls or the Old Scatness bear, shows that they were not exclusive to standing stones. The implication is therefore that the 'meaning' of the symbols need not be tied exclusively to any one function.

As to the date of Class I symbols on stones, unfortunately, few have any archaeological context, and in consequence, most assessments hitherto have necessarily relied heavily on arthistorical considerations. Anderson assumed that their absence from the west must imply that they post-dated the historical emergence of the kingdom of Dál Riata in the fifth century, an inference which has been rightly rejected as a total non sequitur (Laing and Laing, 1984). Obvious affinities between animal or bird motifs incised on stones and similar representations in the Northumbrian school of early gospel books, notably the Echternach Gospels, the Book of Durrow and Corpus Christi MS 197 plainly implies a relationship that has proved contentious. Stevenson (1955b) saw the symbols as derived from the gospels; Isabel Henderson (1967) inferred a reciprocal influence of the stones on manuscript art. A direct debt one to the other cannot be ruled out, of course, but equally, it is possible that both drew inspiration from an older or common pool of imagery involving late Roman and Germanic contributions, thereby compromising simplistic derivations and chronological inferences. Laing and Laing (1984) argued that distinctive motifs, like triskeles, interlace, key and trumpet patterns, which are represented in the Northumbrian manuscripts, were found more frequently on Class II stones rather than on Class I stones or related artefacts. If Class I stones were earlier than Class II, then it seemed logical to infer that they were also earlier than the manuscripts.

The distribution of Class I stones (Figure 9.5) is concentrated notably in Aberdeenshire, Strathspey and the Moray Firth region. There is also a significant group in Angus and Perthshire centred on Strathmore, but despite attempts to equate them with a supposed 'Pictish heartland' in this area, the archaeological distribution most logically argues for their origins north of the Dee. In fact, that northern concentration equates most closely with the earlier distribution of decorated glass beads of Guido's Class 13, while the overall distribution of Class I stones reflects the earlier distribution of massive armlets and related bronzes. Like the massive armlets, symbol stones could be regarded as an expression of identity and autonomy on the part of communities capable of considerable technical and artistic sophistication.

The motifs employed on Class I stones are either abstract symbols or animal images (Thomas, A. C., 1961). The human form or narrative scenes only appear on Class II stones. Some of the abstract motifs - scrolls, peltae, simplified palmette or lotus leaves, ring-and-dot, arc and circle are part of the common sub-stratum of early La Tène art, the survival of which into the post-Roman period need excite no special comment. Yet there are others, abstract geometrical shapes like the Z-rod or V-rod, which have no such long-standing antecedents. Symbols resembling everyday objects like combs, mirrors or hammers, likewise do not figure as motifs in earlier La Tène art, though earlier Iron Age types might well have been the models on which the symbols

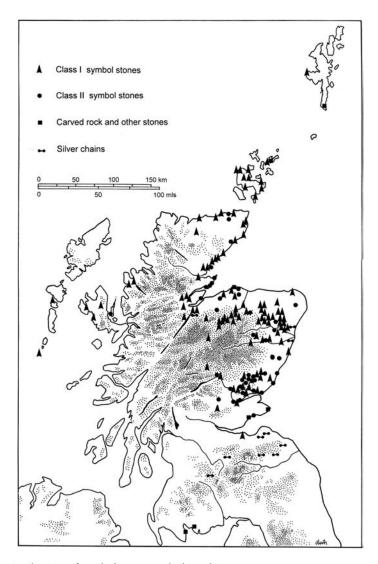


FIGURE 9.5 Distribution of symbol stones and silver chains

Source: Drawing by D. W. Harding, adapted from Foster (1996), Breeze (1998) and NMRS.

were based rather than contemporary types (Thomas, A. C., 1984: 178). The iconography of birds and beasts certainly has a long antecedent history in the earlier Iron Age of Britain and Europe, and on coinage of the pre-Roman Iron Age alone horses, boars, bulls, birds of various kinds and snakes are not uncommon. It is not necessary to invoke direct derivation since the style of rendering these creatures differs significantly, but the veneration of the later Bronze Age and earlier Iron Age zoo and its mythological or ritual significance could well have been sufficiently enduring to re-appear in modified guise as symbols on stones and other artefacts.

As to the purpose of the symbol stones, it would be easy to assume a single role, such as that of funerary memorial, when there could have been several different reasons for erecting a stone, including the assertion of territorial rights or the commemoration of diplomatic or marriage liaisons. From the combination or counter-posing of symbols with Christian imagery on Class II stones it surely seems most likely that the symbols have religious significance, animals and birds most obviously alluding to communal deities or spiritual forces. The idea that they represent personal names (Thomas, A. C., 1984; Samson, 1992) has gained widespread support, and it certainly seems possible that they proclaim identity in some sense, individual, joint or collective. But the prehistory of zoomorphic and ornithomorphic iconography with supernatural or symbolic associations argues for a religious meaning, whether in the context of burial, memorials, buildings or on a treasured personal talisman.

Whilst it is possible that some Class I symbol stones were earlier than the conventional dating, it is equally probable that their currency extended into and overlapped with that of Class II. The fact that the same symbols were incorporated also into the design of Class II stones, on which, apart from the cross itself, biblical imagery clearly proclaims a Christian context, has been taken to indicate that the pagan symbolism was subsumed within the Christian repertory, a process that would not be without parallel. Apart from the cross itself, Christian imagery includes biblical scenes, such as Daniel and the lions (Meigle No. 2) or David in various guises. The cross itself may be embellished with interlace or related patterns, as at Glamis, Angus, while abstract symbols, animals and human figures occupy the panels between. The reverse side may display a fuller narrative scene of hunting or battle, as in the case of the Aberlemno churchyard cross-slab, or the later Aberlemno roadside slab. The cross on the latter is executed in higher relief with raised bosses in a style which reaches its culmination in the early ninth century in works like the Hilton of Cadboll, Ross-shire, stone, which R.B.K. Stevenson described (1955b: 116) as more like the page of a manuscript than a carving in stone.

The range and variety of ornament on Class II stones is considerably greater than on Class I, but echoes of early Iron Age themes remain present if elusive, not only in spirals and triskeles but also in the occasional exotic beast. Interlaced animals like those flanking the Aberlemno cross plainly have a Germanic pedigree, but opposed fantastic creatures like those on the Brodie slab or Meigle No. 26 have echoes of the La Tène fashion for dragon pairs in similar confrontation. Equally, the human head flanked by two animal heads at the top of the cross recalls the earlier adoption of the voracious beast theme, while the centaur on the same cross-slab is another classical image which is adopted by the La Tène artist on pre-Roman Iron Age coinage. Strikingly different from the traditions of earlier La Tène art is the portrayal of the human form, or the depiction of narrative scenes. The themes depicted nevertheless reflect an older Iron Age tradition in which aristocratic pursuits like hunting and fighting are prominent.

The temptation to make simplistic equations between archaeological evidence and historical traditions is nowhere better demonstrated than in the conventional reading of the scene on the back of the Aberlemno churchyard stone (Figure 9.6) as a commemoration of the battle of Nechtansmere in AD 685 (Ritchie, 1989: 24-5). Rival Picts and Northumbrians are identified on the basis of their helmets, and one horseman, together with the figure over which hovers a carrion bird, is even identified as the defeated Northumbrian king Ecgfrith. The fact that the stone is normally assigned on art-historical grounds to nearly a century after the date of the battle is no impediment to the equation of the scene with one specific historical event, even as a distant folk memory.



FIGURE 9.6 Aberlemno, Angus, churchyard symbol stone, reverse side

Source: Crown Copyright: Historic Environment Scotland.

An important additional element on some symbol stones and cross-slabs is the addition of ogham inscriptions. Ogham is generally reckoned to have developed in Ireland in the fourth century AD, and not to have been transmitted to Scotland until the seventh century. Since it was a phenomenon originally of southern Ireland not widely adopted in the north, the role of the historical settlement of Dál Riata in its introduction to Scotland has been challenged (Ritchie, A., 1987). Instead, it may have been introduced at the same time as the spread of Christianity through the subsequent activities of Irish missionaries. It is not impossible, of course, that symbols and ogham inscriptions were not contemporary but successive: as Ritchie (Ritchie, A., 1989: 20) observed, 'on symbol stones and cross-slabs (ogham) can look very much an afterthought - almost a footnote'. Many prestigious works of early Iron Age art are demonstrably composite pieces, and on several of the later symbol stones, there is evidence of re-working or alterations, or re-use of earlier stones. For the most part, the ogham inscriptions themselves on epigraphic grounds are generally regarded as belonging to the second half of the first millennium AD.

Often quoted as the earliest reliable archaeological context for a Class I symbol is the slab found incorporated face-down in paving in a sixth-century context at Pool, on Sanday in Orkney (Hunter, J., 1990: 185-7). By definition, this provides not a date but a terminus ante quem for the carving and use of the stone for its original purpose, which could therefore have been significantly earlier than its sixth-century secondary context. Other associations are more equivocal. At Burghead, for example, radiocarbon dates suggest that the fort might have been constructed between the fourth and sixth centuries, but the bulls are normally dated on art-historical grounds to the seventh century and are therefore arguably from a developed phase of the settlement. Likewise, at Garbeg, the association of symbol stone with incised crescent and V-rod and the barrow remain unproven, though the balance of probability is surely that the stone was originally a grave-marker. The burial is not closely dated, of course, but cemeteries of this kind in eastern Scotland appear from radiocarbon dates to belong between the early and mid-first millennium AD. Among the more recent examples of a symbol stone from a secure archaeological context is the bear carving from Structure 11 at Old Scatness (Dockrill et al., 2010). The dressed edge of the stone suggests that it was originally a facing for one of the wheelhouse's radial piers. Unfortunately, its archaeological context, face-down on the floor, is secondary and probably resulting from the final period of the structure's history. We can therefore only infer that it was made and incorporated into the wheelhouse during its occupation in the seventh or eighth centuries.

Undoubtedly, the most important recent research on the archaeological context of symbol stones has been that conducted by Aberdeen University's Northern Picts Project. At Rhynie, excavations in the immediate environs of the Craw Stane (Noble and Gondek, 2011) have shown that it stood within an enclosure consisting, probably cumulatively, of two ditches, a line of substantial posts and a palisade founded in a trench a metre deep, the two latter possibly part of a single timber-framed wall-rampart. Finds from a destruction level in the outer ditch included fragments of sixth-century Mediterranean B-ware amphorae and continental glass of the sixth/seventh centuries, finds that are unique in eastern Scotland and clearly indicate that the site was of some political and economic importance. A ring-ditch and post settings adjacent to the Craw Stane itself may well be from a contemporary occupation, but demonstrating the direct association of the stone with what could prove to have been a multi-period occupation may prove problematic.

The date of portable artefacts bearing symbols can only be determined by their associations, and here again, the record is regrettably defective. The Norrie's Law hoard (Figure 9.7) has provoked particular controversy, its conventional seventh-century dating being based essentially on art-historical assessments that are not beyond dispute (Laing and Laing, 1984;

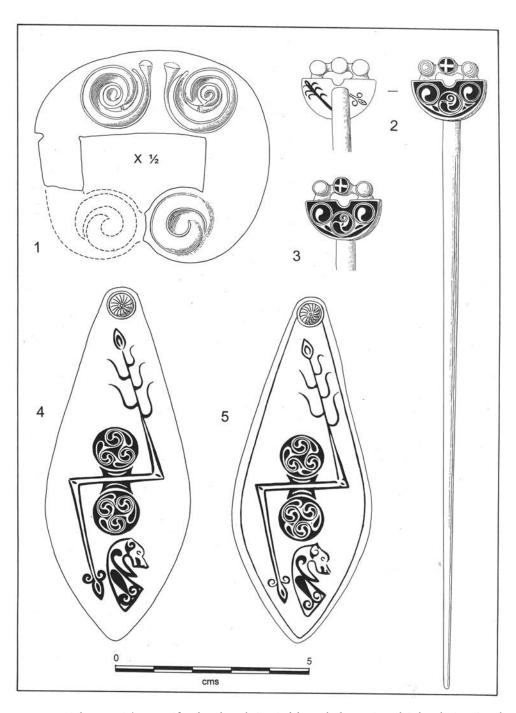


FIGURE 9.7 The Norrie's Law, Fife, silver hoard, 1, spiral-bossed plaque; 2, and 3, hand-pins; 4 and 5, oval plaques

Source: Drawings by D. W. Harding, adapted from MacGregor (1976).

Graham-Campbell, 1991). Assuming the hoard to be a genuine association, the youngest artefact in the group obviously provides a terminus post quem for the date of deposit. But the objects in the hoard could have been old when buried, treasured over many generations after the date of manufacture and use. It is therefore significant that the oval plaques with doubledisc, Z-rod and dog's head should be in pristine condition, and by implication not long in circulation, by comparison for instance with the silver spiral ring. Nevertheless, among the key associations, the spiral-bossed plaque with trumpet motifs need not be nearly as late as the seventh century, and dating the hand-pins quite so late is becoming problematic in the light of dated contexts elsewhere.

One striking class of artefacts, on some of which symbols are engraved, is the heavy silver chain, of which a dozen examples are known in a distribution that concentrates south of the Firth of Forth (Figure 9.5; Henderson, I., 1979), notably of course from Traprain Law. Plainly objects of luxury and high status, perhaps even royal regalia, their find-spots are unfortunately not informative and their dating in consequence hardly closely defined beyond the mid-first millennium AD or slightly later.

A Pictish postscript

The ethno-genesis of the Picts is an issue of enduring fascination, and for some is as problematic as their eventual disappearance is mysterious. It is a commonplace that the first documented reference to the Picts is in an anonymous panegyric to Constantius of AD 297/298, sometimes attributed to Eumenius, in which the Picts are referred to, probably anachronistically, in the context of Caesar's raids on Britain (Panegyrici Latini, VIII (V): 11, 4). A slightly later panegyric, likewise anonymous, to Constantine and dating to AD 310 or thereabouts, refers to 'Caledonii and other Picti' (Panegyrici Latini, VI (VII): 7, 2), which implies that Picti was a supratribal designation or inclusive generalization for north Britons. It is nevertheless still popularly believed, following the late fourth-century poet Claudian, that the word Picti derives from the Latin verb pingere, to paint, hence meaning 'painted people', in effect Roman army slang for 'painted savages'. Though this may have been Roman folk-etymology, Nicolaisen (1976, 150) pointed out that it could not linguistically have been the authentic Celtic meaning, and that in any event there was no evidence that the Picts called themselves by that name.

In the vernacular languages of Britain and Ireland the term Picti is a name for the native inhabitants of Northern Britain, equivalent to *Priteni in Welsh and cognate with Cruithni in Ireland. Derived from the name of the Pretanic Islands reported by Pytheas in the fourth century, it was a generalized name for the non-Romanized inhabitants of Britain and Ireland (Fraser, 2011). At this level, it was certainly not a tribal name, nor even the name assigned to a tribal confederacy limited geographically to eastern Scotland, though it may later have acquired that connotation.

It has already been suggested that the term Brigantes (effectively 'Highlanders') may have been one used by the Romans to embrace a number of different tribal groupings in the north of England whose individual names and identities they neither understood nor were concerned with. The confrontation between Roman and native interests may even have triggered common cause between the diverse indigenous groups, so that their assimilation into a larger entity may have become a reality. Much the same case was made nearly half a century ago for Northern Britain by John Mann, who declared with uncharacteristic assurance that 'the Pictish kingdom was a product of the Roman presence in Britain' (1974: 41). In reality, he was echoing the simple fact of native resistance to Roman military imperialism, that a united front was invariably more successful that an un-coordinated piecemeal response. Tacitus had made this clear on several occasions (*Agricola*: 12, 2; 27, 2; 29, 3), and it seems likely that native communities had learned through bitter experience. To claim nevertheless that a tactical response to a military necessity led ultimately to the coalition of tribal groupings into larger entities, of course, is no more than a hypothesis, though it appears to have support from parallel examples elsewhere on the imperial frontiers.

There is nevertheless some textual support for the notion of progressive change in the social organization of the native population north of the Forth. Cassius Dio, writing in the early third century, identified two principal tribes, the Caledones and the Maeatae, the latter not again independently mentioned in any of the sources, but whose name is presumably commemorated in the place-name Dumyat in the Ochils. By the early fourth century, as we have seen, the reference to 'Caledonum aliorumque Pictorum' implies that the Caledones too were Picts, though this might be saying no more than that they were all painted savages or north Britons. Yet the near-contemporary Verona List names Scoti, Picti and Calidoni as if they were at compatible levels of social groupings. Archaeologically, there are no relevant inscriptions at this date. The putatively fourth-century dice tower from Germany (Hunter, 2007: 4) could easily be a complete red herring; if Picti simply meant 'painted savages', then there is no way of knowing which group of barbarians was being referred to, just as the occurrence of Brigantes or Brigantii in Europe, if no more than generalized 'highlanders' has little bearing on the Brigantes of the north Pennines. Mann saw Ammianus' (27, 8, 5) reference to the Picts divided into two peoples, the Dicalydones and Verturiones, as evidence of an emerging Pictish kingdom, whereas, if we understand the term Picti simply to mean 'north British' the situation by the late fourth century represents no more than a process of shifting political dominance between the Caledones and their neighbours.

The discovery of a lead inscription dating around the turn of the first century AD at Rezé in Loire Atlantique has prompted a new interpretation (Broderick, 2015). In a list of ordinals, relating to some commercial transaction, the word for 'fifth' occurs as *pixte*, which has further potential relevance to the names of the local Gaulish polity *Pictones*, later *Pictavi*. If the meaning 'five/group of five' were applicable to the Northern British context, then the name *Picti* could well allude to a northern alliance created in response to the Roman threat of the Severan period. By the eighth century, that alliance had acquired, externally at any rate, the aspect of a kingdom with ruling élite, even though not founded upon 'a single political entity or with an ethnic cohesion' (Broderick, 2015: 36), so that its apparent demise from historical records by the tenth century reflects no more than its transient existence from the start.

Most authorities acknowledge that the earliest historical references to Picts referred to natives generally north of the Roman frontier (Smyth, 1984; Ritchie, A., 1989: 6; Foster, 1996: 11–12). It is in archaeological usage that the term has been confined to a more restricted geographical zone, a supposed 'Pictish heartland' in eastern Scotland, though even here internal sub-divisions have to be recognized. Smyth argued that there is no historical basis for regarding symbol stones or even Pit-place-names as specifically or exclusively Pictish, other than in the sense that they occur in Scotland north of the Forth-Clyde line in the period in question. Joseph Anderson in his Rhind lectures (1881) made no attribution of the symbol stones to the Picts, treating them instead as late Celtic, and only later adopting the Pictish assignation (Allen and Anderson, 1903). Daniel Wilson (1851) had certainly identified symbol stones as Pictish, but in the context of a native origin rather than as the product of settlement by the

Norse or of Dál Riata Gaels. Picts, of course, are documented in later king-lists and chronicles, which record their presence in eastern Scotland, but these do not demand their identification as an ethnic or archaeological entity distinct from their neighbours. The consequence of the text-led approach is that we end up looking for Pictish burials (Close-Brooks, 1984), Pictish houses (Ralston, 1997) or sites named in historical documents, whose identification on the ground may be extremely tenuous (v. Ralston, 1987: 17, on Dun Foither). In collecting and synthesizing the archaeological data, it would be preferable to categorize it simply as 'later Iron Age' or 'early historic' on the grounds that, though anodyne, it does not pre-judge the issue of historical correlations.

The 'heartland' of the Picts from the mid-first millennium AD is generally inferred in the first instance from the distribution of Pit- and related place-names (Figure 8.11; Whittington, 1975). Though the pit- or pett-element ultimately derives from a Pictish term, the place-names themselves belong to the Gaelic period of the tenth century, post-dating Celtic-speaking Picts (Nicolaisen, 1995; Taylor, 2011: 77-9). It certainly refers to a unit of land, which would have been fundamental to the social order in the early historic period throughout Northern Britain, but it cannot strictly reflect the extent of Pictish territory. The equation of Picts and symbol stones is probably too deeply embedded in archaeological doctrine to dislodge, but there is nothing intrinsically that proclaims them as Pictish, other than in the generalized sense indicated by the late Roman sources. We have already noted that Class I stones, generally regarded as the earliest, in fact have a particular concentration significantly further north than the conventional centre of southern Pictland. An alternative suggestion (Driscoll, 1988a: 229), that the northern distribution represents a concentrated effort to bring the north under southern rule, may be regarded as special pleading, in the face of the normal inference that the densest distribution represents the focus of the phenomenon.

Earlier structural classes whose archaeological distributions correspond to the same presumed southern heartland include souterrains (Maxwell, 1987) and unenclosed timber roundhouse settlements (Maxwell, 1989, Figure 6.5), though neither type could be regarded as exclusive to this group or region. Souterrains in particular, as we have seen (Figure 7.9 in this book) have significant concentrations elsewhere in Northern Britain, corresponding in effect to the broader (Roman army slang) definition of Picts. Silver chains are predominantly distributed beyond the territory normally assigned to the Picts. Linguistically, Pictish was regarded by Kenneth Jackson (1955) as a variant of Gallo-Britonnic, and the Picts therefore may be regarded linguistically as Celtic. Differences between the Pictish language and the Gallo-Brittonic of the Votadini to the south should not be magnified into a major linguistic and cultural watershed on account of a relatively short-lived political anomaly of the mid-second century AD. Jackson believed he could detect a sub-stratum of an older indigenous language that was not Celtic and not even demonstrably Indo-European, an assessment which is apparently endorsed by Isaac's (2005) identification of no less than five non-Indo-European river names in the north-east of Scotland. This enquiry was in part prompted by the 'Pictish Problem' in the first place, since older elements in topographical names could doubtless be detected elsewhere without fundamentally undermining our perception of the native communities of Iron Age Britain. The demise of the Picts by the tenth century, therefore, perhaps might occasion less surprise if the popular myth of the Picts as a separate and mysterious people could be finally consigned to archaeological history, as Alcock (1987) urged thirty years ago.

10

ARGYLL AND ATLANTIC SCOTLAND

There is no immutable threshold for defining the transition from earlier to later Iron Age that would be equally applicable to all regions of Northern Britain. In the Atlantic North and West, an obvious horizon is the decline of monumental buildings, the dismantling of broch towers and the construction within or around them of secondary buildings of lesser proportions. This may have taken place between the second and third centuries AD, in a process that need not have been synchronous across Atlantic Scotland. The position of wheelhouses in the sequence is pivotal. Though Armit (1996) described their internal architecture as preserving the tradition of monumentality, wheelhouses are the very antithesis of the external display of monumentality represented by brochs. Because their occupation still appears generally to have been successive to brochs, they will be here considered as a trailer to the later Iron Age in Atlantic Scotland.

Wheelhouses

The distribution of wheelhouses concentrates primarily in the Western Isles, with some notable variants in the Shetlands. Their apparent absence on Orkney, and their absence in Argyll and the Inner Hebrides, requires explanation. Their layout (Figure 10.1) comprises a circular outer wall, from which project inwards radial piers in the manner of the spokes of a wheel, but truncated to leave a central space within the interior, around which the piers divide the perimeter into a series of individual cells. Sill-stones at the front edges of the cells may reinforce the division between central and peripheral space. Paving is not uncommon, and the central space may include a hearth, often of distinctive U-shaped or three-sided, open-ended plan, and a stone-lined trough. Within the cell walls, there may be aumbries, or box-like cavities. Access was through a single, main entrance, sometimes with external passage to prevent blockage by wind-blown sand. Wheelhouses appear to have been 'solitary homesteads' in Armit's phrase (1996: 144), sometimes with subordinate structures adjacent to them, but not apparently occurring in 'village' clusters. In the case of upstanding, upland sites like Clettraval, North Uist (Scott, 1948), and Tigh Talhamanta, Allasdale, Barra (Young, 1953), the walled enclosure may have been contemporary, but the machair location of most wheelhouses would preclude the

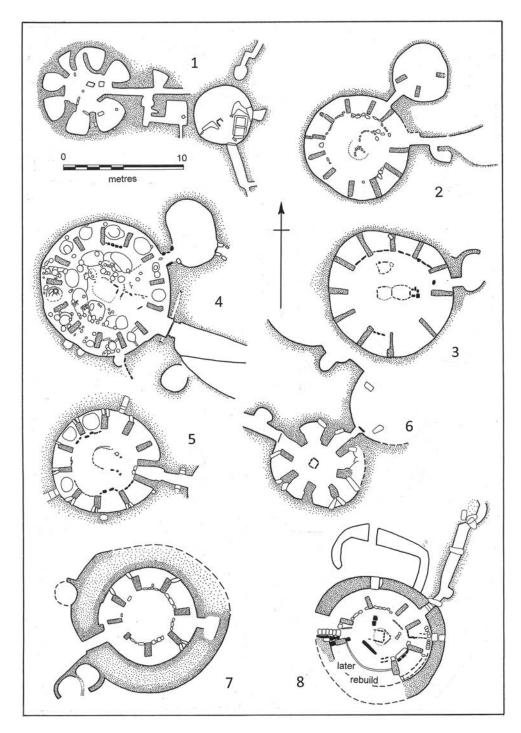


FIGURE 10.1 Wheelhouses: plans, 1, Bac Mhic Connain, North Uist; 2, A Cheardach Bheag, South Uist; 3, A Cheardach Mhor, South Uist; 4, Sollas, North Uist; 5, Kilphedir, South Uist; 6, Cnip, Lewis; 7, Clettraval, North Uist; 8, Tigh Talamhanta, Barra

Source: Drawings by D. W. Harding, adapted from Beveridge (1931), Young and Richardson (1960), Fairhurst (1971), Campbell (1991), Lethbridge (1952), Armit (1992), Scott (1948), and Young (1953).

recognition of any comparable boundary. Occasionally, wheelhouses are built into the collapsed debris of previous structures. Only in a limited number of instances are they completely free-standing at ground level, with double-sided walls. The majority are simply built with a revetment wall against the sand backing up to 2 metres into the machair.

Fieldwork in the Western Isles began with Beveridge's pioneer investigations in the Vallay area of North Uist (Beveridge, 1911) and was revived during the 1950s as a result of the military development of South Uist and Benbecula.

Two principal sub-groups of wheelhouses were recognized, those in which the radial piers abutted or were bonded into the outer perimeter wall, and those in which they were detached from the perimeter wall, the latter being known aisled round-houses. In some instances, the aisle between pier and perimeter wall was blocked in a secondary phase. In fact, though the piers may be free-standing in ground-plan, they were bonded into the outer wall a metre or so above floor level, initially by a pair of long slabs set to form a Y, above which the roof of the cells could be progressively covered by slabbing or corbelling. The significance of the aisle in terms of internal human movement must, therefore, have been minimal.

There is a considerable disparity in size and layout of wheelhouse settlements. The Cnip wheelhouse (Armit, 2006) was 7 metres in internal diameter, with just eight radial piers; Sollas was 11 metres in diameter, for which thirteen piers were necessary. The curiously conjoined structures B and C at Foshigarry (Beveridge and Callander, 1931) could not have co-existed as wheelhouses, and seem to anticipate the figure-of-eight plans of later Iron Age buildings. As an independent wheelhouse, structure C would have been one of the largest, with a diameter between 13 and 15 metres. Structure D at Bac Mhic Connain (Beveridge and Callander, 1932) is another that departs from the normal symmetry of wheelhouses, with its perimeter cells showing the irregularities that might be associated with the much earlier courtyard houses at Jarlshof, or some of the cellular post-broch structures at Old Scatness. We should therefore beware of creating strict architectural typologies, where in reality we may be dealing with the progressive and occasionally erratic development of round-houses over a prolonged period of time. As with brochs, there is the danger that classification, based upon details of architectural typology, will create the myth of a 'true' wheelhouse, parallel to the architectural construct of a 'true' broch.

Externally semi-subterranean wheelhouses would have merged in the wind-blown sand into their machair environment. The possibility of livestock wandering on to the roof to graze, alluded to in Irish sources, however improbable in other circumstances, might have been a real risk with such buildings. From an interior perspective, however, they would have presented an imposing elevation, which would have been enhanced by their architectural details. At Cnip, the height from original floor level to apex must have been in the order of 5 or 6 metres, which would have given the impression of a towering vault within the relatively confined interior. The radial piers progressively widen from basal course upwards, whilst the use of facing slabs at Jarlshof (Figure 10.2b) against horizontal coursing set just far enough back to accommodate the width of the facing stone, is a deliberately ornamental rather than functional device. Most elaborate of all was the roofing of the peripheral cells. Only two examples survive intact, one at Jarlshof in Shetland (Figure 10.2a), where the use of tabular flagstones facilitated the task, the other at Cnip in west Lewis (Plate 12A), where the more intractable Lewisian gneiss presented an altogether more formidable challenge for the builders. The Jarlshof technique involves the initial corbelling of courses of the cell walls, above which large slabs progressively converge, like a camera's aperture diaphragm, until it can be bridged with a single slab. The Cnip roof,





FIGURE 10.2 Jarlshof, Shetland, wheelhouses, A (above), Wheelhouse 2, cell roof; B (below), Wheelhouse 1 interior

Source: Photographs by D. W. Harding.

preserved in two cells of the latest phase of re-use, entails the use of chunky, undressed gneiss, cruder at first sight but evidently durable over nearly two millennia. Support for the roof of corbelled peripheral cells of wheelhouses would have been required on the inner edge of the cells, which Sir Lindsay Scott at Clettraval deduced could have been provided by an arrangement of cantilevered stone architraves.

The assumption of total roofing is now generally agreed. In Atlantic Scotland, where an unroofed court would rapidly fill with wind-blown sand, practicality must argue in favour of a totally roofed reconstruction in the majority of cases. Captain Thomas' (1870) sketch of Usin-ish, despite his textual observation that the central court was open with only the peripheral cells corbelled, actually shows a central stone vault of quite unrealistic proportions. Perhaps surprisingly for someone who advocated the lesser 'pent', or inward-sloping, annular roof for brochs, Hamilton (1956: 204) revived the notion of a full stone vault for the Jarlshof wheel-houses. Citing the internal diameter of the early Christian corbelled cells at Eileach an Nao-imh on the Garvellach islands as comparable to the diameter of the inner court of the Jarlshof wheelhouses, he believed, rather optimistically, that the wheelhouses could have sustained the weight of a totally stone-vaulted roof on their perimeter walls and radial piers.

By contrast, Lethbridge's (1952: 181) interpretation of the Kilphedir wheelhouse as a compound for a tent seems equally improbable at the other extreme. His comparison with 'the regulation army bell tent 16 feet in diameter and designed to house three officers, seven sergeants or fifteen men with their equipment' seems ludicrously anachronistic, and the idea that the surrounding wall was devised by 'a nomadic people settling down to semi-permanent life' in order to 'prevent cattle from falling over the guy ropes or rubbing against the tent' now beggars belief. But it is a salutary reminder of just how 'primitive' Iron Age communities were believed to have been just a couple of generations ago, against all the evidence of their structural and material remains.

The improbability of Lethbridge's primitivist reconstruction should not distract us from the real problems that reconstruction of wheelhouses poses (Romankiewicz, 2011). That the perimeter cells could be stone-roofed is demonstrated by the survival of examples that were. Scarcity of timber may have been one factor in the development of the wheelhouse plan, since its radial piers certainly reduced the span required to roof the central court. Straw, reed or heather thatch would presumably have been available for that purpose. Turf as a roofing material would perhaps have been feasible, provided a regular fire was maintained within the building to prevent it collapsing as a sodden mass, but its greater weight would have required substantial rafters. Additional support could have been based on flagstones without needing postholes.

Despite the internal height of wheelhouses, there is no evidence for intermediate floors or loft-levels for storage, other than in the hybrid 'aisled round-houses' of Jarlshof and Old Scatness. Any such additional capacity as was required, therefore, had to be created by lateral expansion, which doubtless accounts for the complexity of surrounding structures of some wheelhouse plans, not all of which need be regarded as secondary. The many amorphous, cellular appendages to wheelhouses occasionally included souterrains or linear passages (Armit, 1992). Some souterrains were manifestly secondary, as at Bruthach a Tuath, Benbecula, at Foshigarry or at Cnip. There are, however, examples of souterrains in the Western Isles that do appear to have been integral to wheelhouse construction, at Tigh Talamhanta and possibly at Usinish (Thomas, 1870).

The constructional problems posed by free-standing buildings like Clettraval and Tigh Talamhanta must have been of a different order altogether. With their double-faced walls,

these buildings are effectively solid-walled round-houses, within which radial piers dictate the internal ground-plan of a wheelhouse. They might be regarded as simple Atlantic roundhouses at one end of a spectrum with complex Atlantic round-houses or brochs at the other, among which some also display a radial division of internal space. In fact, their radial plans might have more to do with the social division of space than with architectural engineering. If social division of space was the key criterion, then the apparent anomaly of the absence of wheelhouses in Orkney may be substantially qualified. Several round-houses on Orkney betray elements of radial division, notably at Calf of Eday (Calder, 1939), Howmae Brae, North Ronaldsay (RCAHMS, 1946: no. 195) and Tofts Ness, Sanday (Dockrill et al., 2007), but equally in the secondary occupation of the Burrian broch, North Ronaldsay (RCAHMS, 1946: no. 193). The fact that these divisions are frequently achieved by means of edge-set slabs rather than piers, not necessarily to the same height as the radial piers of western wheelhouses, need not mean that the structural types are not related, if social division of space was the key. An example from Skaill (Buteux, 1997) evidently did have radial walls rather than simply edge-set slabs. In fact, building techniques may be expected to vary regionally, reflecting adaptability to local resources. Social conventions might be expected to display a wider currency in Atlantic Scotland, even though their physical expression will have been affected by local considerations.

If the machair wheelhouses and upland radial round-houses present two variants on a theme, the Cill Donnain structure from South Uist represents an anomaly in that it was apparently built with external and internal wall-faces at ground level on the machair (Parker Pearson and Zvelebil, 2014). The fact that the outer face was recognized only at the writing-up stage (Parker Pearson and Zvelebil, 2014: 23), however, raises concerns regarding the reconstruction of the building. Given the shortcomings of the excavation (Armit, 2015), it is hard to evaluate its true character and significance, but the possibility of ground-level structures of any kind on the machair requires further investigation.

The total absence of wheelhouses from the Inner Hebrides is difficult to account for, since proximity to the Western Isles might have been expected to encourage interaction across the Minch. MacKie argued that the secondary round-house at Dun Mor Vaul on Tiree (Figure 10.5, 6) could have been a wheelhouse, on the basis of massive lintels around the perimeter of the round-house that he believed were the bonding stones of an aisled structure. But excavation revealed no trace of the diagnostic radial piers, and had wheelhouses really been a regular feature of the Iron Age landscape of the Inner Hebrides, chance finds from erosion by wind or sea would surely have exposed their distinctive structural remains. In fact, the contact between the two regions appears to have been limited in the Iron Age in terms of structural types and material assemblages.

The case for a ritual function for wheelhouses has been argued on the basis of evidence from Sollas in North Uist (Campbell, 1991). The ritual activities focused upon a series of animal burials, principally of sheep, but also including cremated remains of cattle, found within a series of intersecting pits, numbering around 150 in total, in the interior of the wheelhouse. These pits, none of which underlay the walls or radial piers, and hence most plausibly belong to the occupation of the building, were disposed in two groupings, one around the perimeter of the central space, the others confined within the peripheral cells. Only the entrance 'cell' was devoid of pits, while Cell 9, diametrically opposite the main entrance, seems to have attracted a particular concentration of burials. Most convincing as ritual deposits are those in which a whole or nearly whole, articulated skeleton has been buried, and in one instance the dismembered remains were packed so neatly into the pit as to suggest very careful deposition of the

de-fleshed remains. In some cases, the skull and feet were missing, prompting the suggestion that they may have been removed with the skins for a 'heads and hooves' ritual (Piggott, S., 1962) prior to deposition of the remainder of the skeleton. Animal burials were not the only deposits that were potentially of ritual significance; in one instance a broken quern with central perforation had been placed over a small pit, suggesting the possibility that libations were poured through it to the cavity below.

Sollas is unusual in the density of deposits of apparently ritual character, but votive deposits or more specifically foundation deposits are not unknown in wheelhouses for which a normal domestic function may otherwise be inferred. Most striking among other settlements are the human burials at Hornish point, South Uist (Barber *et al.*, 1989; Barber, 2003), found in four pits immediately underlying a structure with radial piers. The human remains were those of a juvenile, possibly male, whose skeleton had been cut up and deposited in portions in each of the four pits, accompanied in three by remains of cattle and sheep, which had likewise been treated as a deliberate deposition. It is possible that the human remains had been exposed before burial, and the excavator was inclined to regard this not as a foundation burial so much as the abnormal burial of a social outcast. Armit (1996: 156), on the other hand, noting the general absence of Iron Age cemeteries or burials in the Western Isles, suggested that excarnation may have been the norm, which happened to coincide in this instance with the construction of the wheelhouse and the requirement for foundation deposits.

A clear demonstration of foundation rituals comes from Cnip, Lewis, where behind the wall of the unfinished second wheelhouse was found the skull of a great auk and a whole pottery vessel. Other examples of this kind doubtless exist, but whereas pits in the floor are likely to be recognized by excavators, archaeologists seldom engage in the systematic dismantling of structural walls. The arc of red deer jawbones around the hearth at A' Cheardach Bheag, and the hoard of cattle teeth found in one of the wheelhouse's peripheral cells (Fairhurst, 1971) were clearly deliberate collections, which were presumably intended to serve a votive purpose. The cache of seal's teeth from the later secondary occupation at Beirgh could conceivably have been intended for ornament, though none was perforated for suspension. The arc of cattle teeth around the secondary round-house hearth at Dun Bharabhat closely resembles the deposit from A' Cheardach Bheag, and suggests a magical or supernatural motivation. What is clear from these comparisons is that votive deposits are not unique to wheelhouses, but the scale of the Sollas pit-deposits, together with the abnormal diameter of the building, must raise the question whether this site served particular ritual purposes.

In some cases, wheelhouses are demonstrably secondary to Atlantic round-houses. The older classic model is the Jarlshof sequence (Figure 10.3; Hamilton, 1956). Here the aisled round-house of the immediately post-broch phase represents a transitional form, having a scarcement as well as unbonded radial piers. The scarcement implied the possibility of an upper floor level, or at least a mezzanine or gallery, and the presence in the perimeter wall of an aumbry above the scarcement reinforced the idea of an upper level. The radial piers were regarded as a secondary introduction, not to create peripheral cells in the manner of a wheel-house, but to provide additional support for the roof. They certainly show no sign of progressive outward curvature with height, as is characteristic of the later wheelhouses at Jarlshof, but the contiguous paving of their bays on the other hand enhances the appearance of a conscious differentiation between central and peripheral space.

The fully developed wheelhouses that succeeded the aisled round-house at Jarlshof were essentially free-standing structures, with two-faced walls around most of their circuit. The

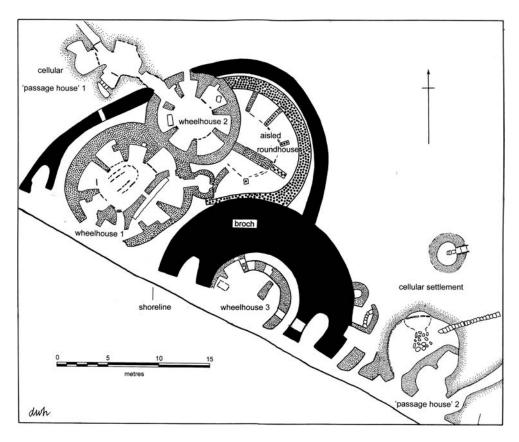


FIGURE 10.3 Jarlshof, Shetland, broch and post-broch settlement: plan

Source: Drawing by D. W. Harding, adapted from Hamilton (1956).

radial piers of these buildings are bonded into their perimeter walls, and they corbel inwards with height to facilitate roofing with stone slabs, still preserved in the cells of Wheelhouse 2. The apex of the peripheral cells survives to a height of around 3 metres from the floor, so that, with the addition of a conical roof to the central area, the total height of the building could have been in the order of 5 metres. There was no evidence of any upper or mezzanine level, other than a loft compartment above the entrance passage. Notwithstanding the structural weaknesses that emerged with time, these buildings are feats of considerable technical sophistication and architectural pretension.

If the reconstruction of the Jarlshof 'hybrid' aisled round-house remains an enigma, the structure itself is no longer unique. Excavations at Old Scatness (Dockrill et al., 2010, 2015) revealed in the later broch or immediately post-broch settlement two aisled round-houses (Structures 12 and 14), of which the latter displays the same combination of scarcement, aumbry and radial piers (Plate 13A). At least three radial piers survived to the same level as the scarcement, suggesting to the excavator, as to Hamilton at Jarlshof, that the building could have had an upper floor. These piers were of elongated rectangular plan, in contrast to the shorter, triangular shape of later wheelhouse piers. The fact that one pier partly blocked an aumbry in the outer wall also indicated more than one phase of construction in the building.

Radiocarbon and archaeomagnetic dates for this aisled round-house indicates its occupation in the later first millennium BC, providing the earliest reliable dating for the appearance of wheelhouses or related structures.

Old Scatness also features wheelhouses (Structures 6 and 11) that plainly belong within complex structural sequences that defy their isolation as distinct and separate types. Structure 11 (Plate 13B) has decidedly triangular radial piers, which, like the Jarlshof wheelhouses, also include the embellishment of vertical slabs facing the inner edge of the radial piers. The discovery of a discarded slab with carving of a bear-symbol on its face has prompted the suggestion that it could have been an ornamental façade for just such a pier. The internal occupation of these buildings was intensive, and in Structure 6 in particular was represented by a series of superimposed floors and hearths. AMS radiocarbon dates, archaeomagnetic dates and optically stimulated luminescence dating all point to the probability that the later phases of these buildings belonged to a period much later than is conventionally assigned to the currency of wheelhouses, in the second half of the first millennium AD. In fact, the upper levels of Structure 11 yielded a significant assemblage of Norse artefacts, indicating unprecedented re-use or longevity of occupation.

In the Western Isles the Beirgh sequence suggests an alternative model of development. It seems probable that initially the secondary re-occupation of the reduced shell of the complex Atlantic round-house was a simple round-house. At Beirgh this was a structure revetted into rubble around the inner broch wall, but with re-entrant gaps to provide access into the ground floor galleries and cells of the former broch (Figure 10.4A). In effect, the round-house had a series of peripheral cells, created by re-use of the earlier intra-mural structures. The rising water table at Beirgh, however, required that the floor level should be raised periodically, so that in due course the intra-mural cells of the former broch were no longer accessible. Only at this stage were radial piers introduced into the round-house in order to re-create the internal division of space that would approximate to the archaeological definition of a wheelhouse. Quite evidently this would have resulted in a reduction in the overall space available, and it may well be that it was at this stage that the external structures were developed in compensation.

Site sequences like Jarlshof need not in principle preclude the use of wheelhouses at an earlier date, contemporary with Atlantic round-houses. Once again, the problem is compounded by the undiagnostic nature of earlier material assemblages (Harding, 2005a). A late dating for wheelhouses was argued by R.B.K. Stevenson (1955a), though much of the material in question may have been derived from secondary contexts. Both saddle and rotary querns are found, either within undifferentiated occupation debris or sometimes incorporated into the walls themselves, so that the position of wheelhouses relative to the period of 'quern replacement' (Caulfield, 1978) is hard to assess. Beads are hardly closely dateable between the closing centuries of the first millennium BC and the early or mid-first millennium AD. On the basis of its ceramic assemblage, which included applied cabled ornament and a variety of stamped and incised wares, but notably did not include arcaded ornament of everted-rim vessels in the Clettraval style, we might wonder, contra Sir Lindsay Scott (Young, 1953: 104), whether Tigh Talamhanta, Barra, might not have been among the earlier wheelhouse settlements in the Western Isles.

Armit has argued (1996: 145) that occupation levels that survive for archaeological examination most likely relate to the closing stages of a site's use, so that the data is necessarily biased towards late dating. It is probably true that evidence of the earliest occupation on a site will have been obliterated by re-use, if not simply by periodic cleaning and maintenance. For this

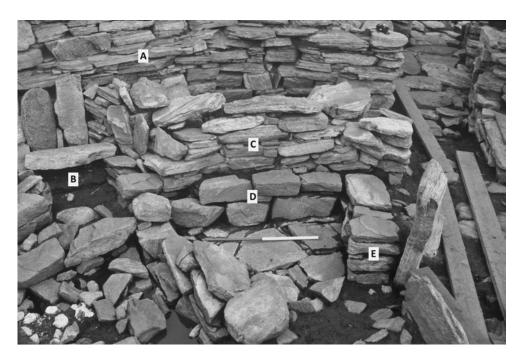




FIGURE 10.4 Beirgh, Riof, Lewis, A (above), secondary round-houses, showing broch scarcement (a), re-entrant into broch gallery (b), round-house wall (c), wheelhouse wall (d) and pier (e); B (below), figure-of-eight building

Source: Photographs by D. W. Harding.

reason, the terminus post quem centring on the late fifth century BC (GU-2754: 2370 +/-130 BP), obtained from bone in the votive deposit behind the wall of Wheelhouse 2 at Cnip, though only a single uncorroborated date, might be of potential significance. Unfortunately, the dating of Phase 1 at Cnip was ambiguous. Phase 2 was fairly securely dated to the mid- to late-first century AD, so by implication the earliest wheelhouse could have been constructed in the closing centuries of the first millennium BC. Much the same could have been true of Sollas. The radiocarbon dates there pointed to a span of occupation between the first and third centuries AD, but none was from an unequivocally primary context. The dates from Hornish Point, South Uist, centring on the fifth and fourth centuries BC were recognized by the excavator as probably prejudiced by the marine reservoir effect, and are not therefore reliable testimony of early dating of wheelhouses.

As regards the Udal, until such time as the site is adequately published and the stratigraphic and contextual data are available for critical review, it is obviously prudent to reserve judgement. But the excavator claimed that the wheelhouses there had their origins in the later Bronze Age (Crawford, n.d.: 8–9). In a long sequence of occupation of Udal South the final wheelhouse phases apparently produced three radiocarbon dates centring on the first century AD. Crawford compared the later Bronze Age phase of activity, apparently represented by bronzeworking and buildings constructed of piers, to the late Bronze Age settlement at Jarlshof, raising the possibility that buildings allied to the wheelhouse originated in structures of the earlier 'courtyard' class. The social-use-of-space rather than the architectural-typology model would certainly lead to the expectation of an older tradition of building in which the defining factor was the division of central from peripheral areas.

Whatever doubts there may be regarding the structure of the Cill Donnain 'wheelhouse', there is little doubt regarding its occupancy in the first millennium AD, being constructed most probably after the second century and abandoned in the late fifth or early sixth. As such, it represents one of the latest of the wheelhouses of the Western Isles, or at least a late variant on the theme.

In sum, the case for an early Iron Age origin of wheelhouses is far from demonstrated, but cannot altogether be ruled out. On the other hand, the secondary occurrence of wheelhouses in Atlantic round-house sequences is undeniable. Excavation has amply demonstrated that wheelhouses form part of protracted sequences of occupation, in Shetland at any rate, at Old Scatness and Scalloway (Sharples, 1998), extending into the later first millennium AD.

Post-broch settlement in the Western Isles

In both the Northern and Western Isles the immediately post-broch occupation frequently takes the form of a round-house, built within the courtyard of the inner broch wall (Figure 10.5). In some cases the broch walls were apparently deliberately reduced, providing building material for the new construction while consolidating the remains of the broch tower. Where the round-house wall actually abuts a perfectly serviceable inner broch wall, as at Dun Mor Vaul, we might question why it was necessary to create a new wall-face at all, constricting internal space to no obvious advantage. At Carn Liath, Sutherland (Figure 10.6a; Figure 10.5, 3; Joass, 1890; Love, 1989), the rebuilt secondary wall seems unnecessarily to reduce space within a serviceable broch wall, while at Ousedale, Caithness (Figure 10.6b), the secondary facing seems to be little more than superficial cladding. At Mousa the surviving broch structure (Plate 14A) must surely have remained in use, though how the secondary structures functioned

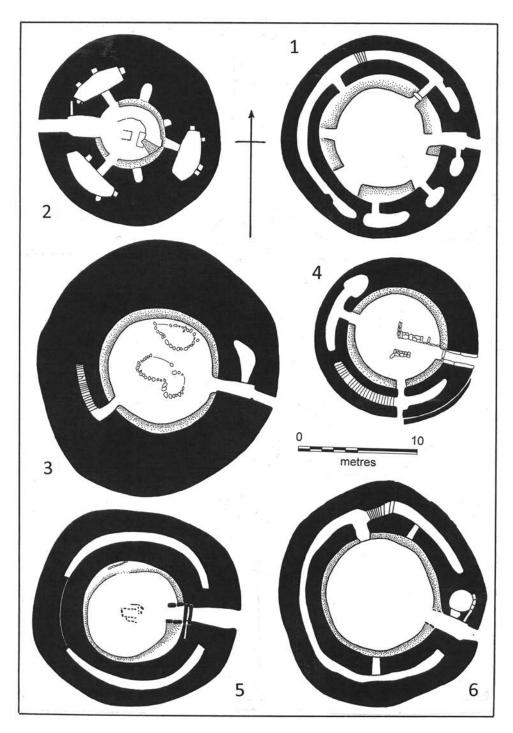


FIGURE 10.5 Complex Atlantic round-houses with secondary round-houses: plans, 1, Beirgh, Lewis; 2, Mousa, Shetland; 3, Carn Liath, Sutherland; 4, Yarrows, Caithness; 5, Dun Cuier, Barra; 6, Dun Mor Vaul, Tiree

Source: Drawings by D. W. Harding, adapted from RCAMS (1946), RCAHMS (1911), Joass (1890), Love (1989), Young (1956) and MacKie (1974).





FIGURE 10.6 Post-broch secondary structures, A (above), Carn Liath, Sutherland; B (below), Ousedale, Caithness

Source: Photographs by D. W. Harding.

within the tower (Plate 14B) is unclear. For the majority of brochs, the implication must be that the re-facing was a symbolic and physical break with the past, even though functional features of the Atlantic round-house were re-used, such as its entrance or perhaps its intra-mural galleries. The transition was evidently one of some significance. Post-broch structures cease to be monumental on the scale of the Atlantic round-houses, and in floor area their singlestoreyed construction cannot have matched a quarter of the potential of a tower with multiple floors and intra-mural galleries. In compensation, expansion beyond the walls of the broch may have been necessary, as was probably the case at Beirgh. What the catalyst for this major change was, and whether it was synchronous across Atlantic Scotland, remains a puzzle. Major demographic disruption or innovation hardly seems to be implied in the material assemblage and can probably be discounted. In any event, the question, 'what brought about the demise of the brochs?' should surely be addressed in conjunction with the question, 'what prompted their construction and development in the first place?' Whatever circumstances demanded a display of monumentality either no longer pertained or were addressed in other ways.

An informative post-broch settlement sequence survived in the Loch na Beirgh, in west Lewis (Harding and Gilmour, 2000). Despite the curtailment of excavations before the primary deposits had been examined, the later settlement sequence, extending from around the second century AD to the Norse incursions of the ninth or thereabouts, was recorded in detail. With progressive rise in water table obliging successive generations of occupants to raise their internal floor levels, the underlying structural foundations and associated occupation deposits survived in vertical sequence, while inundation of the lowest deposits had resulted in exceptional preservation of timber and organic materials.

The early post-broch occupation at Beirgh, as we have seen, focussed on a round-house, built within the broch walls, but utilizing some of its still accessible intra-mural galleries, until such time as the rising water level rendered that impractical. At this stage, radial piers were constructed, giving the building an internal division of space akin to that of a wheelhouse. The complexities of the Beirgh round-house phase remain to be clarified. Its end is marked stratigraphically by one of the few contexts that extends across the whole of the site's interior, a thick layer of laid peat covering the round-house occupation and providing the foundations for the next major structural phase, characterized by multiple, small, cellular units. The contrast between the round-house, which, however modified, occupied the former broch interior in its entirety, and the cellular suite of buildings, could not be greater and must signify some important shift in function or change in social pattern. The early cellular phase yielded debris from bronzeworking, which suggests industrial activity in close proximity. The use of external space, probably initiated already in the round-house phase of occupation, was probably extended in the cellular phase. The dating of the cellular phase is assigned to a span between the early third and late sixth centuries AD.

In terms of construction techniques the cellular phase is particularly characterized by the use of edge-set slabs, as single-sided facing of debris from previous buildings or as double-sided facing of a free-standing wall. In either instance slab-revetted foundations commonly formed the base for a wall of dry-stone coursing, which progressively corbelled inwards to create either a completely corbelled roof to the smaller cells, or partly corbelled eaves for an organic roof of timber and thatch. Partial corbelling, though inherently unstable unless firmly braced by the roof-timbers, seems to be well attested by the structural remains from Beirgh and other sites in the Western Isles, and is paralleled in more recent buildings such as the cleitan of St Kilda (RCAHMS, 1988b). Corbelled cells of this kind are particularly difficult to recognize

archaeologically unless the excavator is expressly looking for them, or is familiar with their residual characteristics, since their courses are progressively set back with depth, and at first sight appear more like collapsed masonry than a conventional wall-face. Secondary occupation characterized by this kind of construction can easily have been missed or misinterpreted in older excavations in Atlantic Scotland and Ireland. Reference to amorphous sections of masonry at Cahercommaun, Co Clare (Hencken, 1938), for example, almost certainly indicates secondary occupation, from which much of the Early Christian material might have derived rather than from the primary occupation of the stone fort.

The cellular phase at Beirgh nevertheless exhibits several different types of structure, utilizing a combination of stone and timber. Structure 5 was unique in having the timbers of its twin door-posts still in situ, with their lower, earth-fast sections still intact below floor level. The only surviving evidence of its sub-circular plan was a kerb of small edge-set slabs, suggesting that its walls as well as its roof may have been of organic materials. Elsewhere in the primary cellular phase timber posts and wattled hurdling survived in situ (Plate 15A). Similar foundations of small, edge-set slabs characterized one circular building at Close ny chollagh on the Isle of Man (Gelling, 1958), where the two more substantial round-houses used a combination of edge-set boulders and horizontal coursing in the manner of the cellular and later phases at Beirgh. The Manx promontory fort from its material associations would appear to have been occupied around the first century AD. Structures of wattled construction from Deer Park Farms in Co Antrim (Lynn and McDowell, 2011) could provide a possible parallel for the superstructure of these less substantial buildings at Beirgh. Alternatively, as Gilmour suggested, the cellular settlement in its earlier stages at any rate could still have had an overarching roof, so that the surviving foundations might delineate activity areas rather than independently roofed buildings. The only other distinctive structural features were hearths of baked clay, decorated with geometric linear designs (Plate 15B).

By the later cellular phases, however, structures 1a and 1b were quite evidently fully stone-corbelled cells. At one stage in their use, these cells formed part of a shamrock-shaped unit, with an open court bounded by the re-used wall of the earlier round-house (Figure 10.7, 2). The hearths were characteristically of open-ended, three-sided plan. The similarity with the later Iron Age 'shamrock' from Gurness, Orkney (Figure 10.7, 1), is striking, even down to the sill-stones that marked the entrance into the cells. Two adjacent cells, structures 3 and 4, may have had part-corbelled, part timber and thatch roofs; both included slumped stonework that was generally indicative of partial corbelling. A further novelty of the late cellular phase at Beirgh was a short souterrain-like structure leading out of the 'shamrock', which, like some souterrains in eastern Scotland, had a drain running axially down its length. In fact, the Beirgh 'shamrock' should perhaps be seen as including Cell 3 and the souterrain, as well as Cells 1a and 1b with the open court, its quadrifoliate plan being simply compressed by the constraint of the encircling broch wall.

The final stage of occupation at Beirgh, dated broadly by artefacts to the seventh-eighth centuries AD, is represented by the culmination of cellular construction, the so-called figure-of-eight, or 'ventral' house (Figure 10.8, 3). The Beirgh example, which itself overlay some intermediate structures of which only amorphous arcs of walling survived, occupies the whole of the former broch interior. It still retained the eastern entrance passage, though because of the progressive rise in occupation levels its paving would have been approximately at the level of the capstones over the original broch entrance. The interior comprised a main cell, with central hearth and twin aumbries or recesses diametrically opposite the entrance, and a secondary

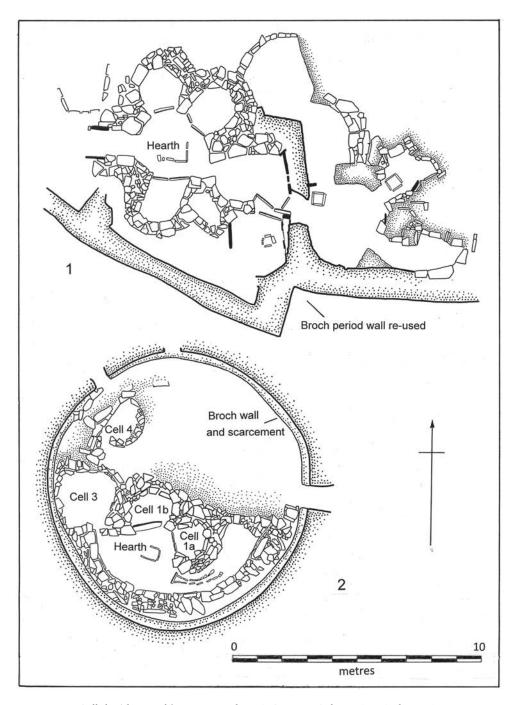


FIGURE 10.7 Cellular 'shamrock' structures: plans, 1, Gurness, Orkney; 2, Beirgh, Lewis *Source*: Drawings by D. W. Harding, adapted from Hedges (1987) and Harding and Gilmour (2000).

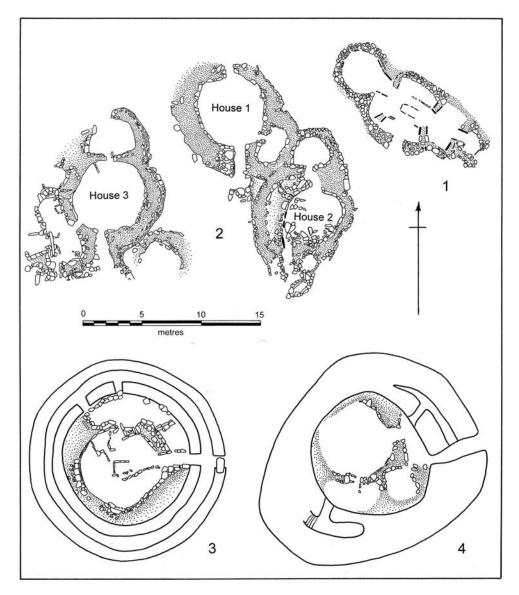


FIGURE 10.8 Ventral or figure-of-eight houses: plans, 1, Buckquoy, Orkney; 2, Bostadh, Great Bernera, Lewis; 3, Beirgh, Lewis; 4, Dun Vulan, South Uist

Source: Drawings by D. W. Harding, adapted from Ritchie (1977), Neighbour and Burgess (1996), Harding and Gilmour (2000) and Parker Pearson and Sharples (1999).

cell to the north, compressed into a kidney shape by the former broch walls. At one stage in its use, a third, smaller cell just inside the entrance passage occupied the same relative position as an earlier cell of the cellular occupation period, perhaps a later derivative of the guard cell of a broch. The figure-of-eight building used massive edge-set slabs to revet the debris of earlier collapsed masonry, above which in places several horizontal courses survived, in sections

plainly demonstrating a tendency to partial corbelling (Figure 10.4B). How such a structure was roofed, however, remains a matter of conjecture. Roofing each cell independently might have proved problematic, and it is possible that these buildings had an overall hipped roof, as was inferred for the experimental reconstruction of the Bostadh house, just across the water on Great Bernera.

Among diagnostic artefacts from the later Iron Age occupation at Beirgh were two penannular brooches from levels immediately preceding the construction of the final figure-of-eight house, and a pair of copper alloy tweezers, found on the floor of the house itself. Pipe-bowl shaped crucibles likewise suggested a date-span in the seventh to ninth centuries, but unlike its northern counterparts, Beirgh yielded no trace of Norse occupation, despite evidence of Norse burials on the Bhaltos peninsula.

In summary, therefore, Beirgh suggests a threefold post-broch sequence, from round-house, to cellular buildings and finally to figure-of-eight or ventral house. This sequence also accords broadly with a progression in ceramic styles (Figure 10.9), with incised linear or impressed ornament in decline with the transition to the cellular phase, in which applied cabled bands, together with a variety of applied circlets and horseshoes predominated among decorated wares. Finally the late cellular, figure-of-eight phase sees only undecorated pottery of essentially slack-profiled form, corresponding to Lane's (1990) 'plain wares' from the Udal. The changes in building typology would seem to indicate radical social change, but in some details, the successive phases unexpectedly preserve the spatial pattern of earlier phases. Internal divisions in functional and social use of space of earlier round-houses may have been effected with partitions that did not leave structural evidence in the archaeological record, so that the contrast with the more formalized sub-divisions of the cellular phase may be more apparent than real. In any event, from the longer chronological perspective, it could be the monumental Atlantic round-houses that were exceptional, rather than their archaeologically more ephemeral antecedents and successors.

Neighbouring sites of the Bhaltos peninsula broadly endorse, and in some measure amplify, this model sequence. At Dun Bharabhat, the situation was evidently complicated by the structural collapse of the early complex Atlantic round-house. It is perhaps surprising that no attempt was made to re-face its inner walls in the construction of the secondary round-house, which, on the basis of the limited radiocarbon dates available, could have taken place rather earlier than the demise of monumentality elsewhere. The external structures at Bharabhat, located on the annexe on the opposite side from the causeway and in part revetted into the collapsed debris of the round-house, were cellular in form, displaying the characteristic combination of edge-set slabs and horizontal dry-stone coursing. Radiocarbon dates from samples taken from the annexe margins, though not associated directly with these structures, indicate continuing occupation of the site into the first half of the first millennium AD.

Cnip introduces the additional dimension of a classic wheelhouse into the Bhaltos sequence. Here the wheelhouse was evidently still in occupation in the opening centuries AD, broadly contemporary with the round-house or wheelhouse phase at Beirgh. Thereafter Cnip too sees the appearance of cellular structures with edge-set slabs revetting the sand and with horizontal coursing above. The principal house of the immediately post-wheelhouse phase (Plate 12B) had its vertical slabbing graded to its highest point directly opposite the entrance, providing a focus in much the same way as the twin recesses did in the later figure-of-eight building at Beirgh. The final phase at Cnip was a linear building, wider than a souterrain, and incorporating two of the surviving cells of the earlier wheelhouse as its terminal focus.

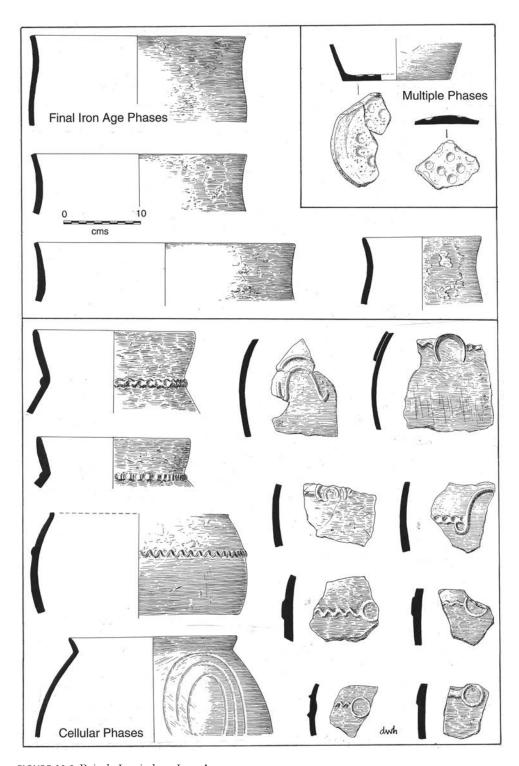


FIGURE 10.9 Beirgh, Lewis: later Iron Age pottery

Source: Drawings by D. W. Harding.

The Bostadh settlement (Neighbour and Burgess, 1996) exemplifies cellular construction not constrained by pre-existing bounds. Whilst its buildings provide good parallels for the Beirgh figure-of-eight plan (Figure 10.8, 2), with free-standing rather than revetted walls, the open settlement permitted lateral expansion into more complex forms. The structures are thus multi-cellular, or ventral with accretions, rather than being simple figures-of-eight, also including structural features such as aumbries. Micro-analysis of deposits may permit the identification of different activities in the subordinate cells. One important difference from Beirgh is that the latest levels, though somewhat ephemeral, indicated Norse settlement.

Metalworking is also attested in the sub-shamrock-shaped structure at Eilean Olabhat, North Uist (Armit et al., 2008). The construction of the building involved similar techniques and features to the Beirgh cellular sequence, including the use of corbelling or partial corbelling. Evidence for metalworking comprised crucibles and fragments of moulds for pins and brooches, whilst radiocarbon dates indicated a span from the fifth to seventh centuries AD. One mould was for casting an ornament with a triskele motif, comparable to an example from Dunadd. The status of the site was nevertheless enigmatic, with minimal evidence for permanent occupation. Accordingly the excavators speculated whether it could have been the seasonal base for an itinerant craftsman, or perhaps more probably an outstation to which a craftsman could be seconded by his patron to client or kin dependents (op. cit. 99).

Post-wheelhouse occupation at A' Cheardach Mhor (Young and Richardson, 1960) evidently took the form of cellular structures, and though incomplete in plan their associations broadly endorse the sequence recognized at Beirgh. Three ephemeral cellular phases were recognized (Phases 2, 3 and 4) with a final, rectilinear structure (Phase 5) for which a Norse date is possibly implied by the presence of worked steatite. Of the cellular structures, those of Phase 4 included arcs of walling comprising edge-set slabs with up to two courses of stonework above. As regards finds, Phase 2 yielded an everted-rim vessel with applied wavy cordon and fillets; Phase 3 was characterized by plain wares comparable to that from the later occupation at Dun Cuier (Young, 1956, 1966). Phase 4 produced little occupation debris, but artefactual finds did include a cast bronze pin with loose, wire ring-head, which might be dated between the sixth and eighth centuries AD (Fanning, 1983).

Among other cellular settlements in the Western Isles, the Udal was plainly an important example, not least because of the presence of at least seven such cellular units (Crawford and Selkirk, 1996: 89, fig.). These appear to include bicameral, 'figure-of-eight' variants as well as multi-cellular structures. Pottery included Lane's 'plain ware', and cellular occupation appears to have continued until it was succeeded by Norse settlement in the ninth century AD. Among other discoveries, Ceann nan Clachan, North Uist (Armit and Braby, 2002) appears to be essentially a figure-of-eight plan with additional lateral cells dating to the later Iron Age.

Finally, Dun Vulan (Parker Pearson and Sharples, 1999) presents a close analogy in its sequence with Beirgh, its final phase being a figure-of-eight that must overlie several intermediate structural phases following the abandonment of the original complex Atlantic roundhouse. Dun Vulan, however, is also important for its rectangular stone platforms, confirmed as early to mid-first millennium AD by a series of radiocarbon dates. It is not clear whether these structures were for domestic occupation or were ancillary buildings. The wheelhouse settlements at Clettraval and Tigh Talamhanta also included rectangular buildings that were regarded by their excavators as barns, which, together with other lesser structures, made up the farmstead complex. A parallel might be cited in the rectangular 'wags' of Caithness, which were also regarded by their excavators essentially as animal byres.

Argyll and the Inner Hebrides

At Dun Mor Vaul, Tiree, the post-broch round-house represents the latest substantial structure on the site, though several ephemeral structures in the external court could conceivably be the fugitive remains of later, cellular buildings. Edge-set slab construction defined four single-roomed 'houses' or 'cells' at Machrins, Colonsay (Ritchie, J.N.G., 1981), where the settlement was radiocarbon dated around AD 800. At the other end of the chronological spectrum, a hut-circle excavated in 1976 at Ardnave, Islay, was constructed with 'orthostats angled against the thrust of the dune, and upper courses of drystone walling' (RCAHMS, 1984: 127). This was essentially the same technique as is used in the Western Isles, except that the dry-stone construction at Ardnave was less obviously coursed, with more rounded boulders. No dating evidence was recovered from this house, but an adjacent and possibly related site yielded evidence of later prehistoric occupation. The technique is plainly suited to structures whose foundations are revetted either into sand or into the collapsed rubble of earlier buildings, and as such may be typical without being diagnostic of any given period.

For mainland Argyll, a similar sequence of structural development to that of the Western Isles might be inferred, given that it is unlikely that ephemeral secondary cellular structures would have been recognized in older excavations. Even at Rahoy, north Argyll (Childe and Thorneycroft, 1938a), Childe noted stonework that in retrospect might be interpreted as the product of secondary re-occupation. Clearly secondary is the penannular arc of edge-set stones at Ardifuar, mid-Argyll (Figure 10.11; Christison *et al.*, 1905). Here, despite the absence of proper stratigraphic record, the early excavators had recognized that the site was multiperiod, a conclusion that was endorsed by the material finds. Apart from undiagnostic finds such as whetstones, polishing stones and perforated discs, the excavations yielded a fragment of samian ware and a sherd subsequently recognized as E-ware, plainly indicative of occupation continuing through the first half of the first century AD.

Among the Argyll duns modern excavation and radiocarbon dating has confirmed the first millennium AD construction and occupation of Kildonan in Kintyre. Though Kildonan is by no means the most irregular of galleried duns in the Argyll Inventories, its sub-triangular plan is quite alien to the early Iron Age tradition of circular or sub-circular plans. Elements of Atlantic round-house architecture are certainly present, though in a form not at all characteristic of complex Atlantic round-houses themselves. The entrance is rebated for a door with bar-holes, but its passage is much wider than in an Atlantic round-house. There is a form of intra-mural gallery leading away from the entrance passage on its south side, but open at both ends, and quite unlike an Atlantic round-house guard cell. Finally there is a gallery with access to upper levels, but by means of a double staircase set against a continuous 'median wall-face' which extends around the entire enclosure. Excavations by Fairhurst (1939) and Peltenburg (1984, 1982: 207-8) have conclusively shown that this was the product of secondary re-facing of the dun wall, rather than an integral device for internally strengthening the original wall. Earlier material was very abraded, and radiocarbon dates for samples recovered by Peltenburg from below a hearth of the second of the site's four principal phases calibrated between the seventh and ninth centuries AD. Whilst there must always remain the residual possibility that the earliest occupational evidence has been obliterated by subsequent activity, the strong probability is that Kildonan was a mid-first millennium AD foundation. Once again, it is clear that complex architecture is not diagnostic of the earlier Iron Age, and that in some regions similar building traditions persisted into the early historic phase.

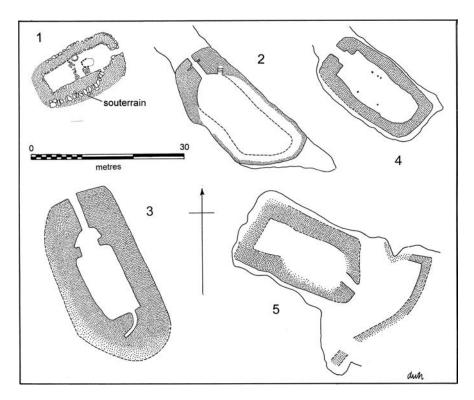


FIGURE 10.10 Rectangular building plans in the Atlantic west, 1, Tungadale, Skye; 2, Dun Grugaig, Skye; 3, Dun Totaig, Skye; 4, Dun Fhinn, Argyll; 5, Dun Mucaig, Argyll

Source: Drawings by D. W. Harding, adapted from Miket (2002), RCAHMS (1928; 1971; 1975) and MacSween (1985).



FIGURE 10.11 Ardifuar, Argyll, secondary round-house within dun

Source: Photograph by D. W. Harding.

An important innovation of the early historic period, as we have remarked, is the rectangular or sub-rectangular building plan. In mainland Argyll the only example to have been excavated is the remarkable stack site on the west coast of Kintyre at Dun Fhinn (Figure 10.10, 4). This building, enclosing an area some 14 metres by 6, was almost certainly a roofed rectangular house; internal postholes, formerly considered as supports for internal timber ranges (RCAHMS, 1971: 83), could equally have supported a fully roofed aisled structure. Dating of the site's construction and initial occupation is based upon the material assemblage from the primary floors, which included samian scraps, two penannular brooches and a blue glass 'dumb-bell' bead, all of which would be consistent with an occupation in the second or third centuries AD. Very similar in topographic location, plan and size is the undated rectangular Dun Mucaig, Seil (RCAHMS, 1975: no. 179), which differs only in having an outwork on its eastern, accessible flank. Dun Grugaig on Skye (RCAHMS, 1928: no. 651) might also afford an analogy for the building at Dun Fhinn, less regular in its rectangular plan, but of very similar dimensions and sharing the use of door-checks in its entrance passage. Admittedly, Dun Fhinn lacks galleries or scarcement, but so too would Dun Grugaig had it survived only to the height of Dun Fhinn's wall foundations. Both could easily have been roofed structures. Rather than being one of the earliest of the proto-brochs, as MacKie suggested (1991: 168), Dun Grugaig might well belong instead to the early historic period. There are several other sites, less well preserved, on Skye which might belong to this same category of rectangular, roofed promontory duns, including Dun Ila, Dun Beag, Torrin, and possibly Dun Pharuig (MacSween, 1985).

Stack sites are not uncommon in the Atlantic north and west, wherever the topography has created opportunity for defensive reinforcement. In some instances, sites which were built on narrow-necked promontories may now survive only as stacks through marine erosion. Some are so precipitous that it is hard to imagine their use as domestic habitation sites, other than as temporary refuges. Caisteal a' Mhorair, North Tolsta, is one such example on Lewis (McHardy et al., 2009). Located less than 100 metres from the cliff-edge, and overlooked by it, its summit is occupied by a rectilinear building with subordinate chamber, suggesting occupation in the early historic, rather than in the later prehistoric Iron Age. Similarities with the stack site at Luchruban (the 'Pigmies Isle') west of the Butt of Lewis, where the buildings suggested an early Christian occupation (Thomas, A. C., 1971: 85–6), raise the possibility that some of these stacks were used as ecclesiastical settlements or eremetic sanctuaries. More recent re-survey (McHardy et al., 2009), however, and the discovery of Neolithic pottery has raised doubts regarding the traditional attribution of Lochruban.

Dunadd and nuclear forts in the west

Since R.B.K. Stevenson's pioneering study of Dalmahoy (1949b), the term 'nuclear fort', as we have seen, has been associated primarily with sites of the early historic period. The particular combination of a citadel as the focal point on the summit, with a series of lesser enclosures looping away from that nucleus to create a hierarchical structure, were requirements that demanded sites that had not generally commended themselves for occupation in the earlier Iron Age.

The early historic occupation of Dunadd (Figure 10.12) and related nuclear forts has been amply demonstrated by excavation. Earlier excavations at Dunadd had unfortunately not recognized the stratigraphic sequence of activity, but investigations in 1980–1 confirmed in fact that there may have been two phases of earlier Iron Age occupation, based upon a stone-built rampart on the summit (Lane and Campbell, 2000), and accounting for saddle querns from the

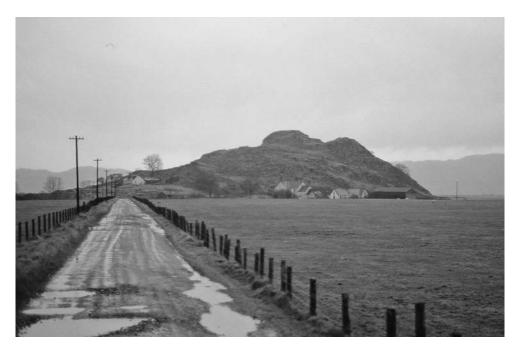


FIGURE 10.12 Dunadd, Argyll, from the east

Source: Photograph by D. W. Harding.

older excavations. The early Medieval occupation began between the fourth and sixth centuries AD, extending at least to the end of the millennium. During this period the early historic defences were successively constructed to complete the plan of a fully developed nuclear fort by the seventh century. The site has thus been conventionally regarded as a major centre of the Dál Riata, possibly the caput regionis of Adomnán's seventh-century record. From the time of Captain Thomas' report (1878), and recognition of the rock-cut footprint and basin, Dunadd has been regarded as an inauguration place of kings of Dál Riata, and accorded primacy among the Dark Age centres of the region.

Alcock (1981:167; Alcock et al., 1989) had argued that nuclear forts, together with Feachem's sub-group of citadel forts, which he subsumed within a single broad class on the grounds that it was the hierarchical organization of space that mattered rather than the arrangement of their enclosure plans, were essentially an innovation of the early historic period. Dundurn at any rate he was able to demonstrate was a foundation of the early historic period, with no evidence for re-use of an earlier Iron Age fortified citadel (Alcock et al., 1989: 211). Whilst the Dunadd evidence is hardly sufficient grounds for contesting this view, it hardly seems surprising that later foundations might favour sites whose geographical or topographical advantages had attracted earlier settlement. If the Dalriadic settlement of Strathclyde represented a radical change, bringing with it a fundamentally new political and social order, then this might indeed have been reflected in distinctive field monuments and a break in settlement continuity. But if the roots of cross-Channel connections go back much further, then the settlement of Dál Riata documented historically may have been no more than a change in ruling élite, with less obvious consequences in the archaeological settlement record.

Elsewhere in Argyll there are instances of smaller sites, like Little Dunagoil on Bute (Marshall, 1964), possibly occupied from the sixth century AD, where the settlement might have been ordered into a series of enclosures descending from the summit on the 'nuclear' model. The origins of the adjacent early Christian site of St Blane's are also commonly attributed to the sixth century, though archaeological support for this early foundation is sparse.

Crannogs in Argyll and the Inner Hebrides

Five miles east of Dunadd lies Loch Glashan, where the lowering of the waters in 1960 for hydro-electric operations provided an opportunity for some superficial examination of a crannog, from which an exceptionally rich assemblage of organic artefacts was recovered (Earwood, 1990; Crone and Campbell, 2005). Of the crannog structures themselves, only a limited area was examined, and what was described as its sub-structure of brushwood and timber was almost certainly only the latest in a deeper sequence of deposits. Though some of the timbers appear to have been laid, and evidently displayed structural joints, their interpretation as a rectangular building seems rather tentative in view of the limited area opened. The date of the occupation represented, however, is hardly in doubt. An E-ware vessel and penannular brooch indicate a span between the sixth and eighth or early ninth centuries. One fragment of a lathe-turned bowl quite closely resembled a common E-ware form. The wooden containers recovered from the site include several rectangular troughs or ashets, one nearly a metre in length and suitable for serving the largest salmon in style. In addition, there were several objects that could have been oars or paddles, and several 'spatulae', too small to have served as paddles, unless as votive miniatures or toys. A crucible and fragments of slag indicated metalworking on site, and more than a dozen rotary querns were included in the domestic assemblage. Fragments of leather were identified as the remnants of shoes and clothing. The survival of organic remains in such waterlogged conditions serves to underline the very partial picture that is left from terrestrial excavation.

Iona and Celtic Christianity

We have already considered briefly the spread of Roman Christianity from Northumbria. The other major tradition was represented by monastic Christianity in the west. Adomnán's Life of Columba, written in the later seventh century, records the founding of a monastic community at Iona in 563, but there were doubtless other missions that did not register in recorded history. The site of the earliest church at Iona has not been identified archaeologically, and it may lie under the Medieval abbey (RCAHMS, 1982). Excavations between the late 1950s and 1979 nevertheless traced evidence of the early settlement to the south-west of the abbey, where structural and material evidence of ancillary activities date from the seventh century, and possibly from the time of Columba. Barber (1981) certainly believed that he had uncovered a section of ditch of the Columban vallum on the basis of radiocarbon dates. In fact, these afford a long and continuous span at one sigma from the fourth century to AD 1000 and after, and from the evidence of air-photography and from geophysical survey it is probable that the monastic enclosure was modified substantially over that period. The extant traces (Figure 10.13) probably cover a much larger area to the north than would have been enclosed by the early vallum. From the later eighth century the high crosses of St Martin and St John survive intact.



FIGURE 10.13 Iona monastic settlement, air-photograph

Source: Photograph by D. W. Harding.

According to Adomnán, Columba extended his mission to the Picts, apparently meeting Bridei, son of Maelchon, somewhere near Inverness. It is likely that the monastic community at Iona founded daughter houses elsewhere in the west, and several possible religious sites have been identified, such as the sub-circular enclosure with internal cells at Sgorr nam Bannaomha, the 'rock of the holy women', on Canna (RCAHMS, 1928: no. 679), and Cladh a' Bhearnaig, Kerrera, in the Firth of Lorn (RCAHMS, 1975: no. 232). There were doubtless other missions in the west, conventionally associated with the names of various saints, but the dating of individual sites without excavation is problematical. In the Western Isles, North Rona became an important centre, with Lochruban, north Lewis, arguably perhaps one of its satellites. The church of Saint Blane's at Kingarth, Bute, is reputed to have early origins, and the beehive cells and possibly elements of enclosure at Eileach an Naoimh in the Garvellach islands (RCAHMS, 1984: no. 354), may have been founded as an early monastic retreat. How these monastic communities integrated with the local, secular population is a question that needs to be addressed (Hunter, J., 2002).

Caithness, Sutherland and the Northern Isles

The building of secondary round-houses within the shell of complex Atlantic round-houses is equally in evidence in the north-eastern mainland of Scotland. One striking example at Carn Liath (Figure 10.6A) on the Sutherland coast has already been noted; here a secondary wall-facing within the broch interior could indeed be contemporary with some of the structural accretions around the outside of the former tower. The broch at Yarrows, Caithness, likewise has a very obvious secondary round-house within its circuit (Figure 10.5, 4). Less conspicuous examples occur in Caithness, notably at Keiss and other brochs investigated by Tress-Barry in the late nineteenth century.

At Crosskirk (Fairhurst, 1984), there was substantial re-organization of both the Atlantic round-house and its external structures around the second century AD, including the construction of an elaborate external passage, accessible by means of several sets of steps from adjacent flagged platforms. The function of this structure was not clear, but its layout conforms to that of the linear structure of the latest phase at Cnip, including the reduction in its width by the insertion of additional facing on one side.

The site that really affords a model sequence was not well served by its mid-twentieth century excavators, the so-called 'wag' settlement at Forse, Caithness (Figure 10.14; Curle, 1941, 1946, 1948). Here, the rectangular houses and figure-of-eight structures were all regarded by Curle as variant forms of 'wags', or agricultural contemporaries of brochs. Gilmour's reinterpretation certainly seems more probable on the basis of the surviving field evidence. The earliest visible structure of any significance is the 'circular wag', in reality a complex Atlantic round-house, of which most of the inner wall had been removed by later reconstruction. The internal diameter of this building would thus have been around 9 metres, rather than 47 feet (or some 14 metres) as Curle believed. Its original entrance, in accordance with the prevailing convention, was south of east, and access to upper floors was gained by means of an intra-mural staircase within a gallery on the north side. At a later stage, a secondary entrance was opened through the outer wall adjacent to the foot of the staircase, direct access to the interior through the original gallery entrance being blocked in favour of a new opening in that gallery's butt end. Robbing of the stonework of the inner broch wall reduced the structures flanking this secondary northern entrance to the appearance of a 'tower', which MacKie (1975: 224) compared to the blockhouses of the Shetland forts. Dating of this early broch or round-house is precluded by the lack of adequate context records for the material assemblage, but as MacKie pointed out (2007: 439 and Figure 7.73) some of the assemblage, in particular the coarse ware jars with basic finger-impressed ornament, could well belong to the earlier Iron Age.

The sub-rectangular 'wags' at Forse are plainly secondary, as is the figure-of-eight building labelled structures C and D by Curle. Despite the excavator's belief that the second figure-ofeight (structures O and P; Figure 10.14, 2) was earlier than the circular dun, it too could belong to the later, post-broch occupation. The better preserved of the two sub-rectangular houses (Figure 10.14, 3) had five surviving pillar stones aligned along its long axis, one of which still supports a lintel from the external wall. Much the same form of building was found adjacent to a circular dun at Langwell, Berriedale, Caithness, also investigated by Curle in the course of researching the Caithness Inventory (RCAHMS, 1911). A similar structure again had been investigated still earlier by Joseph Anderson at Yarrows. The appearance created by the pillar stones and lintels of a series of stalls evidently predetermined the assumption that the building was a byre, and the failure to recognize chronological depth at Forse resulted in the idea that here were the farm buildings of nearby broch-dwellers. Whether stock was brought into the rectangular building cannot be determined with certainty, but that possibility should not exclude the likelihood that this was a habitation site, just as more recent blackhouses had provision for both. The size of the Forse buildings are of the same order as the oblong buildings from Argyll and Skye, and their perimeter 'stalls' could be regarded as a translation of perimeter

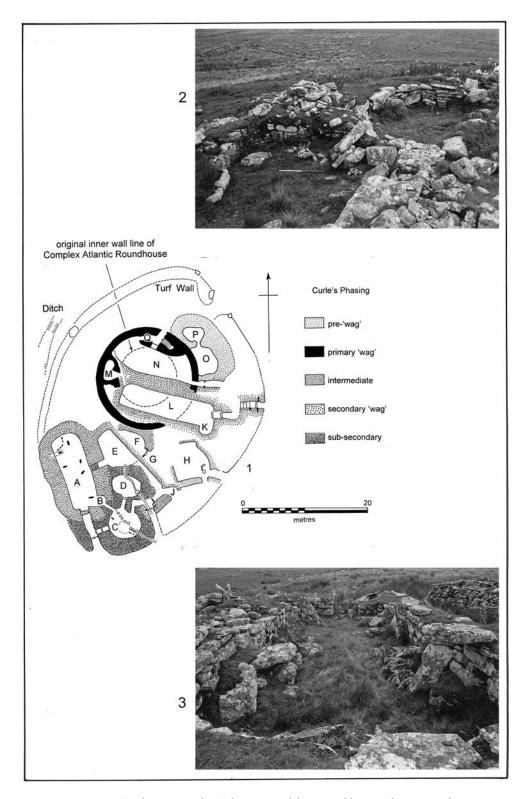


FIGURE 10.14 Forse, Caithness, complex Atlantic round-house and later settlement, 1, plan; 2, structures O and P; 3, structure A

Source: Photographs by D. W. Harding, and drawing adapted from Curle (1941).

cells of a wheelhouse into a rectangular plan. The figure-of-eight buildings included hearths, always taken as the hallmark of human habitation. Buildings C and D are unquestionably later additions, even if O and P are not demonstrably so. Evidence for intermediate cellular construction may well have been missed in areas left unexcavated. MacKie's (1975: 224) suggestion that rectangular building was introduced by Iron Age settlers from Scandinavia is not endorsed by any evidence of exotic material remains, but in the light of some linguistic research (Oppenheimer, 2006) the idea should perhaps not be discounted. The adoption of rectangular architecture was evidently more widespread in the early historic period than can be explained by known episodes of colonization, either in the west or the north-east.

Among more reliable modern investigations in the Northern Isles, the Howe on Mainland Orkney affords an extremely complex but informative post-broch sequence. By the fifth-sixth centuries, a new type of building, sub-rectangular in plan with apsidal ends, and distinguished by stalled partitions down its long axis in much the same fashion as the wags of Caithness, was built over the levelled debris of earlier structures on the south-west side of the former broch enclosure. There is no reason to suppose that this building was not the primary domestic structure of the farmstead at this stage. In turn, this building fell into decay, and the focus of settlement once more reverted to the cellular complex on the east side of the site in the later sixth and seventh centuries. The final stage in the Phase 8 occupation saw the construction over the derelict stalled building of a figure-of-eight structure, or what the excavator preferred to term a 'clover-leaf' building on account of its having additional cellular elements (Smith, B. B., 1994: 116). The central element of this house is more like a waisted oval in plan, not unlike the building at Red Craig, Birsay (Morris, 1979, 1996a), than a figure-of-eight in which access between the cells is through a quite constricted entrance gap. This settlement continued to be occupied into the ninth century AD, when remnants of rectangular buildings on top of the mound may indicate the presence of Norse settlers.

The Howe sequence may not provide an invariable model for post-broch settlement in Orkney, but it shows that cellular building, including multi-cellular or figure-of-eight plans, together with rectilinear and even stalled, wag-like buildings, are part of the architectural mix, and it provides some indication as to where these building types might belong within the first millennium sequence. Among older excavations, the most controversial is Gurness on the northern Mainland. The principal debate centres on whether the external structures are part of a contemporary layout with the broch tower, as they appear to have been initially at the Howe, or whether they represent an entirely secondary accretion around the derelict broch. A second issue was whether the broch itself had undergone radical alteration around the second century AD, as a result of which its walls were substantially reduced. Hedges (1987) favoured a progressive view of the site's occupation, in which the extra-mural village was integral to the original design and changes within the broch were cumulative rather than radical. MacKie (1994) re-asserted the older conventional view (RCAMS, 1946) that the external buildings were secondary to the broch occupation, and that the broch interior itself had been radically re-designed at a comparatively early stage. MacKie's case for viewing much of the internal layout as secondary is convincing, as is his belief that the primary occupation deposits almost certainly still lay intact beneath the secondary paving. As regard the extra-mural village, some of the structures currently on display clearly extend over the edge of the inner ditch. But it is also clear, as Hedges pointed out, that the present layout must be composite, showing evidence of later walls abutting earlier, buildings that have been extended, and paving that has been resurfaced. In effect, the tell-like mound that presented itself to the excavators in 1929

was the product of a succession of structures of which the broch was probably, though not demonstrably, the earliest, and of which Norse long-houses, given scant consideration by the excavators, were apparently among the latest. The defensive enclosure, the entrance through which is aligned directly on the broch entrance, has always been regarded as integral to the broch settlement, and the wide space between ditch and broch walls was presumably intended for occupational activity. Though the surviving exposed structures are doubtless largely the product of secondary, post-broch occupation, therefore, they were probably successive to earlier external buildings dating from the broch period.

Unlike more ephemeral structures that were simply destroyed during the 1930s excavations, the 'shamrock' (Figure 10.7, 1) was removed and rebuilt away from its original location. It had five principal cells grouped around its central court, though in fact it merged with a series of other cellular buildings described as an annexe, almost certainly representing cumulative construction. All were built into the remains of the pre-existing structures, with no recorded stratigraphic separation suggesting any significant break in occupation. Overlying this complex was one of the probable Norse long-houses. Occupation of the site in this post-broch, pre-Norse period was not, however, restricted to the south side of the enclosure. Along its northern perimeter, bordering the shore, a series of cellular structures, all removed by the excavators, testify to a post-broch occupation of some intensity.

If the Iron Age archaeology of the Northern Isles has been dominated by the prominence of brochs and their site sequences, a new perspective was afforded by excavations at Pool on Sanday (Hunter, J., 1990, 1997) and by the publication of earlier excavations at Skaill on the Deerness peninsula of mainland Orkney (Buteux, 1997). On neither site is there evidence of a broch in the immediate vicinity. So the round-houses on both sites, dating to the first half of the first millennium AD, represent not simply a trend away from the tradition of monumental architecture but a parallel development of settlement away from the focal centres represented by the broch 'villages'. At Pool the layout of Structure 18 once again reflects the division between central and peripheral space, marking the division with low orthostats (Hunter, J., 1997: 12, Figure 10.4), while at Skaill the underlying plan of the round-house suggested a radial arrangement around a central 'service area' (Buteux, 1997: 51). This pattern, as we have seen, is characteristic of some brochs and reaches its most formal expression in the design of wheelhouses. Both round-houses had smaller circular annexes or workshops, which seems to anticipate the more formal figure-of-eight plans of the later first millennium AD.

Around the middle of the first millennium AD both Pool and Skaill underwent a major structural change. At Skaill, the re-organization was especially radical, the round-house settlement being paved over and replaced by apparently rectangular structures of which only the truncated remains survived. Circularity of plan survived only in a small structure with porched entrance, which was interpreted by the excavator as a shrine, but which could equally have served a more mundane purpose. At Pool, extensive paving was also a prominent feature of the modified settlement, with cellular structures of various forms and interconnecting passages. In due course, a large sub-rectangular building or courtyard was a prominent feature, as the settlement reached its maximum extent, before its progressive decline and contraction in the eighth century and into the Norse period. These structural sequences are also matched by changes in both pottery styles and the non-ceramic assemblages. In particular, bone pins, bone combs (Foster, 1990) and penannular brooches are diagnostic of the seventh and eighth centuries, and are widely represented across Atlantic Scotland. Buteux, however, has argued that the significant changes in settlement layout at Skaill, and by implication the changes in the social order which they represent, must be dated closer to the sixth century, perhaps triggered by political developments in the Pictish kingdom of Orkney, alluded to in historical sources.

The important interface between later Iron Age ('Pictish') occupation and evidence of Norse colonization and settlement was illuminated by excavations at Buckquoy (Ritchie, 1977). In its earlier occupation cellular buildings were the norm, including plans that broadly equated with the Gurness 'shamrock', constructed characteristically using both dry-stone coursing and vertical slabs. Though lacking diagnostic associations, this phase of settlement was assigned to the seventh century AD or thereabouts. In contrast to these cellular plans, in which the individual cells clustered around the central hearth, the later building (House 4; Figure 10.8, 1) was of extended figure-of-eight plan. The cellular elements were in linear disposition, with a three-sided hearth in the largest of the cells, aligned down the spinal axis of the building. This phase was dated to the eighth century on the basis of an ogham-inscribed spindle-whorl and other artefacts. For Orkney Buckquoy House 4 remains the model 'figure-of-eight' plan. This later Iron Age settlement was in turn succeeded by several phases of rectilinear Norse buildings, which, despite the radical change in architectural fashion, lacked any truly diagnostic Scandinavian artefacts. Together with results of excavations at Birsay (Hunter, J., 1986; Morris, 1989, 1996a), Pool (Hunter, J., 1990) and Skaill (Buteux, 1997) among others, this has led to a realization that the Norse settlement of Orkney was a complex process of co-existence and integration with the native 'Pictish' communities. Buteux (1997: 262) proposed a threefold process of Norse settlement, a 'pioneer stage' of raiding, trading and perhaps over-wintering followed by a 'consolidation stage' in which more permanent settlements were established alongside those of the native population before eventually an 'establishment stage' resulted in the effective replacement of older traditions and material culture. This model still does not wholly satisfy the archaeological evidence for the apparent continuity of 'Pictish' assemblages and their subsequent total eradication, but this intriguing issue lies beyond the main scope of the present study.

For Shetland our understanding of the post-broch settlement sequence has progressed substantially as a result of recent field research, amplifying the evidence available from Jarlshof and avoiding the need to become embroiled in the contradictions of Clickhimin. We have already remarked the importance of the Old Scatness sequence (Figure 10.15; Dockrill *et al.*, 2010, 2015) for the dating of complex Atlantic round-houses, and for the later broch or post-broch settlement including the aisled round-houses (Structures 12 and 14). Contiguous and accessible from Structure 12 was a building, the western wall of which was divided by a series of parallel piers, reminiscent of the stalled rectangular wags of Caithness. Sub-phases of activity are obviously represented within this western group of buildings, but their combination of circular and rectilinear building plans is not inconsistent with post-broch sequences elsewhere.

The post-broch occupation provides a new type-series for 'Pictish' through to Norse settlement. Characteristically late Iron Age in plan are the lobate structures built within the central area of the Atlantic round-house (Structure 7; Plate 16A), comprising five cells clustered around a central hearth from which they are divided, as in the 'shamrocks', by low sills or partition walls. Connected to this area is an external group of later cellular buildings to the east of the Atlantic round-house, though here again containing intrusive Norse artefacts in their later phases. Built into an earlier complex of cellular buildings Structure 5 was of figure-of-eight or ventral plan (Plate 16B), constructed using both upright slabs and intermediate horizontal dry-stone coursing. In the centre of the main cell was a three-sided or horseshoe-shaped hearth defined by edge-set slabs, one of which bore a boar carving. Its open end faced

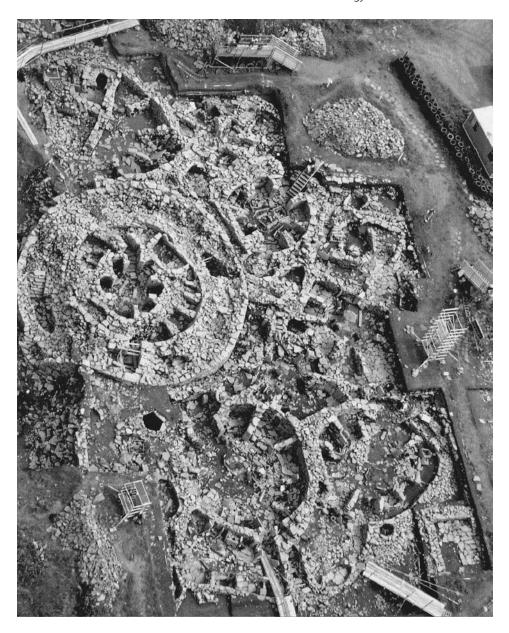


FIGURE 10.15 Old Scatness, Shetland Source: Photograph copyright J. Dockrill, University of Bradford.

the entrance, with flanking orthostats as a guide to what may have been a ritual focus. Dating suggests a late Iron Age occupation for the building (between AD 600-900), though its upper filling again contained material of Norse type. Old Scatness therefore has a dual importance, not only in furnishing potentially the most reliably dated structural sequence from the earlier Iron Age, but also casting new light on the complex structural developments of the later Iron Age 'Pictish' occupation in Atlantic Scotland.

Material culture of the later Iron Age

One reason for adopting here the minimalist division between earlier and later Iron Ages is that any finer classification based upon structural sequences would almost certainly not accord with any based upon material classification and dating. There need, of course, be no presumption that significant changes in structural types and artefactual assemblages should march hand in hand, and even in the case of apparently radical political or demographic change, such as the Norse raids and settlement, the archaeological record may be far from straightforward in reflecting that change.

Current convention nevertheless divides the later Iron Age in Atlantic Scotland into earlier and later sub-phases, spanning the period from the late third or early fourth centuries AD to the late eighth or early ninth. The threshold between the sub-phases falls around the early seventh century, and is based essentially upon the dating of two key artefactual types, hipped pins and composite, double-sided combs. Both pins and combs are represented among earlier assemblages, of course, but it is the distinctive hipped variant of pin, with short bone or metal shaft and various forms of head, and the combs of Types A and B, Foster's Groups 5 and 6 (Foster, 1990), that predominate in the later sub-phase. A third type, the brooch, likewise has a longer chronology from the earlier Iron Age, though some of its most distinctive, developed variants also fall within the later period. The typology of penannular brooches has been sub-jected to particular debate, but a significant proportion of the Atlantic Scottish brooches can still be assigned with reasonable confidence to the later sub-phase. All of these several types are found commonly on broch sites from the Western and Northern Isles, but from the secondary, post-broch phases of occupation that are not infrequently those levels least well recognized on older excavations.

Metal types of the earlier sub-phase include hand-pins, so named because their end plate is shaped like a hand with projecting fingers. Since R.B.K. Stevenson's pioneer study (1955a), it has been generally accepted that these developed progressively from ring-headed pins with beaded moulding, through an intermediate proto-hand-pin in which the beads may be reduced to just three above a crescentic plate, as in the Norrie's Law silver examples. The typology, though very conventional, is probably sound, but the dating of the pins within the developmental sequence is more controversial. The conventional dating of hand-pins would have placed them between the fifth and eighth centuries AD, but moulds from dated contexts at both Beirgh and Eilean Olabhat indicate their manufacture rather earlier, perhaps between the third and fifth centuries. Proto-hand-pins consequently should be somewhat earlier still. This re-assessment of the Scottish series would not be incompatible with evidence for the dating of hand-pins in Ireland. It would, however, place hand-pins firmly within the earlier sub-phase rather than later, with their origins in the opening centuries of the first millennium AD.

A second major class of artefact for which there is an increasing number of moulds in Scotland is the so-called spear-butt, a cast bronze shaped not unlike a doorknob and assumed to have served as a ferrule on the rear end of a spear. The plainest variant is known simply as a doorknob spear-butt, while a version with mouldings is named after the type-site of Lisnacrogher in County Antrim. Once regarded as archetypally Irish, and dated around the turn of the first millennia, these objects have since been recognized from a much wider distribution zone, including examples from Roman sites in Southern Britain (Heald, 2001). Crucially the only known moulds for such spear-butts have been from Scottish sites, including Traprain Law, Dunagoil, Dun Mor Vaul, Beirgh, Gurness and Mine Howe. Ironically, there is still no

comparable evidence of manufacture in Ireland, even though spear-butts occur there in much greater numbers (Raftery, 1982, 1984). The radiocarbon-dated structural sequence at Beirgh prompted a review of the dating of spear-butts, suggesting their manufacture there from the third to fifth centuries AD rather than in the 'middle' Iron Age. The association at Dun Mor Vaul of a doorknob spear-butt mould with Roman glass of second or third-century date could still be accommodated just within this span. Independent dating evidence for the Lisnacrogher type is still lacking, but if the two types were not at least concurrent to some degree then their coincidence at Dunagoil (Figure 5.22, 39–40) would be the more remarkable.

In sum, there does indeed appear to be an increase in the production or survival of distinctive artefact types, notably but by no means exclusively in personal or costume accessories like pins and brooches, in the period following the demise of monumental architecture. This could well reflect changing patterns in the expression of social identity from fixed and communal monuments to portable and personal artefacts. Whether assumptions of social status based upon the presence of metalwork or metalworking debris can reasonably be sustained remains an issue of debate.



PART V Review and conclusion



SETTLEMENT AND SOCIETY

Continuity and change

Open settlement and enclosure

Settlement evidence is predominant in the earlier Iron Age over much of Northern Britain, with the important qualification that dating sites in the absence of radiocarbon assessment has proved problematic in many upland regions for want of a diagnostic material assemblage. The pattern in the later Iron Age is more variable, with marked regional disparities in the nature of the evidence.

Major enclosed sites, including hillforts, are not nearly as numerous or densely distributed as in Southern Britain. Some, like Mam Tor or Eildon Hill were evidently in use from the later Bronze Age, though not necessarily as permanent habitations. In the widely dispersed pattern of settlement, that characterizes much of Northern Britain in later prehistory, conspicuous landmarks like Ingleborough or Tap o' Noth might well have been chosen deliberately for their dominating position in the landscape as centres of periodic communal assembly. The defensive role of hillforts remains equivocal, though the presence of siege-works at Burnswark, and the record of Roman historians for Southern Britain indicates that they could have served as defensive refuges, even if not designed exclusively or even principally to this end. Beyond the frontier, some hillforts may have continued in occupation through and beyond the Roman interlude, while others were certainly re-occupied. Some, like Traprain Law and Castle O'er may even have negotiated diplomatic arrangements with the Roman authorities. In the later Iron Age, some hillforts almost certainly were re-occupied. In the post-Roman era, nuclear forts, like Dunadd and Dundurn may embody an innovative form of regional seat for periodic assembly, though the hierarchical structure may already have been latent in earlier Iron Age citadels. Larger terrain enclosures are known in the earlier Iron Age, of which Stanwick approximates to the Southern British oppidum model. Not all enclosed sites have man-made perimeter works around their entire circuit, but even in promontory forts and headland forts, there can be no doubt that confinement or exclusion was the objective. The precipitous nature of some northern and western promontory sites again raises doubts regarding the function of such sites as domestic settlements, and suggests a ritual dimension in their location.

Lesser-enclosed sites, sometimes with multiple round-houses like High Knowes B, Hay-hope Knowe or Gibb's Hill might be thought of as protected villages. In such cases, groups

of households, perhaps of collateral kin, may be inferred, even acknowledging that not all the surviving buildings need have been from contemporaneous occupation. The broch 'villages' of Orkney are likewise community settlements, but with the implication of a hierarchical relationship to the broch that is absent from the majority of other settlement types.

Discrete settlements with a single large round-house or pair of buildings of the kind represented at West Brandon, High Knowes A or Greenbrough may be described as 'homesteads' and were presumably occupied by a single nuclear family. This form accords with the *Einzelhof* concept typified in Southern Britain by the type-site at Little Woodbury, Wiltshire. Crannogs might also be regarded as single-family homesteads, some of which may have had perimeter fencing in addition to being enclosed by water.

Open settlements are the least well-documented class of field monument, except where they survived above the zone of destruction in various upland locations from the second millennium. Their existence alongside enclosed settlements has long been known, though even with air-photographs and exploratory trenches it is sometimes hard to be certain that the limits of settlement have been established. Now, they are increasingly being uncovered as a result of excavation in advance of development. One region in which unenclosed settlements apparently are characteristic from the earlier Iron Age is north-eastern Scotland, with notable examples from the Moray coastal plain. In the Western Isles, wheelhouses in the machair appear to have been unenclosed, though occasional free-standing upland examples may have had contemporary enclosures. Unenclosed sites are not necessarily the lowest in the social hierarchy; brochs like Carloway are unenclosed, yet monumental in their scale of construction.

An important consideration therefore is the question of enclosure. For many years, Iron Age studies have been concerned almost exclusively with enclosed settlements, of which hillforts, regarded almost as an archetype of the insular Iron Age, represented the apex of the social pyramid. As we have seen, an older view saw an ordered progression towards enclosure through increasingly complex and labour-intensive structural stages. What the purpose was of enclosure, and why it was only achieved progressively over time, was never explained. One consequence was certainly to blind us from the complexity of the settlement mix at any given time. Enclosure of a settlement might be desirable for several reasons. Most obvious among functionalist interpretations would be protection from thieves or predators, or on a larger scale for communal defence against raiders. Equally important might be to assert one's identity and to define the nodal points of a settlement. The idea of defining personal or communal space by enclosure is endemic in human society as much as it is in other social animals. This was probably not achieved solely by the construction of walls or ditches. Even across open ground or water around crannogs an intruder would doubtless be aware of encroaching on someone else's space, which can be marked in various ways. At Dun an Sticer on North Uist, for example, access is controlled by a network of causeways in stages across the water, noticeably not direct. For this reason, defining enclosure, or conversely recognizing an 'open' settlement, could be difficult, since archaeologically elusive markers could have been as potent as earthworks in proclaiming liminality. In any settlement, that includes adjacent fields with trackways between them, like those of upland Perthshire, the concept of enclosure and controlling access is in any case endemic to the layout of the agricultural pattern in the landscape. We might therefore distinguish between dedicated enclosure, like a hillfort rampart, and implicit enclosure, of the kind that controls access through surrounding fields or natural barriers.

What then, apart from functional considerations, might have determined whether a settlement was enclosed or not? In the context of Irish ring-forts, it is often suggested that having

bivallate or trivallate defences (or possibly the number of ditches rather than banks) was a measure of progressive hierarchy, though later documentary sources do not explicitly endorse this assumption. The implication is that the king or overlord would have authorized the scale of enclosure. The distinction may perhaps have been determined by the status of the individual household or kin group, whether tenant or client (Karl, 2006) for example, the latter's dependency being based upon capital rather than lease of land. The changes in the character of the enclosure, or the absence of it, at a site like Broxmouth, therefore, might reflect the fluctuating fortunes and relative status of the occupying community through time, rather than simply the consequences of expansion or contraction.

Enclosure on a landscape scale too might be undertaken for various reasons, with political implications. This might be accentuated by economic considerations in time of population growth with consequent intensification of agriculture, or climatic deterioration during which marginal uplands were no longer viable and there was increasing demand for prime land. Agricultural practice itself may require landscape boundaries, between arable and pastoral. One or more of these may combine in prompting the construction of extensive systems like those of the North York moors or even the intensive networks of the Lothian plain. Their creation would nevertheless require an authority and resources of manpower beyond the household scale, so that these works should signify social organization on a regional basis. Defining territory, locally and regionally, is fundamental to social identity and doubtless was much more ancient than the Iron Age. Extending that principle to individual settlements or domestic enclosures simply combines the basic assertion of identity with practical advantages for controlling access and movement of people and livestock and for defining areas allocated to specific purposes or activities.

Houses and households

Following Hingley (1992), we may suggest that the basic unit of society in the Northern British Iron Age was the household. Irish vernacular sources have various terms for 'household' or 'farmstead' that do not equate directly with a kinship group, since they would also include servants and other dependents. It is arguable whether a household, based on a substantial timber round-house, might include a nuclear family unit only with its subordinates, and whether a broch tower by contrast might have been occupied by an extended family group. The number of individuals involved would be complicated if polygyny was practised or if adoption or fosterage were a regular part of the social system. Among sites that appear to have been for permanent occupation, some homesteads are effectively made up of a single household, a single residential unit or paired unit. In the case of paired units, it might be tempting to see the secondary element as the residence of a cadet group, such as a married son, or of servants or estate workers or even of dual 'ownership'. But equally, it could simply have been functionally different from the main building.

Conventional classification has invariably distinguished buildings on the basis of their architectural plans and construction techniques. In consequence, brochs are seen as different from crannogs, and wheelhouses are different from cellular houses. Most obviously circular plans stand in contrast to rectangular and, for most of prehistory, distinguish the Atlantic settlement tradition from that of central or northern Europe. Closer architectural sub-division would distinguish ring-groove plans from ring-ditch houses, or brochs from wheelhouses. If instead we give priority to the social use of space, the division between central or communal space and

peripheral, personal or functionally specific space, seems to be common across these categorical boundaries. It could even be argued that the central-peripheral contrast extends in the early historic period into a rectangular version of the same apparent order. Barrett (1981) referred to the *structuring principles* whereby social order was translated into the internal division of space. In the case of brochs, this almost certainly introduced a vertical dimension, with several floor levels offering a physical hierarchy of space, as well as the more common horizontal divisions. Factors bearing upon those structuring principles will have included gender and age considerations, as well as practical functions of sleeping, eating and working. Attempts have been made to read these social factors from the distribution of artefacts or micro-debris of human activity, but we must be sure in doing so that we have correctly interpreted the taphonomy of deposition.

Within the various groups, it is commonly assumed that the most striking, monumental buildings were the residences of élite families, on the simple argument that their construction would have required control of substantial resources, notably stone and timber, and authority to marshal the manpower needed to build them. If, however, Atlantic round-houses represented the apex of a hierarchical settlement system, other, lesser contemporary settlements might be expected in proximity, representing the lower or non-land-holding orders. In the Northern Isles, the 'broch villages' might reflect a social spectrum if the broch itself and surrounding buildings were in contemporary occupation. In Orkney, we have seen different development in the post-broch era on sites that had broch towers as their original focus from settlements that did not. For Shetland, Dockrill et al. (2015) proposed a distinction between brochs that were the focus of nuclear villages and those that may have been strategically located between a group of lesser, dispersed dependent settlements. In the Western Isles, contemporary lesser settlements have yet to be identified, assuming that wheelhouses are for much of their occupation successive to, rather than concurrent with brochs. Armit (2002: 24) preferred to see Atlantic round-houses as residences not just of social élites but of free land-holders below the highest rank, 'analogous to the tenant farmers of the post-medieval period'.

In fact, though there is considerable diversity in round-house design and construction between regions in the British Iron Age, there is remarkably little evidence within individual settlements of social distinction being expressed in terms of house size or elaboration. The facile inference that the chief's house should be larger than the rest seems to be based on an entirely anachronistic consumer-capitalist conception of status. Even in the construction of Atlantic round-houses, it need not follow that those who commanded resources and manpower would only exercise that authority on their own behalf. It would be consistent with what is known of Iron Age society from other sources and regions that patronage would be exercised on behalf of subordinate social groups in a system that bound the latter with reciprocal obligations, which might extend over several generations. This then raises in an earlier Iron Age context questions regarding the nature of possession and inheritance, particularly in areas like Atlantic Scotland, where monumental buildings had a potential endurance of centuries rather than decades. No doubt, obligations and debts could be inherited as well as assets and entitlements. The nature of land-holding also bears upon the issue of monumentality. If brochs were intended to assert identity and to legitimize entitlement to land, whose identity and entitlement were being asserted, the occupants', the social superior's, the community's or kinship group's collectively? Within the dispersed settlement pattern of Atlantic Scotland, it need not follow that society was egalitarian rather than hierarchical, and the apparent absence of lesser categories of settlement contemporary with the brochs is probably still partly a factor of archaeological invisibility. But any assumption that a broch might be regarded as the capital

asset of its owner-occupier must surely be anachronistic, and community or kin control of land and buildings seems more likely.

The assumption that monumental buildings like brochs were occupied without break over many generations has been challenged (Cowley, 2003). Though they plainly had the capacity for longevity of use, and in some cases evidently were occupied over several centuries, it is hard to demonstrate archaeologically that occupation was unbroken. Had their roofs not been maintained, sites like Beirgh might have been expected to show intermittent layers of windblown sand, but the probability on many sites is that later occupation or re-occupation would largely eliminate evidence for earlier use or dis-use.

With the passing of monumentality in Atlantic Scotland, did the household order disintegrate, reverting to later Bronze Age forms of cellular or courtyard building, or mutating while still preserving its essential elements in a reconfigured structure? The disadvantage of the round-house concept, compared to rectangular plans, is its limited capacity for expansion. The broch towers achieved this monumentally in vertically superimposed floors, but in the horizontal plane, the only options are building a second structure adjacent or conjoined to the first, or aggregating less regularly a series of adjacent cells, as seen on some wheelhouse settlements. The formalization of the principle of cellular aggregation is seen in the shamrocks or ventral houses of the later Iron Age.

In the case of timber buildings, the case for much shorter spans of occupation, even where there is structural evidence of rebuilding on the same spot, has probably been over-stated in recent years. Evidence of experimental reconstruction certainly suggests that substantial timber round-houses could last for more than a generation. Equally, surviving domestic, agricultural and ecclesiastical buildings that have lasted many hundreds of years are doubtless representative of thousands that less exceptionally lasted at least a century. And there is really no basis for assuming that Iron Age communities were any less adept at timber construction and maintenance than Medieval.

Domestic structures: recognition and interpretation

The shorthand term 'house' is almost universally applied to Iron Age buildings, irrespective of the archaeological evidence for their use. Even excluding the possibility of ritual or ceremonial functions, within a normal agricultural homestead, it may be hard on the basis of structural plans alone to distinguish domestic houses from barns and byres or roofed buildings from open corrals. Conventional reconstructions of Southern British Iron Age timber round-houses, exemplified at the Butser Ancient Farm in Hampshire, were based essentially upon ground-plans of earth-fast postholes. They further assumed that the roofing material was straw or reed thatch, for which tradition demanded a pitch of 45 degrees in order to be weatherproof, though practical experiment has shown that a steeper angle may be desirable (Reynolds, 1993). Quite plainly, Northern British round-houses are different. Other materials than timber and straw thatch may be employed, including stone, turf or earth for walls and heather thatch or turf for roofs. In consequence, other constructional techniques are in evidence, not simply posthole substitutes, such as continuous ring-grooves, but ring-ditches or hollowed-out foundations, and because these techniques imply a different elevation profile, ground-plans need not accord with southern British round-house geometry. The classic Little Woodbury or Pimperne ground-plan had its weight-bearing circle of postholes much closer to the perimeter wall than to the mid-point between it and the centre of the house. This was

almost certainly because this ratio broadly equalized the surface areas and weight of the roof within and beyond the weight-bearing circle. The central four-poster at Little Woodbury is unlikely to have been an essential element in supporting the roof. Its purpose may have been constructional, like a scaffolding frame, or may have been related to the support of an upper or mezzanine floor, or simply formed a framework around the hearth for suspending pots, spits or foodstuffs for curing. In houses of diameters over 15–16 metres, it is possible that a central tower supported a split-level roof, perhaps in combination with one or more of these options.

In Northern Britain, there are certainly examples of house plans in which the post-rings do conform to similar round-house geometry, on the basis of which we may reasonably infer a conical thatched roof of straw, reed or perhaps heather. There are many others, however, where a different set of ratio-norms applied, as at Culduthel, where a substantial, weight-bearing circle of posts stood approximately half-way between the centre point and outer ring-groove or wall-line. The size of the posts suggests a central tower rising above the lower roof-line and capped by a separate roof cone, which would also overcome the problems posed by roofing houses of greater than average diameter in a single rafter's span.

Plainly, however, earth-fast posts were not the only constructional option, and research has made clear the fact that ring-ditch houses or variants thereof were current in eastern Scotland from at least the later Bronze Age through to the para-Roman Iron Age. The purpose of the ring-ditch is still open to question, not least because of its various manifestations. The idea that a sunken floor might alleviate the need for high walls to allow headroom at the eaves is undermined by the fact that commonly the ring-ditch is evident only around part of the floor area. Even for stalling stock on the ground floor of a byre-house, the provision sometimes looks very constricted. Likewise for storage, antecedent to 'proto-souterrains', the shallow scoops are rather less than convincing, especially now that pits, similar to storage pits of the Southern British Iron Age, have been found to occur occasionally on settlements in Northern Britain. In consequence, ring-ditches are frequently now interpreted as the result of erosion rather than as a constructional feature, though it remains unclear exactly what activity resulted in this particular and restricted effect. Clarification of the function or multiple functions of ring-ditches will remain an important aim of the research agenda.

One conclusion that has been reinforced by the greater scale of developer-led excavation is that house foundations can appear archaeologically to be extremely ephemeral, but this need not mean that the buildings very any less sophisticated or their occupation any more transient. Scooped foundations, for example, must have produced material that would have been deposited around the building's perimeter as wall-footings, perhaps bolstered by turf, all trace of which may easily therefore be erased by subsequent agriculture. Rectangular plans, as we have noted, are even less dependent upon earth-fast foundations, so that there is no reason to suppose on the basis of surviving evidence that the later Iron Age buildings at Birnie, for example, were any less sophisticated than their circular antecedents. And certain kinds of vernacular architecture, perhaps such as turf walls with single-sided stone facing, may leave extremely ephemeral surviving traces after two millennia.

Social structure

Roman sources describe a tribal geography of North Britain. How real was this in the earlier Iron Age? Evidence suggests little centralization of power or social unity at regional level, beyond what would have been implicit in kinship ties. Historical records suggest names for

Southern Britain that may approximate to a tribal structure, but for Northern Britain, the evidence is much more equivocal, with names like Brigantes or Picti not necessarily corresponding to any clearly defined grouping. A move towards greater cohesion apparently came in the later Iron Age, though doubtless in different degrees in different parts of Northern Britain.

It would certainly no longer be acceptable to infer from documentary sources, classical or later Irish or Welsh that there was a pan-European or even a north-western 'Celtic' social order that was uniform through space and time, or that any such social order that might be inferred for continental Europe had any relevance to insular Britain. In particular, the hierarchical model with king at the apex and with progressively subordinate nobles and free farmers is hard to support in the archaeological record for the earlier Iron Age and is doubtless a simplification of a much more complex social structure anyway. Nevertheless, models derived from early historic Ireland and Wales are in principle no less relevant to Iron Age Northern Britain than models drawn from ethnographic contexts more remote in distance and time. Scholars have rightly sounded warnings regarding the use of epic literature, with its formulaic conventions, or early Irish and Welsh legal tracts, themselves subject to rewriting and liberal editing by successive scribes over hundreds of years. Yet a rigorous analysis of these legal sources (Charles-Edwards, 1993) suggests that there were underlying recurrent elements in the social order that might reasonably be regarded as having a considerable antiquity, perhaps deriving from earlier Iron Age traditions. The window on the Iron Age may be of distorted glass, but, like all historical sources, treated with due qualification, it may yet afford the archaeologist useful insights.

In the first place, we should question whether Iron Age society in Northern Britain was nearly as rigidly stratified as is normally inferred for Southern Britain or continental Europe. From a Wessex perspective, it is easy to imagine hillforts functioning as capites, but in Northern Britain, hillforts in some regions are hardly represented, and in others, are distributed too densely overall, whilst being individually on an insufficient scale, to represent this hierarchical structure. Furthermore, there is little evidence in terms of material assemblages to indicate the high status of hillforts in contrast to lesser homesteads. Status need not be reflected in portable artefacts, of course, and was much more likely to have been measured in land or stock holding. And where there were prestige goods, they would have been conserved and recycled rather than discarded for the benefit of the archaeologist. Until the emergence in the early historic period of larger political entities, with high kings or dominant lineages, hierarchy was probably less accentuated, which is not to assume that society was egalitarian in a modern political sense. Hierarchy within and between lineages, and the probable existence of clientship within and between communities, was doubtless based upon an established order within kin groups, linked to land and stock holdings. But this will have been a dynamic system, with inherent dangers of what Charles-Edwards (1993) has called 'downward social mobility' as well as the upward alternative.

In the Irish model the importance of the $t\dot{u}ath$, a social unit with territorial connotations, and the threefold hierarchical order is conventionally stressed (Powell, 1958/1980). Ranks below free farmers are seldom discussed, following Caesar's dismissal of all below the equites and druides as being of no account (dBG: VI, 13). The Old Irish laws suggest, however, that there may have been grades among the non-free, with a rank of semi-free above slavery. Status evidently was linked to land-holding, and if a lineage was unable through partitive inheritance to sustain the land requirements of a freeman, then it might be relegated to the status of semifree and forced into bonds of clientship (Charles-Edwards, 1972).

Before the seventh century, Ireland evidently had a social structure based upon kinship made up of lineages comprising the agnatic descendants of the great-grandfather of the youngest generation of the group (Charles-Edwards, 1972). With the passage of generations lineages split in a process of segmentation, creating daughter lineages that might or might not supersede the parent lineage. The status of freeman or free farmer was dependent on the holding of land, not just in Irish society, but in Anglo-Saxon too. Inherited land was evidently transferred on the principle of agnatic division among sons of recognized liaisons, though acquired land could be disposed of by the individual, or by the kin group in redistribution to members of the group whose status as freemen was at risk. Even so, there were considerable complexities in matters relating to polygynous offspring, to adopted and fostered sons, and in the relationship between linear and collateral kin, with some significant differences of legal custom between Ireland and Wales. Whilst we should certainly not transpose the detail of land ownership or inheritance of the early historic period from cognate areas into the earlier Iron Age of Northern Britain, it seems reasonable to suggest that land was probably controlled by kindred rather than individuals and that inheritance of land would have been essentially through agnatic male descendants. In essence, the system of partitive inheritance militates towards downward social mobility if the male offspring surviving to adulthood exceeds one in any generation, or three in two generations, unless additional land is acquired to enhance the kin holding. This doubtless encouraged aggressive acquisition of land or stock from neighbouring communities. Extinction of the lineage can be avoided by adopting a son into full membership of the kin, but adopted sons or polygynous sons will otherwise increase the consequences of division.

Possible systems of inheritance were discussed by Armit (2005) in the context of Atlantic round-houses and the transition to wheelhouses. He rightly argued that the stability and longevity of the broch landscape in Atlantic Scotland was hardly consistent with a normal system of partitive inheritance, which would surely have resulted in greater fragmentation of landholding, and consequent 'downward social mobility', than is witnessed archaeologically. The incentive to acquire additional land to compensate for impoverishment resulting from land division might well have triggered political instability between neighbouring communities, but this is not obviously in evidence archaeologically. The replacement of larger round-houses in south-west Scotland by a group of smaller houses, as at Boonies, might indicate divisions in inheritance, whilst the unit villas of Roman Britain have been regarded potentially as evidence of dual ownership. But there is little evidence in Atlantic Scotland of similar divisions that might be attributed to partitive inheritance. If land was held by a larger kin group, and title passed elsewhere within the kindred on the death of the former holder, then another broch site might for a generation assume primacy within the district. Armit (2005) adapted the idea of 'redistributive partible inheritance' (Charles-Edwards, 1972) to explain the Atlantic roundhouse phenomenon, based on a broadly egalitarian ideology and with the ownership of land similarly vested in the kin group. He argued that it was the breakdown of this system, and the emergence of certain lines of descent that prompted the demise of the brochs and the shift to wheelhouses and other settlement forms. The demise of monumental Atlantic round-houses, and their replacement by structures of rather different, cellular character, could be the archaeological manifestation of some fairly radical change within the social order. The economic success represented by Atlantic round-houses may have resulted in a self-destructive increase in the number of surviving sons of the dominant lineage, if not a demographic increase in the population at large, with the result that the system was unable to sustain itself and collapsed. This certainly seems more plausible than to see a radical change in social patterns as the result

of the very limited introduction of Roman goods in Atlantic Scotland (Sharples, 2003) or of a series environmental catastrophes in the first millennium AD (Baillie, 2000). It is important to recognize that occupation of broch sites did not come to a radical and decisive end, either at Beirgh in the west or at Old Scatness in the far north. At Old Scatness, the later broch occupation coincided with the first aisled round-houses that were added to its south-west side in the first century BC; only in the first century AD, when the external settlement was extended, was the broch entrance blocked and secondary buildings introduced into its interior, signifying its final demise. The change must indicate a change in the social and economic order, here and more generally across Atlantic Scotland. Brochs were the victims of their own success.

The demise of monumentality and the shift in Atlantic Scotland to cellular village settlement, however, was not the only consequence in the archaeological record of social change. The concept of individual identity, even if still grounded in group identity, is reflected in the greater prominence of personal artefacts, notably those associated with dress fastening or ornament, in the later Iron Age (Armit, 1997b: 252-3). Whether this reflects the emergence of wider authorities with a more complex hierarchy of social rank, or the opposite, a break-up of the old order and an increasing number of lesser competitors asserting individual status, remains to be resolved.

At the top of the social hierarchy, lordship or kingship in historical Celtic-speaking societies was determined not by primogeniture but by choice from those eligible within dominant lineages. The important hierarchy therefore was not so much within the lineages, but between them. The model therefore is more complex than might appear, and that much more difficult to detect archaeologically. Furthermore, the system would have been subject to dynamic change over time, as a result of factors of inheritance, kinship alliances, marriages, repayment of social debts, competition and feuds, so that 'fixing' it at any given point in time in the archaeological record will be extremely difficult.

One regional variation that has commonly been inferred from documentary sources is the matrilineal system attributed to the Picts, which was vigorously challenged by Smyth (1984) as wholly mythical. Bede implausibly claimed that the Picts came from Scythia via Ireland, where they acquired wives on condition that, in cases of dispute, inheritance should be established through the female line. It is worth remarking that Bede's account actually required the matrilineal principle only to operate in the event that the royal succession should be in dispute, which must imply that it would be the exception rather than the rule. Yet Duncan (1992: 48) dismissed this crucial point as arising from Bede's ignorance of Pictish practice, since the matrilineal principle among the Picts, though unique in Europe, had become accepted wisdom. Whether Bede's account repeats Irish propaganda intended to bolster political claims in Scotland need not concern us: the point is that documentary sources should not predetermine archaeological interpretations but should be evaluated according to rigorous historical criteria.

Ritual, ceremonial and the archaeology of death

The interpretation of certain archaeological sites as ritual foci is currently quite fashionable, whereas to a previous generation it was regarded as being on the very limits of archaeological inference (Hawkes, 1954), and sometimes satirically parodied as the last refuge when all rational explanations were wanting. The reason for caution was understandable, since it was considered that mute artefacts in the context of non-literate prehistoric societies could only exceptionally cast light upon spiritual beliefs and social rituals. Ethnographic models might

arguably afford insights into cognate systems, but even so it is important that we should recognize the limits of inference of archaeological evidence. Disquiet at the contemporary fashion for invoking ritual explanations arises from the cavalier disregard of those limits, commonplace in the popular presentation of archaeology, but now deeply embedded in academic archaeology as well. Too often archaeologists simply assert, without reference to the evidential basis, however tenuous, that prehistoric societies believed this or that, so that archaeological synthesis becomes closer to creative fiction than to rational deduction or reasoned inference.

For the Iron Age generally, there are very few sites that as a class might be regarded as potentially cultic or ceremonial, even as henge monuments or stone circles of the Neolithic or Bronze Age might be. Springs, rivers, lakes and bogs attracted apparently votive hoards or even human sacrifices widely throughout western and northern Europe. In potentially ritual contexts of the earlier Iron Age, there are no recognizable formal furnishings like altars or inscribed dedications, as are found in the classical world, or icons like crosses in the Christian era to signify a ritual purpose. Where the sheer scale or abnormality of a deposit defies normal interpretation, a ritual explanation presents itself by default; activities in the Sculptor's Cave, Covesea or at the High Pasture Cave on Skye might come into this category. But it is hard to codify the conditions for recognizing ritual deposition in less dramatic circumstances. Artefacts like torcs may have had a special significance, and recurrent motifs in La Tène art, like the triskele or the 'leaf-crown', may have had cult significance, but these inferences are hardly amenable to empirical demonstration.

The one formal ritual context that can leave tangible traces in the archaeological record is burial, but even so there is a significant absence of evidence in many regions and periods during the Iron Age in Northern Britain, from which we can only deduce that disposal of the dead followed conventions that did not lead to interment or cremation in a regular and recurrent form. Burials like the late pre-Roman sword burials from Alloa or Bugthorpe are few in number and plainly represent a highly selective and unrepresentative rite. Only perhaps in the case of the cemeteries of the Arras series of eastern Yorkshire, or in the long cist cemeteries of the later Iron Age in eastern Scotland, might we reckon to have identified a regular mode of disposal of the dead. The absence of a recurrent burial type for much of Iron Age Britain could be the outcome of the widespread adoption of a rite like cremation and scattering that leaves no archaeological trace. But there need be no presumption that funerary practices should involve a single, widespread and archaeologically recognizable rite, when regional diversity and variable practices within a community may have been the custom.

Increasingly, there is evidence for the fragmentation of human remains, perhaps after excarnation or preliminary interment, and the distribution of selected fragments around settlements, often in supposedly liminal locations such as enclosure ditches or entrances. Once regarded as anomalous, such practices may well have been a deliberate means of incorporating the benign dead within the living community (Harding, 2015). There is also increasing evidence in the British Iron Age for the curation of human remains, perhaps in order to harness the power of ancestral spirits against some future threat or disaster, and in some cases, evidence of preservation ('mummification') has been claimed. There is also evidence for the manipulation of both human and animal remains in burial, perhaps the removal of selected bones or the reassembly of composite skeletons. Where such manipulation is in evidence, it would certainly not be unreasonable to infer ritual intent.

Of the two pan-European practices that accord reasonably with ritual activity, hoards in watery contexts and deposits in shafts in the ground are both represented in Northern Britain.

The ironwork hoards of southern Scotland could be matched elsewhere in Britain and, on a grander scale, in central Europe. Shafts into the underworld may range from relatively modest pits at Newstead, matched widely by examples throughout Britain and Europe (Ross, 1968; Piggott, S., 1978), to the more formal flights of steps represented at Mine Howe, Orkney and perhaps at Burghead into the Christian era. The existence of other sites whose function was predominantly ritual is hinted at by excavations at An Dunan in the Western Isles. In a society in which ritual was doubtless implicit as well as codified, it may be difficult to isolate cult practices in a domestic context. The burials beneath the foundations at Sollas or behind the wheelhouse wall at Cnip certainly suggest ritual, as do the arrangements of animal bones or teeth around the hearths at Dun Bharabhat, A 'Cheardach Mhor and A 'Cheardach Bheag. With the possibility that remains were curated over protracted periods before final deposit, it is of course crucial that stratigraphy and taphonomy are reliably observed and recorded in the field.

Communal ritual may well have been one of the functions of major hillforts in those regions where such larger centres existed (Harding, 2012). In Southern Britain, hillforts were sought out in the late Roman period for the construction of Romano-Celtic temples, perhaps suggestive of older ritual associations. Prominent landmarks like Ingleborough, Yeavering Bell, Traprain Law or Tap o' Noth might well have been used for seasonal gatherings or religious festivals among a range of other communal purposes. Promontory forts and headland forts, especially where their perilously precipitous location seems unduly hazardous for normal occupation, could perhaps have served some ritual purpose. Enclosure evidently served a variety of different purposes in later prehistory and early history, and the association of sites, large and small, simple or complex, into a single category of hillforts has undoubtedly been an over-simplification of archaeological classification.

Culture contact and culture change

Most theoretical texts on archaeology discuss trade and exchange as if this was the only form of culture contact or mechanism for material innovation. In fact, there are a number of possible agencies short of full-scale immigration that could have been influential in triggering cultural or material innovations, some of which are suggested by documentary sources. Fosterage, for example, the outplacing of sons or cadet members of a high-ranking family during years of education and training, or the exchange of professional skilled men, craftsmen, technicians, poets, or seers, could have resulted in the transmission of ideas between ruling élites or their entourages that might account, for example, for technical or stylistic changes in high-status metalwork. Mercenary service, sometimes evidently in quite remote, foreign parts, or diplomatic missions by envoys, whose role may be closely related to trade by mercatores, could equally have made a disproportionate impact among small but influential ruling groups. The exchange of hostages, probably not involving quite the involuntary menace of its contemporary counterpart, could also have resulted in the introduction of novel goods and ideas. Finally, of course, acts of raiding or piracy could have resulted in the displacement of artefacts and individuals from their area of origin.

Among high-status metalwork, the Cairnmuir gold torc terminal from southern Scotland is so manifestly of south-eastern English origin that diplomatic gift or high-status exchange seem the most likely explanations of its presence so far north, though the snake armlet in the Snailwell, Cambridgeshire, grave suggests that this could have been a two-way process. The Balmaclellan collar, on the other hand, shows distinctive south-western stylistic traits in a form

that is unknown in the south-west of England. Here, we might speculate whether a craftsman from south-west England might not have been working for a south-western Scottish patron as a result of negotiated exchange of specialists. The continental 'Plastic Style' gold torc from Blair Drummond could be an even more striking example. The Stichill collar likewise displays a combination of styles and techniques with both Irish and south-western English affinities, suggesting composite input rather than a simple import from a southern source. The western seaways were evidently being exploited in the early historic period, with the import of Mediterranean or continental pottery and glass to major centres in western Britain and Ireland, but it remains unclear whether western Scotland was receiving such imports directly or through down-the-line contacts with south-western Britain.

Innovative burial rites have long been regarded as a litmus test for cultural innovation, perhaps without sufficient analysis of the rationale. The cemetery rites of eastern Yorkshire bear striking affinities to those of continental Europe, yet even here, the selective character of the insular assemblage and difficulties in pointing to any particular continental source has frustrated any confident belief in direct immigration. The Newbridge, Edinburgh, chariot burial is thus particularly intriguing in view of its affinities with the continental series rather than those of eastern Yorkshire. Could this have been the burial of a continental prince in fosterage with a southern Scottish aristocratic kin group, or the outcome of a diplomatic marriage anticipating by more than two millennia the Auld Alliance?

Invasion or population movement on any significant scale has been unfashionable among archaeologists since the 1960s as an explanation of culture change, even though classical and later historical sources suggest that population mobility was endemic in Iron Age and early historic Europe. A couple of generations later, it should now be possible to take a more objective view. Acknowledging that archaeologists in the political environment of the mid-twentieth century tended to explain culture change too simplistically, it is plain that migration or invasion should not be excluded from the wider spectrum of options. Genetic analyses increasingly demonstrate patterns of settlement from continental Europe from at least the Neolithic through into early historic times, though not necessarily correlating with apparent episodes of cultural innovation as indicated by the archaeological evidence, and certainly not now vindicating the extravagant interpretations of earlier generations. Interest has equally focused on the dating of the introduction of Celtic languages, and indeed of Indo-European languages generally into western Europe, with archaeologists tending to favour earlier horizons than might command support from linguists. Language, however, as we have seen, is not regarded by linguists as correlating with any specific archaeological assemblage or genetic group, and indeed, 'ancient linguistic expansions, unless sudden and long range, are unlikely to leave any unambiguous archaeological or genetic traces' (Sims-Williams, 2012: 436). As Oppenheimer (2006: 113) summarized it, 'genes are a proxy for actual migration, while languages only may be. Language is, more importantly, a proxy for cultural movement'.

It has long been evident that Britain throughout prehistory was open to access from the continental mainland via two principal routes, from the south-east across the Channel and southern North Sea, and from the south-west and the Atlantic seaways. Fluctuations in climatic patterns through later prehistory and the early historic period may well have curtailed sea-borne traffic from time to time, but an overall pattern of culture contact seems more probable than one of cultural isolation. It is now becoming clear from genetic studies that the pattern of contact with neighbours was more complex, with connections with Scandinavia and across the southern North Sea probably pre-dating the Anglo-Saxon settlements and

thus facilitating the apparently comprehensive linguistic and cultural assimilation of eastern England. It seems equally probable that long-standing links between communities across the North Channel, extending back into prehistory, cumulatively contributed to the difficulty in identifying archaeologically any diagnostic traits of Dalriadic settlement of the mid-first millennium AD, assuming that documented episode was not simply a historical metaphor for the cumulative process itself.

Archaeologically, it is difficult to adduce evidence for population movement on any scale, in the earlier or later Iron Age, with or without the support of documentary sources. In part, this may be because political change could involve a change in ruling élite without major population change, and in part because across Atlantic Scotland and the Irish Sea province a broad cultural continuum may have minimized the impact archaeologically of regional changes. Caesar cited the Gaulish chief Diviciacus of the Suessiones, who had ruled on both sides of the Channel. Equally, it is possible that long-standing diplomatic liaisons if not political dominion could have united communities on both sides of the North Channel from the earlier Iron Age, and likewise could have pertained between the Northern Isles and Norway earlier than the period of Norse raids and settlements.

Romanization

Perception of the impact and outcome of the Roman occupation of Britain has undergone radical review in the past thirty years. The older conventional view of Richmond, Frere and Salway, sometimes called 'interventionist', was first challenged by the 'non-interventionist' view of Millett and others, then subject to various more nuanced interpretations that recognized that there was no single, static, universal concept of what it was to be Roman, as was formerly implied by scholars who pronounced what 'Rome' did or believed in matters of political, military or imperial policy. Issues of individual identity, what Britons believed themselves to be, or how their behaviour patterns may have changed under Roman occupation, are hard to infer from archaeological evidence alone, and historical sources do not include a native social anthropology of Roman Britain.

The process of ethnic and cultural fusion resulting from the annexation of Britain into the Empire was certainly more mutually complex than was implied by the older conventional model of unalloyed Roman civilization being imposed upon a barbarian society that was receptive or resistant according to inclination or perversity. Many of the Romans in Britain, and most of those in the army, would have been from far-flung parts of the empire, so that their Romanitas would itself have been a cosmopolitan version. Whilst the archaeologist should be concerned with material culture as an index of social identity, social and more especially cognitive reconstruction are areas in which extreme caution must be exercised to avoid being discredited as sociological dilettantism.

Because of the inevitable effects of dynamic interaction, the older notion that, when the legions withdrew, the natives heaved a collective sigh of relief and reverted once more to traditional 'Celtic' customs is simply naïve. It is impossible to believe that anyone was not immeasurably affected by three and a half centuries of Roman imperial presence in Britain, not excluding the Romans themselves. The most critical impact of Roman occupation must have been upon the structure and fabric of native society. Even if the native aristocracies were only reluctantly persuaded to adopt Roman living styles and to accept a measure of political or administrative responsibility in the new province, their authority would have derived from

the occupying regime, and the traditional bonds of obligation between rulers and dependants would inevitably have been eroded or completely destroyed. It was this independent authority that survived beyond the Roman frontier, so that when John Mann (1974) observed that at one level the emergence of a Scottish nation was the legacy of Rome, it was a legacy forged, not just by the unification of northern tribes in opposition to Rome, but by the fact that their traditional social structure had not been totally fractured by subjugation within the Empire. In fact, the history of the northern frontier, despite its Roman perspective, contains sufficient information for us to infer that the political and military campaign north of Hadrian's Wall was little short of a disaster, with no consistent policy being sustained for any length of time, and with a succession of disruptions, which in any impartial account would be described as defeats. Not surprisingly, therefore, any legacy of Roman Britain was largely negative. There was no significant legacy of literacy or artistic tradition, no legacy of urbanization, monetary economy or diocesan administration, and only a limited legacy of Roman Christianity. Yet, however transient we rate the impact of Roman occupation, the older order in southern and eastern England at least was irrevocably destroyed, and in Northern Britain, disrupted to the extent that the political and social structure that emerged in the later Iron Age was in the process of fundamental change.

Archaeology into history

One of the merits of studying the 'long Iron Age' as a continuum derives from a comparison of conventional approaches of prehistorians and historical archaeologists. Many of the 'problems' that formerly vexed students of the early historic period in Northern Britain stemmed from the fact that the archaeological evidence did not match expectations as the documentary sources led them to expect. There were no settlement or burial types diagnostic of Dál Riata or Pictland, still less of Rheged, despite the recognition of archaeologically distinctive types like nuclear forts, long cist cemeteries or symbol stones. The fact that some distinctive types could be assigned to Anglian expansion or the later presence of Norse types in the north only encouraged the belief that this should be the norm. With the demise of the culture-historical model, we can now recognize that expectations of both the historical sources and the archaeological database were simplistic at best and at worst totally misguided.

The absence of distinctive settlement or material types that might make up an archaeological distribution coterminous with the historically inferred region of Dál Riata in western Scotland has frequently been remarked. The expectation that archaeological distributions might correlate with the territories of distinct ethnic groups was implicit in the Childean cultural model, but prehistorians have long since recognized that such simplistic equations are unlikely to be valid, either in principle or in practice. The irony in this instance is that the territory of Dál Riata in its Irish homeland is not recognizable from any unique or diagnostic settlement types or material remains, so that any such expectation in western Scotland seems flawed from the outset. In any event, it is becoming increasing clear that connections across the North Channel were of much longer standing than the historical record might imply and that a commonality of culture across the western seaways would always obscure any particular historical episode, even if such occurred. Cultural interaction is a cumulative and dynamic process that will always defy definition by the static boundaries of archaeological distributions. Should we therefore expect anything diagnostically indicative of Dál Riata settlers if the historical record conflates a long sequence of events and complex relationships into a simplistic apologue? This

does not mean that historical migrations or the transfer of ruling élites from one region to another did not happen, but the documentary record in this instance may either be a metaphor for a much longer and more complex process of cross-channel interaction, or might entail politically fabricated traditions intended to bolster the claims of the Dál Riata dynasty in its rivalry with its neighbours.

So what about the Picts? Whether simply army slang for painted natives, a generic term for north Britons or a collective name for anti-Roman Allies, by the eighth century, the name Picti had been adopted by native communities themselves and thereafter became formalized in historical annals and in recorded king-lists. There may be little evidence to suggest any sense of ethnic identity before that (Fraser, 2011), though we still might be tempted to regard the appearance of symbol art from the sixth century as evidence of emerging ethno-genesis. From the documentary records, it is clear than the Picts were still divided into numerous separate groups that progressively through the first millennium AD coalesced into two main kingdoms, a northern and a southern. Identifying individual kings and their territorial seats is the prerogative of the historian, but there is no close correlation between any archaeological distribution and the inferred territory of historical Picts. Several artefacts or structural types may of course be regarded as Pictish in the sense that they are found in Pictish territory at a time broadly coincident with the genesis or existence of these Pictish kingdoms, but their distributions in space and time are hardly coterminous with 'Pictland'. Artefactual distributions of course essentially reflect patterns of deposition, which are dependent among other factors upon the activity represented, so that high-status goods, like silver chains, in adjacent territories could be the product of diplomatic exchange between different, co-equal polities.

A major development of the sixth century and thereafter was the introduction of literacy, first in the context of ecclesiastical establishments and thereafter among the secular authorities who realized its potential as a means of reinforcing their political power (Nieke, 1988).

Northern Britain in the Iron Age: a community of diversity?

The fashion for synthesizing and classification in prehistoric archaeology, once an essential prerequisite to chronological evaluation, has gone into abeyance in recent years with the demise of the cultural-historical approach to interpretation. For the Northern British Iron Age, any such synthesis risks misrepresenting the regional diversity of the known database and some of the fundamental shifts that are evident over the thousand years of the 'long Iron Age'. In any event, there is a basic issue over how truly representative the known database may be. For much of the Iron Age in many regions, the surviving domestic assemblage is minimal, whereas, under optimum conditions of preservation such as in wetland sites, the survival of organic materials suggests that there could have been a much more diverse range of artefacts than is represented on terrestrial sites. The apparent absence of a regular and recurrent class of burials not only removes the one context that archaeologically could provide a productive source of material artefacts, but self-evidently prejudices our interpretation of Iron Age society if we are unable to explain whatever conventions and rites were associated with the disposal of the dead. We have seen that excavation prompted by development, sometimes on a substantial scale though not under optimum conditions, may cast light where targeted research excavation has hitherto failed to focus, but the probability remains that our cumulative database is biased through factors of survival and recovery.

Recognizing that absence may be as significant as presence, however, some generalizations may be offered as a preliminary characterization of the Northern British Iron Age.

- The transition between symbiosis with to domination of the landscape may have been later in Northern Britain than in southern England, but by the later first millennium, there were extensive tracts of the Yorkshire Wolds, North York Moors, Cumbria, Perthshire and elsewhere where patterns of linear earthworks and enclosure networks imposed an order within which even transhumance or shifting settlements may have been accommodated. With widespread evidence for woodland clearance well before the Roman period, it is clear that even within a system of dispersed settlement resources were nevertheless managed on a communal scale.
- Settlements for the most part fall into two principal categories, either individual homesteads of a nuclear family or village-sized communities, some with enclosing earthworks of protective proportions, probably of an extended kin group. The apparent co-existence of the two in close proximity, in the Borders for example or in the brochs and broch villages of Orkney, makes it hard to explain their relationship within the social structure. Major hillforts or larger enclosed sites analogous to those of Southern Britain are comparatively rare and, where they existed, may have served as places of assembly for a much larger dispersed community. The implication is that political, social or economic organization on a regional or wider scale was a later Iron Age development, in contrast to the time-scheme in Southern Britain or continental Europe.
- The most recurrent manifestation of domestic settlement, as in Southern Britain, is the round-house, with a shift towards sub-circular or rectilinear plans occurring to a limited extent in the later Iron Age. The diversity of plans and construction techniques, however, is considerable, even within the timber or timber-and-stone houses of lowland Scotland and northern England. In Atlantic Scotland, monumental building in stone undoubtedly began earlier and therefore lasted longer than was formerly believed, but still represents a temporary departure from the longer tradition of non-monumental, circular, cellular, ventral or sub-rectangular plans. The Atlantic tradition of circular architecture still stands in marked contrast to the Central European and Northern European fashion for rectangular building, both presumably archaeological proxies for the social units and systems that created them.
- Funerary practices in the earlier Iron Age, with the sole exception of the Arras group of eastern Yorkshire, did not entail in general the deposition of the dead in archaeologically visible burials of a recurrent class. The presumption must be either than rites were used that left no archaeological trace, or that the remains of the dead were regularly fragmented and dispersed around settlements, where skeletal fragments are not uncommonly found. Those burials that have been recognized like the warrior graves of Dunbar, Mortonhall or Alloa, or the small cemetery at Broxmouth, therefore, must have been socially selective in some way. In the early historic period in eastern Scotland, square-ditched barrows, cairns, long cists and simple graves signify a continuing diversity of disposal practice. Though cist burial as a rite evidently preceded the advent of Christianity, as indeed may the origins of long cist cemeteries, it was doubtless the adoption of Christianity that encouraged the use of a standard form of disposal of the dead that would eventually become the norm.
- The economic basis of the Northern British Iron Age was variously a combination of pastoralism and agriculture, supplemented by local resources where available. The cereal

- regime was for large areas of the north a barley monoculture, but arable intensification or extensification can be attested, notably in parts of northern England already before the Roman occupation. In many regions, pastoralism was undoubtedly dominant, but not generally to the exclusion of arable cultivation.
- For the earlier Iron Age, in contrast to Southern Britain, much of Northern Britain was effectively aceramic, a characteristic shared with Ireland, and one that can hardly be attributed to cultural isolation or ignorance in view of the exceptional nature of the pottery assemblage of Atlantic Scotland, and of the Western Isles in particular. Whilst it is easy to infer the use of other materials, wood, leather and textiles for containers, the implication must also be that food preparation was by spit roasting or by boiling in a communal cauldron that was too valuable to be abandoned to the archaeological record except in votive deposits.
- Material production of other artefacts was largely conducted on a domestic or local scale, with little evidence until the later Iron Age of centralized production on even the scale that characterized the pre-Roman Iron Age in Southern Britain. The material assemblages from domestic settlements from northern England in the pre-Roman period, and from Scotland in the earlier Iron Age, are basic and utilitarian, principally in stone or bone. Artefacts of Hallstatt or La Tène type are comparatively rare and almost invariably of insular manufacture. By the early first millennium AD, settlements in north-eastern and Atlantic Scotland have richer and more diverse material assemblages with evidence of iron smelting and smithing together with non-ferrous metalworking, perhaps indicating a greater concern with the expression of identity through material artefacts rather than through buildings. Regional patterns are evident in pin and bead production and the localized distribution of distinctive bronze ornaments. Thereafter, pins and brooch types conform to recurrent types of wider British and Irish distribution.
- Trade and exchange may be inferred with Southern Britain and beyond, though actual imports are exceptional in the pre-Roman period. Though maritime contacts across the North Sea route and along the western seaways in the earlier Iron Age may be inferred, the absence of specific imports or a suite of cognate material types makes it unlikely that there was any significant element of colonization from the south or directly from continental Europe in the earlier Iron Age. A significant distinction in the economic systems of the Northern British Iron Age is indicated by the fact that communities north of the Trent were not coin-using until the historic period. During the Roman period, the occurrence of Roman material beyond the frontier is sporadic and generally confined to a limited number of major centres. Some exceptional finds from the north-east of Scotland may even have been the result of attempts to appease native aggression. By the sixth century AD, there is ample evidence of imported pottery and glass from continental or Mediterranean Europe, including trade via the Irish Sea to western Scottish centres, but the centres controlling trade were royal or monastic rather than commercial ports or markets as in Anglo-Saxon England, thereby reinforcing the impression of a north-west south-east divide.

Two models which gained prominence in the post-cultural-historical years were the World Systems Model in which it was presumed that there was a Core and a Periphery in cultural relationships, and the Prestige Goods Economy Model, not unrelated to it, since what was regarded as prestigious invariably derived from the presumed core and sustained the social hierarchies operating on the dependent periphery. In the context of Mediterranean relationships with central and western Europe in later prehistory, the classical civilizations of Greece and Rome were obviously cast in the role of core, with north-Alpine Europe and more especially Atlantic Europe in the role of periphery. Prime examples of this relationship were the appearance of Greek imports in late Hallstatt and early La Tène princely fortifications and burials, or the deposition in lavishly furnished graves of late La Tène in north-eastern Gaul and the Ardennes of wine-amphorae and Italic bronze vessels. The former made little or no impact upon Britain; the distribution of the latter includes a group of high-status burials in southeastern England. These imports were seen as a means whereby local aristocracies sustained their élite status by exercising local control over the trade in luxury goods. The hierarchical dominance of the élite within the social structure would plainly be threatened by any disruption in the supply of exotic goods. Whilst it is certainly plausible that control of long-distance exchange may have been a factor in sustaining social hierarchies in central and western Europe, it is hard to believe that such hierarchies had not developed through a suite of more complex political and economic factors. Furthermore, the pattern of imports in north-Alpine and western Europe clearly indicates that they were not all simply the product of trading initiatives by Greek or Roman entrepreneurs. The distribution in the sixth century BC of Phocaean grey ware and amphorae along the Mediterranean littoral and its immediate hinterland might well accord with a maritime trading pattern. But the appearance of exotic items like the Grächwil hydria or the Vix crater so far from the coast suggests that barbarian chieftains of north-Alpine and western Europe were not simply passive recipients, but may have been pro-active in these relationships. The process in any event cannot have been one-way, even though the reciprocated goods - metal ores, hides, slaves or whatever - were not such as to leave traces in the archaeological record.

Atlantic Europe too, including Northern Britain and Ireland but not excluding the lands bordering the western approaches and the Atlantic coast to the Hispanic peninsula, periodically came into contact with the Mediterranean world. The documented voyage of Pytheas or the Barbary ape from Navan fort in Armagh are indicative of a burgeoning pattern of maritime contacts. This pattern was certainly sustained into the early historic period, with imports from the Mediterranean and western Europe attested in various parts of Western and Northern Britain and Ireland. This need not mean that Atlantic Europe was any more peripheral to a Mediterranean core than the Mediterranean was peripheral to Atlantic Europe. Both had their reserves of natural resources, both doubtless had developed sophisticated social structures over many generations, and both may be expected to have had their independent orbit of political and economic contacts and alliances. Our perception of the two zones is, of course, immeasurably and indelibly influenced by the fact that the Mediterranean world was literate from an early date, and developed nuclear or urban centres with stone architecture, with the result not only that we have more enduring physical evidence of their settlements, but also that our perception of the ancient world from documentary sources is essentially from the viewpoint of classical civilization.

In drawing a broad distinction between the Mediterranean world, with its immediate neighbours in north-Alpine and west-central Europe on the one hand, and Atlantic Europe on the other, it is not my intention to suggest any implicit cultural unity across the Atlantic zone. At certain periods in some regions, there may well have appeared distinctive fashions of building or burial, or indeed in material assemblages, which might be the archaeological indicators of a broader community of cultural tradition. The practice of collective burial in

megalithic tombs might be cited as an instance, though the regional distinctiveness of different groups defies simplistic explanation of their potential relationships. Metalworking industries of the later Bronze Age are equally distinctive, though the presence of individual types in hoards suggests a good deal of reciprocal exchange between neighbouring Atlantic communities. The predominance throughout later prehistory of the circular ground-plan for domestic buildings in Atlantic Europe is one of the region's most enduring characteristics, even if the local building types, of Scottish brochs and duns, Wessex timber round-houses, Irish cashels or roundhouses of the Hispanic castros and cividade, all proclaim their local origins.

To make a case therefore for a common cultural identity across the Atlantic Iron Age, of which Northern Britain was part, therefore, might be tempting, but would probably be misguided. Atlantic Europe is not a cultural unity in the Iron Age, though its regions have many characteristics in common that distinguish them from the central European tradition. Apart from land-based interaction with Southern Britain, the inhabitants of Northern Britain throughout the Iron Age doubtless had contacts, in varying degrees at various times, with both Northern Europe across the North Sea on the one hand and with Ireland and the western seaways on the other, and through both with continental Europe beyond. These contacts could have triggered cultural innovation, which, in the most extreme form of Romanization, must have had a lasting impact on the native population, particularly in the disruption of an older social and political order. The process of dynamic change to which these external impulses contributed culminated in the political territories that emerged with documented identities in the early historic period. Even if there is no single Atlantic Iron Age, Northern Britain cannot be dismissed simply as peripheral to the mainstream of Central Europe. Northern Britain and Atlantic Europe were in another mainstream altogether.

ABBREVIATIONS

AA Archaeologia Aeliana
AJ Antiquaries Journal
ArchJ Archaeological Journal
BAR British Archaeological Reports
BMQ British Museum Quarterly
CA Current Archaeology

CUP Cambridge University Press
DAJ Durham Archaeological Journal
DES Discovery and Excavation in Scotland
DyAJ Derbyshire Archaeological Journal
GAJ Glasgow Archaeological Journal

IJNA International Journal of Nautical Archaeology

JAS Journal of Archaeological Science JIA Journal of Irish Archaeology

JBAA Journal of the British Archaeological Association

JRA Journal of Roman Archaeology JRS Journal of Roman Studies

IRSAI Journal of the Royal Society of Antiquaries of Ireland

JWA Journal of Wetland Archaeology

MA Medieval Archaeology NA Northern Archaeology

OUCA Oxford University Committee for Archaeology

OJA Oxford Journal of Archaeology
OUP Oxford University Press

PDNHAS Proceedings of the Dorset Natural History and Archaeological Society

PPS Proceedings of the Prehistoric Society
PRIA Proceedings of the Royal Irish Academy

PSAS Proceedings of the Society of Antiquaries of Scotland

RCA(H)MS Royal Commission on the Ancient (and Historical) Monuments of Scotland

SAF Scottish Archaeological Forum

SAIR Scottish Archaeological Internet Reports

SALResCom Society of Antiquaries of London Research Committee

SAR Scottish Archaeological Review SAJ Scottish Archaeological Journal

SERF Strathearn Environs Royal Forteviot Project STAR Scottish Trust for Archaeological Research

TAASDN Transactions of the Architectural and Archaeological Society of Durham and

Northumberland

TAFAI Tayside and Fife Archaeological Journal

TBNHS Transactions of the Buteshire Natural History Society

TCWAS Transactions of the Cumberland and Westmorland Archaeological Society

TDGNHAS Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian

Society

TGAS Transactions of the Glasgow Archaeological Society

TLCAS Transactions of the Lancashire and Cheshire Archaeological Society

WYAS West Yorkshire Archaeological Services

YAJ Yorkshire Archaeological Journal

BIBLIOGRAPHY

- Abercromby, J., Ross, T. and Anderson, T. (1902) 'Account of the excavation of the Roman Station at Inchtuthill, Perthshire, undertaken by the Society of Antiquaries of Scotland in 1901', *PSAS*, 36, 1901–2: 182–242.
- Alcock, L. (1981) 'Early historic fortifications in Scotland', in Guilbert, G. ed. 1981: 150-80.
- Alcock, L. (1984) 'A survey of Pictish settlement archaeology', in Friell, J. and Watson, W. eds 1984: 7–41.
- Alcock, L. (1987) 'Pictish studies: Present and future', in Small, A. ed. 1987: 80–92.
- Alcock, L. (1988) Bede, Eddius and the Forts of the North Britons, Newcastle upon Tyne, Jarrow Lecture.
- Alcock, L. (2003) Kings and Warriors, Craftsmen and Priests in Northern Britain AD 550–850, Edinburgh, Society of Antiquaries of Scotland.
- Alcock, L. and Alcock, E. A. (1987) 'Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84: 2, Excavations at Dunollie Castle, Oban, Argyll, 1978', PSAS, 117: 119–47.
- Alcock, L. and Alcock, E. A. (1990) 'Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84: 4, Excavations at Alt Clut, Clyde Rock, Strathclyde 1974–75', PSAS, 120: 95–149.
- Alcock, L. and Alcock, E. A. (1992) 'Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84: 5: A, Excavations and other fieldwork at Forteviot, Perthshire, 1981; B, Excavations at Urquhart Castle, Inverness-shire, 1983; C, Excavations at Dunnottar, Kincardineshire, 1984', PSAS, 122: 215–89.
- Alcock, L., Alcock, E. A. and Driscoll, S. T. (1989) 'Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84: 3, Excavations at Dundurn, Strathearn, Perthshire, 1976–77', PSAS, 119: 189–226.
- Alcock, L., Alcock, E. A. and Foster, S. M. (1986) 'Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84: 1, Excavations near St Abb's Head, Berwickshire, 1980', PSAS, 116: 255–79.
- Alexander, D. ed. (1996) Prehistoric Renfrewshire: Papers in Honour of Frank Newall, Edinburgh, Renfrew Local History Forum.
- Alexander, D. (2002) 'An oblong fort at Finavon, Angus: An example of the over-reliance on the appliance of science', in Smith, B. B. and Banks, I. eds 2002: 45–54.
- Alexander, D. (2005) 'Redcastle, Lunan Bay, Angus: The excavation of an Iron Age timber-lined souterrain and a Pictish barrow cemetery', *PSAS*, 135: 41–118.

- Alexander, D. and Ralston, I. (1999) 'Survey work on Turin Hill, Angus', TAFAI, 5, 1999: 36–49.
- Alexander, D. and Watkins, T. (1998) 'St Germains, Tranent, East Lothian: The excavation of Early Bronze Age remains and Iron Age enclosed and unenclosed settlements', PSAS, 128, 1998: 203-54.
- Allen, D. F. (1961) 'The origins of coinage in Britain: A reappraisal', in Frere, S. S. ed. 1961: 97-308.
- Allen, D. F. (1963) The Coins of the Coritani, Sylloge of Coins of the British Isles 3, London, British Academy, OUP, Spink.
- Allen, J. R. and Anderson, J. (1903) The Early Christian Monuments of Scotland, Edinburgh, Neil and Co/ Society of Antiquaries of Scotland.
- Allison, P. M. ed. (1999) The Archaeology of Household Activities, London, Routledge.
- Anderson, J. (1881) Scotland in Early Christian Times, Edinburgh, David Douglas.
- Anderson, J. (1883) Scotland in Pagan Times: The Iron Age, Edinburgh, David Douglas.
- Anderson, S. and Rees, A. (2006) 'The excavation of a large double-chambered souterrain at Ardownie Farm cottages, Monifieth, Angus', TAFAJ, 12: 14-60.
- Anderson-Whymark, H., Garrow, D. and Sturt, F. eds (2015) Continental Connections: Exploring Crosschannel Relationships from the Mesolithic to the Iron Age, Oxford, Oxbow Books.
- Anthoons, G. (2007) 'The origins of the Arras Culture: Migration or elite networks?', in Karl, R. and Leskovar, J. eds 2007: 141-51.
- Armit, I. ed. (1990a) Beyond the Brochs: Changing Perspectives on the Atlantic Scottish Iron Age, Edinburgh, Edinburgh University Press.
- Armit, I. (1990b) 'Broch-building in the north: The context of innovation', World Archaeology, 21, no. 3: 435-45.
- Armit, I. (1992) The Later Prehistory of the Western Isles of Scotland, Oxford, BAR, British Series 221.
- Armit, I. (1996) The Archaeology of Skye and the Western Isles, Edinburgh, Edinburgh University Press.
- Armit, I. (1997a) Celtic Scotland, London, Batsford/Historic Scotland.
- Armit, I. (1997b) 'Cultural landscapes and identities: A case study in the Scottish Iron Age', in Gwilt, A. and Haselgrove, C. eds 1997: 248-53.
- Armit, I. (1999a) 'Life after Hownam: The Iron Age in south-east Scotland', in Bevan, B. ed. 1999a:
- Armit, I. (1999b) 'The abandonment of souterrains: Evolution, catastrophe or dislocation?', PSAS, 129:
- Armit, I. (2000) 'Review of M. Parker Pearson, N. Sharples with J. Mulville, Between land and sea; excavations at Dun Vulan, South Uist, Sheffield, 1999', Antiquity, 74: 244-5.
- Armit, I. (2002) 'Land and freedom: Implications of Atlantic Scottish settlement patterns for Iron Age land-holding and social organisation', in Smith, B. B. et al. eds 2002: 15-26.
- Armit, I. (2003) Towers in the North: The Brochs of Scotland, Stroud, Tempus.
- Armit, I. (2005) 'Land-holding and inheritance in the Atlantic Scottish Iron Age', in Turner, V., Nicholson, R., Dockrill, S. and Bond, J. eds 2005: 129-43.
- Armit, I. (2006) Anatomy of an Iron Age Roundhouse: The Cnip Wheelhouse Excavations, Lewis, Edinburgh, Society of Antiquaries of Scotland.
- Armit, I. (2015) 'Review of M. Parker Pearson and M. Zvelebil, Excavations at Cill Donnain', Antiquity, 89: 755-6.
- Armit, I., Badger, S., Hunter, F. and Nells, E. (2005) 'Traprain Law', DES, 6: 55-6.
- Armit, I. and Braby, A. (2002) 'Excavation of a burnt mound and associated structures at Ceann nan Clachan, North Uist', PSAS, 132: 229-58.
- Armit, I., Campbell, E. and Dunwell, A. (2008) 'Excavation of an Iron Age, Early Historic and medieval settlement and metalworking site at Eilean Olabhat, North Uist', PSAS, 138: 27-104.
- Armit, I., Dunwell, A. and Hunter, F. (1999) Traprain Law Summit Project, East Lothian: Data Structure Report, 1999, Edinburgh, privately published professional report.
- Armit, I., Dunwell, A. and Hunter, F. (2000) Traprain Law Summit Project, East Lothian: Data Structure Report, 2000, Edinburgh, privately published professional report.
- Armit, I. and McKenzie, J. (2013) An Inherited Place, Broxmouth Hillfort and the South-East Scottish Iron Age, Edinburgh, Society of Antiquaries of Scotland.

Armit, I., Schulting, R., Knüsel, C. and Shepherd, I. (2011) 'Death, decapitation and display? The Bronze and Iron Age human remains from the Sculptor's Cave, Covesea, north-east Scotland', PPS, 77: 251–78

Ashmore, P. (1980) 'Low cairns, long cists and symbol stones', PSAS, 110, 1978-80: 346-55.

Ashmore, P. (1997) 'Radiocarbon dates from archaeological sites in Argyll and Arran', in Ritchie, G. ed. 1997; 236–83.

Atkinson, D. (2007) 'Mither Tap, Bennachie', DES, 8: 28.

Atkinson, R. J.C. and Piggott, S. (1955) 'The Torrs Chamfrein', Archaeologia, 96: 197-235.

Baillie, M. (2000) Exodus to Arthur: Catastrophic Encounters with Comets, London, Batsford.

Banks, I. (2000) 'Excavation of an Iron Age and Romano-British enclosure at Woodend Farm, Johnstonebridge, Annandale, 1994 and 1997', PSAS, 130: 223–81.

Barber, J. (1981) 'Excavations on Iona, 1979', PSAS, 111: 282-380.

Barber, J. (1985) 'The pit alignment at Eskbank Nurseries', PPS, 51: 149-66.

Barber, J. (2003) Bronze Age farms and Iron Age farm mounds in the Outer Hebrides, Edinburgh, SAIR 3.

Barber, J., Clark, C., Cressey, M., Crone, A., Hale, A., Henderson, J., Housley, R., Sands, R. and Sheridan, A. eds (2007) Archaeology from the Wetlands: Recent Perspectives. Proceedings of the 11th WARP Conference, Edinburgh, 2005, Edinburgh, Society of Antiquaries of Scotland.

Barber, J. and Crone, A. (2001) 'The duration of structures, settlements and sites: Some evidence from Scotland', in Raftery, B. and Hickey, J. eds 2001: 69–86.

Barber, J., Halstead. P., James, H. and Lee, F. (1989) 'An unusual Iron Age burial at Hornish Point, South Uist', *Antiquity*, 63, 773–8.

Barclay, G. (1980) 'Newmill and the souterrains of Southern Pictland', PSAS, 110, 1978-80: 200-8.

Barclay, G. (1999) 'Cairnpapple revisited: 1948–1998', PPS, 65: 17–46.

Barker, G. ed. (1981) Prehistoric Communities in Northern England, Sheffield, Department of Prehistory, University of Sheffield.

Barley, M. W. and Hanson, R. (1968) Christianity in Britain 300–700, Leicester, Leicester University Press.

Barrett, J. C. (1981) 'Aspects of the Iron Age in Atlantic Scotland. A case study in the problems of archaeological interpretation', PSAS, 111: 205–19.

Barrett, J. C. and Bradley, R. eds (1980) Settlement and Society in the British Late Bronze Age, Oxford, BAR, British Series 83.

Barrett, J. C., Fitzpatrick, A. and Macinnes, L. eds (1989) Barbarians and Romans in North-West Europe, from the Later Republic to Late Antiquity, Oxford, BAR International Series, 471.

Benton, S. (1931) 'The excavations of the Sculptor's Cave, Covesea, Morayshire', PSAS, 65, 1930–31:177–216.

Bernelle, A. ed. (1992) Decantations: A Tribute to Maurice Craig, Dublin, Lilliput Press.

Bersu, G. (1940) 'Excavations at Little Woodbury, Wiltshire, part 1', PPS, 6: 30–111.

Bersu, G. (1948) "Fort" at Scotstarvit Covert, Fife', PSAS, 82, 1947-8: 241-63.

Bersu, G. (1977) Three Iron Age Round Houses in the Isle of Man, ed. C.A.R. Radford, Isle of Man, Manx National Museum and National Trust.

Beswick, P. (1987) Wincobank hillfort: Radiocarbon dates, Bull. Prehist. Res. Section, Yorks. Arch. Soc., Leeds, no page nos.

Beswick, P. and Coombs, D. (1986) 'Excavations at Portfield hillfort, 1960, 1970 and 1972', in Manby, T. and Turnbull, P. eds 1986: 137–79.

Bevan, B. (1997) 'Bounding the Landscape: Place and identity during the Yorkshire Wolds Iron Age', in Gwilt, A. and Haselgrove, C. eds 1997: 181–91.

Bevan, B. ed. (1999a) Northern Exposure: Interpretative Devolution and the Iron Ages in Britain, Leicester, University of Leicester Arch. Mon., 4.

Bevan, B. (1999b) 'Land-Life-Death-Regeneration: Interpreting a middle Iron Age landscape in eastern Yorkshire', in Bevan, B. ed. 1999a: 123–48.

Bevan, B. (1999c) 'Northern exposure: Interpretative devolution and the Iron Ages in Britain', in Bevan, B. ed. 1999a: 1–20.

Bevan, B. (2000) 'Peak practice: Whatever happened to the Iron Age in the southern Pennines?', in Harding, J. and Johnston, R. eds 2000: 141–55.

Bevan, B. (2005) 'Iron Age and Roman settlement in the Peak District', in Nevell, M. and Redhead, N. eds 2005: 87-98.

Beveridge, E. (1903) Coll and Tiree, Edinburgh, William Brown.

Beveridge, E. (1911) North Uist, Edinburgh, William Brown.

Beveridge, E. and Callander, J. G. (1931) 'Excavation of an earth house at Foshigarry and a Fort, Dun Thomaigh in North Uist', PSAS, 65: 299-357.

Beveridge, E. and Callander, J. G. (1932) 'Earth houses at Garry Iochdrach and Bac Mhic Connain in North Uist', PSAS, 66: 32-66.

Bewley, R. H. (1986). 'Survey and excavation in the Solway Plain, Cumbria (1982-4)', TCWAS, 86: 19-40.

Bewley, R. H. (1992) 'Excavations on Two Crop-Mark Sites in the Solway Plain, Cumbria, Ewanrigg Settlement and Swarthy Hill, 1986–1988', TCWAS, 92: 23–47.

Bewley, R. H. (1993) 'Survey and excavation at a crop-mark enclosure, Plasketlands, Cumbria', TCWAS, 93: 1-18.

Bewley, R. H. (1998) 'Survey and excavations of a cropmark enclosure at Edderside, Cumbria, 1989–90', TCWAS, 98: 107-17.

Birch, S. (2012) 'High Pasture Cave and Environs Project', DES, 13: 116.

Birch, S., Fraser, L. and Peteranna, M. (2013) 'Comar Wood Dun', DES, 14: 109.

Birch, S., Peteranna, M. and Fraser, L. (2012) 'Broadford Medical Centre', DES, 13: 115-6.

Birch, S. and Wildgoose, M. (2005) 'Uamh an Ard Achaidh (High Pasture Cave), Skye', DES, 6: 88-9.

Blake, B. (1959) 'Excavations of native (Iron Age) sites in Cumberland 1956-58', TCWAS, 59: 1-14.

Blundell, J. D. and Longworth, I. H. (1967) 'A Bronze Age hoard from Portfield Farm, Whalley, Lancs', BMQ, 32:8-14.

Bowden, M.C.B., Mackay, D. A. and Blood, N. K. (1989) 'A new survey of Ingleborough Hillfort, North Yorkshire', PPS, 55: 267-71.

Bowen, H. C. and Fowler, P. eds (1978) Early Land Allotment, Oxford, BAR, British Series 48.

Boyle, A., Evans, T., O'Connor, S., Spence, A. and Brennand, M. (2007) 'Site D (Ferry Fryston) in the Iron Age and Roman Periods', in Brown, F. et al. eds 2007: 121-60.

Bradley, R. (1984) The Social Foundations of Prehistoric Britain, Themes and Variations in the Archaeology of Power', London and New York, Longman.

Bradley, R. (1987) 'Time regained: The creation of continuity', JBAA, 140: 1–17.

Bradley, R. (2000) The Good Stones: A New Investigation of the Clava Cairns, Edinburgh, Society of Antiquaries of Scotland.

Branigan, K. ed. (1980) Rome and the Brigantes: The Impact of Rome on Northern England, Sheffield, Dept of Prehistory and Archaeology, University of Sheffield.

Breeze, A. (1998) 'Pictish chains and Welsh forgeries', PSAS, 128: 481-84.

Breeze, D. ed. (2014) The Impact of Rome on the British Countryside, London, Royal Archaeological Institute.

Breeze, D. and Dobson, B. (2000) Hadrian's Wall, 4th ed. London, Penguin Books.

Brewster, T.C.M. (1963) The Excavation of Staple Howe, Malton, East Riding Arch. Res. Comm.

Brewster, T.C.M. (1981) 'The Devil's Hill', CA, 76: 140-1.

British Museum (1951) Guide to the Antiquities of Roman Britain, London, British Museum.

Broderick, G. (2015) '*Pixti/*Pexti, Picti? The name "Picti" revisited', The Journal of Scottish Name Studies, 9: 9-42.

Brown, F., Howard-Davis, C., Brennand, M., Boyle, A., Evans, T., O'Connor, S., Spence, A., Heawood, R. and Lupton, A. (2007) The Archaeology of the A1 (M) Darrington to Dishforth DBFO Road Scheme, Lancaster, Oxford Archaeology North.

Brown, J. (1999) 'Romano-British Villa Complex Chapel House Farm, Dalton on Tees, North Yorkshire', Yorkshire Archaeological Society Roman Antiquities Section Bulletin, 16: 19-27.

Brown, M. (1983) 'New evidence for Anglian settlement in East Lothian', SAR, 2, 2: 156-63.

Bruce, J. (1900) 'Notes of the discovery and exploration of a pile structure on the north bank of the river Clyde, east from Dumbarton Rock', PSAS, 34, 1899–1900: 437–62.

Bruce, J. (1908) 'Report and investigations upon the Langbank pile dwelling', TGAS, 5: 43–53.

- Burgess, C. B. (1970) 'Excavations at the scooped settlement Hetha Burn I, Hethpool, Northumberland', *TAASDN*, ns 2: 1–26.
- Burgess, C. B. (1974) 'The bronze age', in Renfrew, C. ed. 1974: 165-232.
- Burgess, C. B. (1984) 'The prehistoric settlement of Northumberland: A speculative survey', in Miket, R. and Burgess, C. B. eds 1984: 126–75.
- Burgess, C.M.G. (1999) 'Promontory enclosures on the Isle of Lewis, the Western Isles, Scotland', in Frodsham, P., Topping, P. and Cowley, D. eds 1999: 93–104.
- Burgess, C.M.G. and Church, M. (1997) Coastal Erosion Assessment, Lewis: A Report for Historic Scotland, Edinburgh, privately published professional report.
- Burgess, C.M.G., Church, M. and Gilmour, S.M.D. (1998) *Uig Landscape Survey: Second Interim Report*, Edinburgh, privately published professional report.
- Burgess, C., Topping, P. and Lynch, F. eds (2007) Beyond Stonehenge: Essays on the Bronze Age in Honour of Colin Burgess, Oxford, Oxbow Books.
- Burt, J. (1997) 'Long cist cemeteries in Fife', in Henry, D. ed. 1997: 64-6.
- Buteux, S. (1997) Settlements at Skaill, Deerness, Orkney. Excavations by Peter Gelling of the Prehistoric, Pictish, Viking and Later Periods, 1963–1981, Oxford, BAR, British Series 260.
- Calder, C.S.T. (1939) 'Excavations of Iron Age Dwelling on the Calf of Eday in Orkney', *PSAS*, 73, 1938–39: 167–85.
- Calder, C.S.T. (1963) 'Cairns, Neolithic houses and Burnt Mounds in Shetland', *PSAS*, 96, 1962–63: 37–86.
- Campbell, E. (1991) 'Excavations of a wheelhouse and other Iron Age structures at Sollas, North Uist by R. J.C. Atkinson in 1957', *PSAS*, 121: 117–73.
- Campbell, E. (1996a) 'The archaeological evidence for external contacts: Imports, trade and economy in Celtic Britain A.D. 400–800', in Dark, K. ed. 1996: 83–96.
- Campbell, E. (1996b) 'Trade in the Dark Age West: A peripheral activity?', in Crawford, B. ed. 1996: 79–91.
- Campbell, E. (2000) 'A review of glass vessels in western Britain and Ireland AD 400–800', in Price, J. ed. 2000: 33–46.
- Campbell, E. (2007) Continental and Mediterranean Imports to Atlantic Britain and Ireland, AD 400–800, York, CBA Research Report 157.
- Campbell, E. (2010) Forteviot Cemetery Excavation 2010, SERF online Data Structure Report.
- Campbell, E. and Gondek, M. (2009) Forteviot Perthshire: Excavation of a Pictish Cemetery and Iron Age Enclosure 2009, SERF online Data Structure Report.
- Card, N. and Downes, J. (2003) 'Mine Howe the significance of space and place in the Iron Age', in Downes, J. and Ritchie, A. eds 2003: 11–19.
- Carruthers, M. (2015) 'The Cairns, Windwick Bay', DES, ns 16: 133-4.
- Carson, R.A.G. and Kraay, C. M. eds (1978) Scripta Nummaria Romana: Essays Presented to Humphrey Sutherland, London, Spink.
- Carter, S. (1994) 'Radiocarbon dating evidence for the age of narrow cultivation ridges in Scotland', Tools and Tillage, 7: 83–91.
- Carter, S. and Hunter, F. (2003) 'An Iron Age chariot burial from Scotland', Antiquity, 77: 531-5.
- Carter, S., McCullagh, R. and MacSween, A. (1995) 'The Iron Age in Shetland: Excavations at five sites threatened by coastal erosion', *PSAS*, 125: 429–83.
- Carver, M., Barrett, J., Downes, J. and Hooper, J. (2012) 'Pictish Byre-houses at Pitcarmick and their landscape: Investigations 1993–5', PSAS, 142: 145–99.
- Casey, P. J. (1984) 'Roman coinage of the fourth century in Scotland', in Miket, R. and Burgess, C. B. eds 1984: 295–304.
- Caulfield, S. (1978) 'Quern replacement and the origins of brochs', PSAS, 109: 129-39.
- Cavers, G. (2006) 'Late Bronze and Iron Age Lake Settlement in Scotland and Ireland: The development of the "Crannog" in the North and West', OJA, 25, no. 4: 389–412.
- Cavers, G. (2010) Crannogs and Later Prehistoric Settlement in Western Scotland, Oxford, BAR, British Series 510.

Cavers, G. and Henderson, J. (2005) 'Underwater excavation at Ederline crannog, Loch Awe, Argyll, Scotland', IJNA, 34, no. 2: 282–98.

Cavers, G., Barber, J. and Ritchie, M. (2015) 'The survey and analysis of brochs', PSAS, 145: 153-76.

Ceron-Carrasco, R., Church, M. and Thoms, J. (2005) 'Towards an economic landscape of the Bhaltos Peninsula, Lewis, during the mid to late Iron Age', in Turner, V., Nicholson, R., Dockrill, S. and Bond, J. eds 2005: 21–34.

Challis, A. J. and Harding, D. W. (1975) Later Prehistory from the Trent to the Tyne, Oxford, BAR, 20.

Champion, S. (1995) Hillfort Study Group Visit to the Isle of Man, 21–24 April 1995: Guide, Privately circulated.

Chapman, J. and Mytum, H. eds (1983) Settlement in North Britain 1000 BC – AD 1000, Oxford, BAR, British Series 118.

Chapman, M. (1992) The Celts: The Construction of a Myth, New York, St Martin's Press and London, Macmillan.

Charles-Edwards, T. (1972) 'Kinship, status and the origin of the hide', Past and Present, 56: 3-33.

Charles-Edwards, T. (1993) Early Irish and Welsh Kinship, Oxford, Clarendon Press.

Childe, V. G. (1935a) The Prehistory of Scotland, London, Kegan Paul.

Childe, V. G. (1935b) 'Excavation of the Vitrified Fort of Finavon, Angus', PSAS, 69, 1934-5: 49-80.

Childe, V. G. and Thorneycroft, W. (1938a) 'The vitrified fort at Rahoy, Movern, Argyll', *PSAS*, 72, 1937–8: 23–43.

Childe, V. G. and Thorneycroft, W. (1938b) 'The experimental production of the phenomena distinctive of vitrified forts', *PSAS*, 72, 1937–8: 44–55.

Christison, D. (1898) Early Fortifications in Scotland: Motes, Camps and Forts, Edinburgh and London, Blackwood.

Christison, D., Anderson, J. and Ross, T. (1905) 'Report on the Society's excavations of forts on the Poltalloch Estate, Argyll, in 1904–5', *PSAS*, 39: 259–322.

Church, M. (2002) 'The archaeological and archaeobotanical implications of a destruction layer at Dun Bharabhat, Lewis', in Smith, B. B., and Banks, I. eds 2002: 67–75.

Church, M., Nesbitt, C. and Gilmour, S. (2013) 'A special place in the saltings? Survey and excavation of an Iron Age estuarine islet at An Dunan, Lewis, Western Isles', *PSAS*, 143: 157–226.

Clack, P. (1982) 'The Northern Frontier: Farmers in the Military Zone', in Miles, D. ed. 1982: 377–402.

Clack, P. and Haselgrove, S. eds (1982) Rural Settlement in the Roman North, Durham, CBA Regional Group 3.

Clarke, D. V. (1970) 'Bone Dice and the Scottish Iron Age', PPS, 36: 214-32.

Clarke, D. V. (1971) 'Small finds of the Atlantic Province: Problems of approach', SAF, 3: 22–54.

Clarke, D. V. (2007) 'Reading the multiple lives of Pictish symbol stones', MA, 51: 19–39.

Close, R. S. (1972) 'Excavation of Iron Age hut circles at Percy Rigg, Kildale', YAJ, 44: 23-31.

Close-Brooks, J. (1984) 'Pictish and other burials', in Friell, J. and Watson, W. eds 1984: 87-114.

Close-Brooks, J. (1986) 'Excavations at Clatchard Craig, Fife', PSAS, 116: 117-84.

Coggins, D. (1985) 'Settlement and farming in Upper Teesdale', in Spratt, D. and Burgess, C. eds 1985: 163–75.

Coggins, D. (1986) Upper Teesdale: The Archaeology of a North Pennine Valley, Oxford, BAR, British Series 150.

Coles, J. and Simpson, D. (1968) Studies in Ancient Europe: Essays Presented to Stuart Piggott, Leicester, Leicester University Press.

Collingwood, R. G. (1933) 'Prehistoric settlement near Crosby Ravensworth, TCWAS, 33: 201–26.

Collingwood, R. G. (1938) 'The hill-fort on Carrock Fell', TCWAS, 38: 32-41.

Collingwood, R. G. and Myres, J.N.L. (1937) Roman Britain and the English Settlements, Oxford, OUP.

Collingwood, R. G. and Richmond, I. A. (1969) The Archaeology of Roman Britain, London, Methuen.

Collingwood, W. G. (1908) 'Report on an exploration of the Romano-British settlement at Ewe Close, Crosby Ravensworth', *TCWAS*, 8: 355–68.

Collis, J. (1997) 'Celtic myths', Antiquity, 71: 195–201.

- Collis, J. (2003) The Celts: Origins, Myths and Inventions, Stroud, Tempus.
- Cook, M. (1999) Aspects of the Funerary Rituals of the pre-Christian Iron Age in Scotland, Edinburgh, MA Dissertation, University of Edinburgh, Department of Archaeology.
- Cook, M. (2006a) 'Excavations of a Bronze Age roundhouse and associated palisade enclosure at Aird Quarry, Castle Kennedy, Dumfries and Galloway', TDGNHAS, 80: 9–27.
- Cook, M. (2006b) 'Neolithic and Iron Age structures at Grantown Road, Forres, Morayshire', Northern Studies, 40: 3–22.
- Cook, M. (2012) 'Bankhead of Kinloch Farm', DES, 13: 145.
- Cook, M. (2016) Prehistoric settlement patterns in the north-east of Scotland; excavations at Grantown Road, Forres 2002–2013, Edinburgh, SAIR 61.
- Cook, M. (2010) 'New light on oblong forts: Excavations at Dunnideer, Aberdeenshire', *PSAS*, 140: 79–91.
- Cook, M. (2011) 'New evidence for the activities of Pictish potentates in Aberdeenshire: The hillforts of Strathdon', PSAS, 141: 207–29.
- Cook, M. (2013) 'Open or enclosed: settlement patterns and hillfort construction in Strathdon, Aberdeenshire, 1800BC AD1000', PPS, 79: 327–52.
- Cook, M. J. and Dunbar, L. (2008) Rituals, Roundhouses and Romans, Excavations at Kintore, Aberdeenshire 2000–2006, Volume 1, Forest Road, Edinburgh, Scottish Trust for Archaeological Research.
- Cook, M. J. and Dunbar, L. (forthcoming) Kintore vol 2, STAR monograph.
- Cool, H.E.M. (1982) 'The artefact record: Some possibilities', in Harding, D. W. ed. 1982: 92–100.
- Cool, H. and Mason, D. (2008) Roman Piercebridge: Excavations by D. W. Harding and Peter Scott, 1969– 1981, Durham, The Architectural Society of Durham and Northumberland, Research Report 7.
- Coombs, D. G. (1982) 'Excavations at the hillfort of Castercliff, Nelson, Lancashire 1970–71', TLCAS, 81: 111–30.
- Coombs, D. G. and Thompson, F. H. (1979) 'Excavation of the Hill Fort of Mam Tor, Derbyshire, 1965–69', DyAI, 99: 7–51.
- Cootes, K. and Emery, M. (2014) The Excavation of Ring-Ditches Two and Three at Poulton, Cheshire, 2010–2013. An Interim Report, ADS online.
- Corder, P. and Hawkes, C.F.C. (1940) 'A panel of Late Celtic Ornament from Elmswell, East Yorkshire', AJ, 20: 338–57.
- Cowell, R. (2003) Prehistoric and Romano-British Excavations at Duttons Farm, Lathom, West Lancashire, Liverpool, National Museums Field Archaeology Unit Interim Report.
- Cowell, R. (2005) 'Late prehistoric lowland settlement in North West England', in Nevell, M. and Redhead, N. eds 2005: 63–76.
- Cowie, T. G. (1978) 'Excavations at the Catstane, Midlothian, 1977', PSAS, 109, 1977-8: 166-201.
- Cowley, D. (1996) 'Square barrows in Dumfries and Galloway', TDGNHAS, 71: 107-13.
- Cowley, D. (2000) 'Site morphology and regional variation in the later prehistoric settlement of southwest Scotland', in Harding, J. and Johnson, R. eds 2000: 167–76.
- Cowley, D. (2003) 'Changing places building life spans and settlement continuity in northern Scotland', in Downes, J. and Ritchie, A. eds 2003: 75–81.
- Cowley, D. and Brophy, K. (2001) 'The impact of aerial photography across the lowlands of South-West Scotland', *TDGNHAS*, 75: 47–72.
- Craig, D. (1997) 'The provenance of the Early Christian inscriptions of Galloway', in Hill, P. ed. 1997: 614–19.
- Cramp, R. J. (1960) 'The Anglian sculptured crosses in Dumfriesshire', TDGNHAS, 38, 1959–60: 9–20.
- Crawford, B. ed. (1994) Scotland in Dark Age Europe, St Andrews, St John's House Papers 5.
- Crawford, B. ed. (1996) Scotland in Dark Age Britain, St Andrews, St John's House Papers 6.
- Crawford, I. (n.d.) The West Highlands and Islands: A View of 50 Centuries: The Udal (N. Uist) Evidence, Cambridge, Great Auk Press.
- Crawford, I. and Selkirk, A. (1996) 'The Udal', CA, 147: 84-94.
- Creighton, J. (2001) 'The Iron Age-Roman transition', in James, S. and Millett, M. eds 2001: 4-11.
- Creighton, J. (2006) Britannia: The Creation of a Roman Province, London, Routledge.

Cressey, M. and Anderson, S. (2011) A Later Prehistoric Settlement and Metalworking Site at Seafield West, near Inverness, Highland, Edinburgh, Society of Antiquaries of Scotland.

Crone, A. (1993) 'Crannogs and chronologies', PSAS, 123: 245-54.

Crone, A. (2000) The History of a Scottish Lowland Crannog: Excavations at Buiston, Ayrshire 1989–90, Edinburgh, STAR Mon. 4.

Crone, A. and Campbell, E. (2005) A Crannog of the 1st Millennium AD: Excavations by Jack Scott at Loch Glashan, Argyll, 1960, Edinburgh, Society of Antiquaries of Scotland.

Cunliffe, B. (1991) Iron Age Communities in Britain, 3rd ed. London, Routledge.

Cunliffe, B. (2001) The Extraordinary Voyage of Pytheas the Greek, London, Allen Lane Penguin.

Cunliffe, B. (2005) Iron Age Communities in Britain, 4th ed. London, Routledge.

Cunliffe, B. and Koch, J. (2010) Celtic from the West: Alternative Perspectives from Archaeology, Genetics, Language, and Literature, Oxford, Oxbow Books.

Cunliffe, B. and Rowley, T. eds (1978) Lowland Iron Age Communities in Europe, Oxford, BAR, International Series (suppl) 48.

Curle, A. O. (1905) 'Descriptions of the Fortifications on Ruberslaw, Roxburghshire, and Notices of Roman Remains found there', PSAS, 39, 1904-5: 219-32.

Curle, A. O. (1910) 'Notice of some excavation on the fort occupying the summit of Bonchester Hill, parish of Hobkirk, Roxburghshire', PSAS, 44, 1909–10: 225–36.

Curle, A. O. (1915) 'Excavations on Traprain Law', PSAS, 49, 1914–15: 139–202.

Curle, A. O. (1920) 'Excavations on Traprain Law', PSAS, 54, 1919–29: 54–123.

Curle, A. O. (1921) 'The Broch of Dun Troddan, Gleann Beag, Glenelg, Inverness-shire', PSAS, 55: 83-94.

Curle, A. O. (1923) The Traprain Treasure, Glasgow, Maclehose, Jackson and Co.

Curle, A. O. (1936) 'Account of the excavation of an Iron Age smeltery and of an associated dwelling and Tumuli at Wiltrow in the parish of Dunrossness, Shetland', PSAS, 70, 1935–36: 153–69.

Curle, A. O. (1941) 'An account of the partial excavation of the "wag" or galleried building at Forse, in the parish of Latheron, Caithness', PSAS, 80: 11-25.

Curle, A. O. (1946) 'The excavation of the "wag" or prehistoric cattlefold at Forse, Caithness, and the relation of "wags" to Brochs, and implications arising therefrom', PSAS, 80, 1945-6: 11-25.

Curle, A. O. (1948) 'The "wag" of Forse, Caithness. Report of further excavation made in 1947 and 1948', PSAS, 82, 1947-8: 275-85.

Curle, A. O. and Cree, J. E. (1916) 'Excavations on Traprain Law', PSAS, 50, 1915-16: 64-144.

Dalland, M. (1991) 'Burials at Winton House, Cockenzie and Port Seton, East Lothian', PSAS, 121: 175-80.

Dalland, M. (1992) 'Long cist burials at Four Winds, Longniddry, East Lothian', PSAS, 122: 197–206.

Daniels, R. (1988) 'The Anglo-Saxon monastery at Church Close, Hartlepool, Cleveland', Arch J. 145: 158-210.

de Hoz, J., Luján, E. and Sims-Williams, P. eds (2005) New Approaches to Celtic Place-names in Ptolemy's Geography, Madrid, Ediciones Clásicas.

Dent, J. S. (1982) 'Cemeteries and settlement patterns of the Iron Age on the Yorkshire Wolds', PPS, 48: 437-57.

Dent, J. S. (1985) 'Three cart burials from Wetwang, Yorkshire', Antiquity, 59: 85-92.

Dent, J. S. (1989) 'Settlements at North Cave and Brantingham', in Halkon, P. ed. 1989: 26-32.

Dent, J. S. (2010) The Iron Age in East Yorkshire, Oxford, BAR, British Series 508.

Didsbury, P. and Vince, A. (2011) 'First millennium BC pottery', in Fenton-Thomas, C. ed. 2011: 184–97.

Dixon, T. N. (1982) 'A survey of crannogs in Loch Tay', PSAS, 112: 17-38.

Dixon, T. N. (2007) 'Crannog structure and dating in Perthshire with particular reference to Loch Tay', in Barber, J. et al. eds 2007: 253-66.

Dobson, J. (1907) 'Urswick stone walls', TCWAS, 7: 72–94.

Dockrill, S. J., Bond, J. M., Nicholson, R. and Smith, A. (2007) Investigations in Sanday, Orkney. Volume 2: Toft's Ness, Sanday. An Island Landscape Through 3000 Years of Prehistory, Kirkwall, The Orcadian/ Historic Scotland.

- Dockrill, S. J., Bond, J. M., Turner, V. E., Brown, L. D., Bashford, D. J., Cussans, J. E. and Nicholson, R. A. (2010) Excavations at Old Scatness, Shetland, Volume 1: The Pictish Village and Viking Settlement, Lerwick, Shetland Heritage Publications.
- Dockrill, S. J., Bond, J. M., Turner, V. E., Brown, L. D., Bashford, D. J., Cussans, J. E. and Nicholson, R. A. (2015) Excavations at Old Scatness, Shetland, Volume 2: The Broch and Middle Iron Age Village, Lerwick, Shetland Heritage Publications.
- Dockrill, S., Bond, J. and Maher, R. (2014) 'The knowe of Swandro', DES, 15: 149.
- Dockrill, S., Bond, J., Maher, R. and Friel, R. (2015) 'The Knowe of Swandro', DES, 16: 131-2.
- Downes, J. and Lamb, R. (2000) Prehistoric Houses at Sumburgh in Shetland, Excavations at Sumburgh Airport 1967–74, Oxford, Oxbow.
- Downes, J. and Ritchie, A. eds (2003) Sea Change: Orkney and Northern Europe in the Later Iron Age AD 300–800, Balgavies, Pinkfoot Press.
- Driscoll, S. (1988a) 'Power and authority in early historic Scotland: Pictish symbol stones and other documents', in Gledhill, J., Bender, B. and Larsen, M. T. eds 1988: 215–36.
- Driscoll, S. (1988b) 'The relationship between history and archaeology: Artefacts, documents and power', in Driscoll, S. and Nieke, M. eds 1988: 162–88.
- Driscoll, S. (1991) 'The archaeology of state formation in Scotland', in Hanson, W. and Slater, E. eds 1991: 81–111.
- Driscoll, S. (1997) 'A Pictish settlement in north-east Fife: The Scottish Field School of Archaeology excavations at Easter Kinnear', *TAFAI*, 3: 74–118.
- Driscoll, S., Geddes, J. and Hall, M. eds (2011) Pictish Progress, New Studies on Northern Britain in the Early Middle Ages, Leiden, Brill.
- Driscoll, S. and Nieke, M. eds (1988) *Power and Politics in Early Medieval Britain and Ireland*, Edinburgh, Edinburgh University Press.
- Drury, P. J. (1978) Excavations at Little Waltham 1970–71, Chelmsford, CBA Research Report 26, Chelmsford Excavation Committee Report 1.
- Dumayne-Peaty, L. (1998) 'Human impact on the environment during Iron Age and Romano-British times: Palynological evidence from three sites near the Antonine Wall', *IAS*, 25: 203–14.
- Dunbar, L. and Maldonado, A. (2012) 'A long cist cemetery near Auchterforfar farm, Forfar, Angus Christian or pre-Christian?', *TAFAI*, 18: 63–80.
- Duncan, A. (1992) Scotland: The Making of the Kingdom, Edinburgh, Mercat Press.
- Dunwell, A. (1999) 'Edin's Hall fort, broch and settlement, Berwickshire (Scottish Borders): Recent fieldwork and new perceptions', *PSAS*, 129: 303–58.
- Dunwell, A. (2007) Cist Burials and an Iron Age Settlement at Dryburn Bridge, Innerwick, East Lothian, Edinburgh, Society of Antiquaries of Scotland, Edinburgh, Society of Antiquaries of Scotland.
- Dunwell, A. and Ralston, I. (2008) Archaeology and Early History of Angus, Stroud, Tempus.
- Dunwell, A. and Strachan, R. (2007) Excavations at Brown Caterthun and White Caterthun Hillforts, Angus, 1995–1997, Tayside and Fife Archaeological Committee Monographs 5.
- Earwood, C. (1990) 'The wooden artefacts from Loch Glashan crannog, Mid Argyll', PSAS, 120: 79–94.Edwards, K. and Ralston, I. (1978) 'New dating and environmental evidence from Burghead Fort, Moray', PSAS, 109: 202–10.
- Edwards, K. and Ralston, I.B.M. eds (1997) Scotland: Environment and Archaeology, 8000 BC-AD 1000, Chichester, Wiley.
- Ellis, C. (2007) 'Total excavation of a later prehistoric enclosure at Braehead, Glasgow', PSAS, 137: 179–264.
- Ellis, P. (1993) Beeston Castle, Cheshire: Excavations by Laurence Keen and Peter Hough, 1968–85, London, English Heritage.
- Erdrich., M., Giannotta, K. M. and Hanson, W. S. (2000) 'Traprain law: Native and Roman on the northern frontier', *PSAS*, 130: 441–56.
- Evans, C., Appleby, G. and Lucy, S. (2016) Lives in Land. Mucking Excavations by Margaret and Tom Jones, 1965–1978: Prehistory, Context and Summary, Oxford, Oxbow Books.
- Evans, D. (2006) 'Celtic art revealed. The South Cave weapons hoard', CA, 203: 572–7.

Ewart, E. and Curle, A. O. (1908) 'Notice of the examination of a cairn and interments of the Early Iron Age at the Black Rocks, Gullane, Haddingtonshire, on 14th March 1908', PSAS, 42: 332-41.

Fabech, C. and Ringstved, J. eds (1998) Settlement and Landscape, Moesgärd, Äarhus University Press.

Fairburn, N. (2003) 'Brook House Farm, Bruen Stapleford: Excavation of a first millennium BC settlement', J. Chester Arch. Soc., 77, 2002-3: 9-57.

Fairhurst, H. (1939) 'The Galleried Dun at Kildonan Bay, Kintyre', PSAS, 73: 185-228.

Fairhurst, H. (1971) 'The Wheelhouse site at A' Cheardach Bheag on Drimore Machair, South Uist', GAI, 2:72–106.

Fairhurst, H. (1984) Excavations at Crosskirk Broch, Caithness, Edinburgh, Soc. Ant. Scot. Mon., 3.

Fairhurst, H. and Taylor, D. B. (1971) 'A hut-circle settlement at Kilphedir, Sutherland', PSAS, 103, 1970-71:65-99.

Fairless, K. J. and Coggins, D. (1980) 'Excavations at the early settlement site of Forcegarth Pasture North 1972-74', TAASDN, 5: 31-8.

Fairless, K. J. and Coggins, D. (1986) 'Excavations of the early settlement site of Forcegarth Pasture South 1974-75', DAI, 2: 25-40.

Fanning, T. (1983) 'Some aspects of the bronze ringed pin in Scotland', in O'Connor, A. and Clarke, D. V. eds 1983: 324-42.

Feachem, R. W. (1955) 'Fortifications', in Wainwright, F. T. ed. 1955: 66-86.

Feachem, R. W. (1960) 'The Palisaded settlements at Harehope, Peebleshire. Excavations, 1960', PSAS, 93, 1959-60: 174-91.

Feachem, R. W. (1961) 'Unenclosed platform settlements', PSAS, 94, 1960-61: 79-85.

Feachem, R. W. (1963) A Guide to Prehistoric Scotland, London, Batsford.

Feachem, R. W. (1966) 'The hill-forts of Northern Britain', in Rivet, A.L.F. ed. 1966: 59-88.

Fenton, J. (2015) Prehistoric Roundhouses of Wester Ross and parts of Skye, Gairloch, privately published.

Fenton-Thomas, C. (2011) Where Sky and Yorkshire and Water Meet: The Story of the Melton Landscape from Prehistory to the Present, York, On-Site Archaeology.

Field, N. (1965) 'Romano-British settlement at Studland, Dorset, by N. H. Field, with a note on the term "cottage" by Professor C.F.C. Hawkes', PDNHAS, 87: 142-207.

Fitts, R. L., Haselgrove, C. C., Lowther, P. C. and Willis, S. H. (1999) 'Melsonby revisited: Survey and excavation 1992-95 at the site of discovery of the "Stanwick", North Yorkshire, Hoard of 1843', DAJ, 14-15: 1-52.

Fitzpatrick, A. (1994) 'Outside in: The structure of an Early Iron Age house at Dunston Park, Thatcham, Berkshire', in Fitzpatrick, A. and Morris, E. eds 1994: 68-72.

Fitzpatrick, A. and Morris, E. (1994) The Iron Age in Wessex: Recent Work, Salisbury, Trust for Wessex Archaeology.

Fojut, N. (1982) 'Towards a geography of Shetland brochs', GAJ, 9: 38-59.

Fojut, N. (1998) 'How did we get here? Shetland studies to 1995', in Nicholson, R. A. et al. eds 1998:

Foster, J. (2010) 'Steatite Spindle Whorl', in Philpott, R. and Adams, M. eds Irby, Wirral: Excavations on a Late Prehistoric, Romano-British and Medieval Site 1987–96, Liverpool, Liverpool National Museums: 104–6.

Foster, S. (1989) 'Analysis of spatial patterns in buildings (access analysis) as an insight into social structure: Examples from the Scottish Atlantic Iron Age', Antiquity, 63: 40–50.

Foster, S. (1990) 'Pins, combs and chronology of Later Atlantic Iron Age settlement', in Armit, I. ed. 1990: 143-74.

Foster, S. (1996) Picts, Gaels and Scots: Early Historic Scotland, London, Batsford/Historic Scotland.

Foster, S. and Smout, T. C. eds (1994) The History of Soils and Field Systems, Aberdeen, Scottish Cultural Press.

Fowler, C. (2004) The Archaeology of Personhood: An Anthropological Approach, London, Routledge.

Fowler, P. J. ed. (1975) Recent Work in Rural Archaeology, Bradford-on-Avon, Moonraker.

Fox, C. (1932/38) The Personality of Britain, Cardiff, National Museum of Wales.

Fox, C. and Hyde, H. (1939) 'A second cauldron and an iron sword from the Llyn Fawr Hoard, Rhigos, Glamorganshire', AJ, 19: 369-404.

- Fraser, J. (2011) 'From Ancient Scythia to *The Problem of the Picts*: Thoughts on the Quest for Pictish Origins', in Driscoll, S., Geddes, J. and Hall, M. eds 2011: 15–43.
- Frere, S. S. ed. (1961) Problems of the Iron Age in Southern Britain, London, CBA Occ. Ppr 11.
- Frere, S. S. (1967/98) Britannia: A History of Roman Britain, London, Routledge.
- Friell, J. and Watson, W. eds (1984) Pictish Studies: Settlement, Burial and Art in Dark Age North Britain, Oxford, BAR, British Series 125.
- Frodsham, P. (1999) 'Forgetting *Gefrin*: Elements of the past in the past at Yeavering', in Frodsham, P., Topping, P. and Cowley, D. eds 1999: 191–207.
- Frodsham, P., Topping, P. and Cowley, D. eds (1999) We Were Always Chasing Time'. Papers Presented to Keith Blood, Northern Archaeology, 17/18, Newcastle upon Tyne, Northern Archaeology Group.
- Fulford, M. (1989) 'Roman and Barbarian: The economy of Roman frontier systems', in Barrett, J. et al. eds 1989: 81–95.
- Gannon, A. R. (1999) 'Challenging the past: The Resurvey of Braidwood hillfort', in Frodsham, P., Topping, P. and Cowley, D. eds 1999: 105–111.
- Garland, A. (1995) 'Worsley man, England', in Turner, R. and Scaife, R. eds 1995: 104-7.
- Garner, D. (2016) Hillforts of the Cheshire Ridge, Oxford, Archaeopress.
- Gates, T. (1983) 'Unenclosed settlements in Northumberland', in Chapman, J. and Mytum, H. eds 1983: 103–48.
- Gates, T. (2012) 'Monuments from the Air', in Passmore, D. and Waddington, C. eds 2012: 58-110.
- Gates, T. and O'Brien, C. (1988) 'Cropmarks at Milfield and New Bewick and the recognition of Grubenhaüser in Northumberland', AA, 5th ser., 16: 1–9.
- Gelling, P. (1958) 'Close ny chollagh: An Iron Age fort at Scarlett, Isle of Man', PPS, 24: 85-100.
- Gelling, P. (1972) 'The hillfort on South Barrule and its position in the Manx Iron Age', in Lynch, F. and Burgess, C. B. eds 1972: 285–92.
- Gelling, P. (1977) 'Excavations at Pilsdon Pen, Dorset, 1964-71', PPS, 43: 263-86.
- Gentles, D. (1993) 'Vitrified Forts', CA, 133: 18-20.
- Gerritsen, F. (1998) 'The cultural biography of Iron Age houses', in Fabech, C. and Ringtved, J. eds 1998: 139–48.
- Giles, M. (2007a) 'Refiguring rights: Later Bronze Age and early Iron Age landscapes of east Yorkshire', in Haselgrove, C. and Pope, R. eds 2007: 103–18.
- Giles, M. (2007b) 'Good fences make good neighbours? Exploring the ladder enclosures of late Iron Age east Yorkshire', in Haselgrove, C. and Moore, T. eds 2007: 235–49.
- Giles, M. (2012) A Forged Glamour: Landscape, Identity and Material Culture in the Iron Age, Oxford, Windgather Press.
- Gillam, J. (1958) 'Roman and native, A.D. 122-197', in Richmond, I. A. ed. 1958: 60-90.
- Gillies, W. and Harding, D. W. eds (2005) *Celtic Connections*, Vol. 2, Proceedings of X International Congress of Celtic Studies, Edinburgh 1995, Edinburgh, Edinburgh University Department of Archaeology Mon. Ser. 2.
- Gilmour, S. (2000) 'First millennia settlement development in the Atlantic West', in Henderson, Jon C. ed. 2000: 155–70.
- Gilmour, S. (2002) 'Mid-first millennium BC settlement in the Atlantic West?', in Smith, B. B. et al. eds 2002: 55–66.
- Gilmour, S. (2005) 'Complex Atlantic roundhouses chronology and complexity', in Turner, V., Nicholson, R., Dockrill, S. and Bond, J. eds 2005: 78–96.
- Gilmour, S. and Cook, M. (1998) 'Excavations at Dun Vulan: A reinterpretation of the reappraised Iron Age', *Antiquity*, 72: 327–37.
- Gledhill, J., Bender, B. and Larsen, M. T. eds (1988) State and Society: The Emergence and Development of Social Hierarchy and Political Centralization, London/Boston, Unwin Hyman.
- Gondek, M. and Noble, G. (2015) 'The land before symbol stones', PSAS, 145: 125-51.
- Graham-Campbell, J. (1991) 'Norrie's Law, Fife: On the nature and dating of the silver hoard', *PSAS*, 121: 241–59.
- Gregory, R. (2001) 'Excavation at Hayknowes Farm, Annan, Dumfriesshire', TDGNHAS, 75: 29-46.

Greig, J. C. (1970) 'Excavations at Castle Point, Troup, Banffshire', Aberdeen Univ. Rev., 43: 274-83.

Greig, J. C. (1971) 'Excavations at Cullykhan, Castle Point, Troup, Banffshire', SAF, 3: 15-21.

Greig, J. C. (1972) 'Cullykhan', CA, 32: 227-31.

Greig, C., Greig, M. and Ashmore, P. J. (2000) 'Excavation of a cairn cemetery at Lundin Links, Fife, in 1965–6', PSAS, 130: 585–636.

Grimes, W. F. ed. (1951) Aspects of Archaeology in Britain and Beyond: Essays Presented to O.G.S. Crawford, London: H. W. Edwards.

Guido, M. (1974) 'A Scottish crannog re-dated', Antiquity, 48: 54-5.

Guido, M. (1978) The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland, London, Society of Antiquaries/Thames and Hudson.

Guilbert, G. ed. (1981) Hill-fort Studies: Essays for A.H.A. Hogg, Leicester, Leicester University Press.

Guilbert, G. (1996) 'The oldest artefact of lead in the Peak: New evidence from Mam Tor', *Bull. Peak District Mines Historical Soc.*, 13, 1: 12–18.

Gwilt, A. and Haselgrove, C. eds (1997) Reconstructing Iron Age Societies: New Approaches to the British Iron Age, Oxford, Oxbow Monographs 71.

Hachmann, R., Kossack, G. and Kuhn, H. (1962) Volker zwischen Germanen und Kelten, Neuminster, Wachholtz.

Haggarty, A. and Haggarty, G. (1983) 'Excavations at Rispain Camp, Whithorn, 1978–81', TDGNHAS, 58: 21–51.

Hale, A. (1999) Marine Crannogs, Unpublished PhD Thesis, University of Edinburgh, Department of Archaeology.

Hale, A. (2000) 'Marine crannogs: Previous work and recent surveys', PSAS, 130: 537-58.

Hale, A. and Sands, R. (2005) Controversy on the Clyde, Archaeologists, Fakes and Forgers: The Excavation of Dumbuck Crannog, Edinburgh, RCAHMS.

Halkon, P. (1989) New Light on the Parisi, Hull, East Riding Archaeological Society.

Halkon, P. (2011) 'Iron, landscape and power in Iron Age East Yorkshire', Arch J, 168: 133-65.

Halkon, P. (2013) The Parisi: Britons and Romans in Eastern Yorkshire, Stroud, The History Press.

Halkon, P., Millett, M. and Woodhouse, H. (2015) Hayton, East Yorkshire: Studies of the Iron Age and Roman Landscapes, Leeds, Yorkshire Archaeological Reports.

Halliday, S. (1982) 'Later prehistoric farming in south-east Scotland', in Harding, D. W. ed. 1982: 57-91.

Halliday, S. (1983) Cord Rig Survey Project, Privately circulated typescript.

Halliday, S. (1985) 'Unenclosed upland settlement in the east and south-east of Scotland', in Spratt, D. et al. eds 1985: 231–51.

Halliday, S. (1986) 'Cord Rig and early cultivation in the borders', PSAS, 116: 584-5.

Halliday, S. (1993) 'Marginal agriculture in Scotland', in Smout, T. C. ed. 1993: 64–78.

Halliday, S. (1995) 'The Borders in Prehistory', in Omand, D. ed. 1995: 21-37.

Halliday, S. (1999) 'Hut circle settlements in the Scottish Landscape', in Frodsham, P., Topping, P. and Cowley, D. eds 1999: 49–66.

Halliday, S. (2002) 'Settlement, territory and Landscape; the later prehistoric landscape in the light of the survey of Eastern Dumfriesshire', *TDNHAS*, 76: 91–106.

Halliday, S. (2007) 'The later prehistoric Landscape', in RCAHMS ed. 2007: 79-111.

Halliday, S., Hill, P., and Stevenson, J. B. (1981) 'Early agriculture in Scotland', in Mercer, R. ed. 1981a: 55–65.

Hamilton, J.R.C. (1956) Excavations at Jarlshof, Shetland, Edinburgh, HMSO.

Hamilton, J.R.C. (1968) Excavations at Clickhimin, Shetland, Edinburgh, HMSO.

Hanson, W. S. (1989) 'The nature and function of Roman Frontiers', in Barrett, J. et al. eds 1989: 55-61.

Hanson, W. S. ed. (2009) The Army and Frontiers of Rome: Papers Presented to David J. Breeze, Portsmouth, RI, JRA Supplement Series, 74.

Hanson, W. S. and Campbell, D. B. (1986) 'The Brigantes: From clientage to conquest', Britannia, 17:73–89.

- Hanson, W. S. and Slater, E. A. eds (1991) *Scottish Archaeology: New Perceptions*, Aberdeen, Aberdeen U.P. Harbison, P. (1971) 'Wooden and stone *chevaux-de-frise* in central and western Europe', *PPS*, 37: 195–225.
- Harding, A. F. (1981) 'Excavations in the prehistoric ritual complex near Milfield, Northumberland', PPS, 47: 87–136.
- Harding, D. W. ed. (1976) Hillforts, Later Prehistoric Earthworks in Britain and Ireland, London, Academic Press.
- Harding, D. W. (1979) 'Air survey in the Tyne-Tees region, 1969-79', in Higham, N. ed. 1979: 21-30.
- Harding, D. W. ed. (1982) Later Prehistoric Settlement in South-East Scotland, Edinburgh, University of Edinburgh, Department of Archaeology Occasional Paper No 8.
- Harding, D. W. (1984a) 'The function and classification of brochs and duns', in Miket, R. and Burgess, C. B. eds 1984: 206–20.
- Harding, D. W. (1984b) *Holme House, Piercebridge: Excavations, 1969–70. A Summary Report*, Edinburgh, Univ. Edinburgh Dept. Arch. Project Paper No. 2.
- Harding, D. W. (1997) 'Forts, duns, brochs and crannogs: Iron Age settlements in Argyll', in Ritchie, G. ed. 1997: 118–40.
- Harding, D. W. (2000a) 'Crannogs and island duns', OJA, 19: 301-17.
- Harding, D. W. (2000b) *The Hebridean Iron Age: Twenty Years' Research*, Edinburgh, Univ. Edinburgh Dept. Arch. Occ. Ppr. 20.
- Harding, D. W. (2001) 'Later prehistory in South-East Scotland: A critical review', OJA, 20: 355–76.
- Harding, D. W. (2002) 'Torrs and the early La Tène Ornamental Style in Britain and Ireland', in Smith, B. B. et al. eds 2002: 191–204.
- Harding, D. W. (2004) 'Dunagoil, Bute, re-instated', TBNHS, 26: 1-19.
- Harding, D. W. (2005a) 'Atlantic Scotland and the Western Seaways', in Gillies, W. and Harding, D. W. eds 2005: 166–80.
- Harding, D. W. (2005b) 'The Atlantic Scottish Iron Age: External relations reviewed', in Turner, V., Nicholson, R., Dockrill, S. and Bond, J. eds 2005: 32–51.
- Harding, D. W. (2007a) The Archaeology of Celtic Art, London, Routledge.
- Harding, D. W. (2007b) 'Crannogs and island duns: An aerial perspective' in Barber, J., et al. eds 2007: 267–74.
- Harding, D. W. (2009) The Iron Age Round-House: Later Prehistoric Building in Britain and Beyond, Oxford, OUP.
- Harding, D. W. (2012) Iron Age Hillforts in Britain and Beyond, Oxford, OUP.
- Harding, D. W. (2015) Death and Burial in Iron Age Britain, Oxford, OUP.
- Harding, D. W., Blake, I. M. and Reynolds, P. J. (1993) An Iron Age Settlement in Dorset: Excavation and Reconstruction, Edinburgh, Univ. Edin. Dept. Arch. Mon. Ser. 1.
- Harding, D. W. and Dixon, T. N. (2000) Dun Bharabhat, Cnip: An Iron Age Settlement in West Lewis, Vol. 1 Structures and Material Culture, Edinburgh, Calanais Research Series 2, Edinburgh University Department of Archaeology.
- Harding, D. W. and Gillies, W. (2005) 'Introduction: Archaeology and Celticity', in Gillies, W. and Harding, D. W. eds 2005: 1–14.
- Harding, D. W. and Gilmour, S.M.D. (2000) The Iron Age Settlement at Beirgh, Riof, Isle of Lewis: Excavations, 1985–95, Vol. 1, The Structures and Stratigraphy, Edinburgh, Calanais Research Series 1, Edinburgh University Department of Archaeology.
- Harding, J. and Johnston, R. eds (2000) Northern Pasts: Interpretations of the Later Prehistory of Northern England and Southern Scotland, Oxford, BAR, British Series 302.
- Harris, J. (1984) 'A preliminary survey of hut circles and field systems in SE Perthshire', *PSAS*, 114: 199–216.
- Hartley, B. and Fitts, L. (1988) The Brigantes, Stroud, Sutton.
- Haselgrove, C. (1982a) 'Indigenous settlement patterns in the Tyne-Tees Lowlands', in Clack, P. and Haselgrove, S. eds 1982: 57–104.
- Haselgrove, C. (1982b) 'Wealth, prestige and power: The dynamics of Late Iron Age political centralisation in south-eastern England', in Renfrew, C. and Shennan, S. eds 1982: 79–88.

Haselgrove, C. (1984) 'The later Pre-Roman Iron Age between the Humber and the Tyne', in Haselgrove, C., Jones, R. J.F. and Evans, D. M. eds 1984: 9-26.

Haselgrove, C. (1996) 'The Iron Age', in Newman, R. ed. 1996: 61-74.

Haselgrove, C. (1999) 'Iron Age societies in central Britain: Retrospect and prospect', in Bevan, B. ed. 1999a: 253-78.

Haselgrove, C. (2009) The Traprain Law Environs Project: Fieldwork and Excavation 2000–20004, Edinburgh, Society of Antiquaries of Scotland.

Haselgrove, C. (2016) Cartimandua's Capital: A Late Iron Age Royal Site at Stanwick, North Yorkshire, London, CBA Research Report 175.

Haselgrove, C. and Allon, V. (1982) 'An Iron Age settlement at West House, Coxhoe, County Durham', AA, 5th ser. 10: 25–51.

Haselgrove, C., Lowther, P. C. and Turnbull, P. (1990) 'Stanwick, North Yorkshire, Part 3: Excavations on earthwork sites 1981-86', Arch J, 147: 37-90.

Haselgrove, C. and McCullagh, R. (2000) An Iron Age Coastal Community in East Lothian: The Excavation of Two Later Prehistoric Enclosure Complexes at Fishers Road, Port Seton, 1994-5, Edinburgh, STAR Mon. 6.

Haselgrove, C. and Moore, T. eds (2007) The Later Iron Age in Britain and Beyond, Oxford, Oxbow Books.

Haselgrove, C. and Pope, R. eds (2007) The Earlier Iron Age in Britain and the Near Continent, Oxford, Oxbow Books.

Haselgrove, C., Turnbull, P. and Fitts, R. L. (1990) 'Stanwick, North Yorkshire, Part 1: Recent research and previous archaeological investigations', Arch J, 147: 1-15.

Hatherley, C. and Noble, G. (2014) 'Easter and Wester Rarichie', DES, 14: 114-5.

Hawkes, C.F.C. (1948) Archaeology and the History of Europe: An Inaugural Lecture Delivered before the University of Oxford on 28 Nov. 1947, Oxford, Clarendon Press.

Hawkes, C.F.C. (1954) 'Archaeological theory and method: Some suggestions from the Old World', Am. Anthropol., 56: 155-68.

Hawkes, C.F.C. (1959) 'The ABC of the British Iron Age', Antiquity, 33: 170-82.

Hawkes, C.F.C. (1961) 'The ABC of the British Iron Age', in Frere, S. S. ed. 1961: 1-16.

Hawkes, C.F.C. (1977) Pytheas: Europe and the Greek Explorers, Oxford, Blackwell.

Hayes, R. H. (1983) Levisham Moor Archaeological Investigations, 1957-78, Helmsley, North York Moors National Park Committee and Scarborough Archaeological and Historical Society.

Hayes, R. H., Hemingway, J. E. and Spratt, D. A. (1980) 'The distribution and lithology of beehive querns in Northeast Yorkshire', JAS, 7: 297-324.

Heald, A. (2001) 'Knobbed spearbutts of the British and Irish Iron Age: New examples and new thoughts', Antiquity, 75: 689-96.

Heald, A. and Jackson, A. (2001) 'Towards a new understanding of Iron Age Caithness', PSAS, 131:129–48. Hedges, J. W. (1987) Bu, Gurness and the Brochs of Orkney, Oxford, BAR, British Series 163-5.

Hencken, H. (1936) 'Ballinderry crannog no 1', PRIA, 43C: 103-239.

Hencken, H. (1938) Cahercommaun: A Stone Fort in Co. Clare, Dublin, Royal Society of Antiquaries of Ireland.

Hencken, H. (1942) 'Ballinderry crannog no 2', PRIA, 47C: 1-76.

Hencken, H. (1950) 'Lagore crannog: An Irish royal residence of the seventh to tenth century AD', PRIA, 53C: 1-248.

Henderson, I. (1967) The Picts, London, Thames and Hudson.

Henderson, I. (1979) 'The Silver Chain from Whitecleugh, Shieldholm, Crawfordjohn, Lanarkshire', TDGNHAS, 54: 20–8.

Henderson, J. (1991) 'Industrial specialisation in late Iron Age Britain and Europe', Arch J. 148: 104–48. Henderson, J. (1998a) 'Islets through time: The definition, dating and distribution of Scottish crannogs', OIA, 17: 227-44.

Henderson, J. (1998b) 'A survey of crannogs in the Lake of Menteith, Stirlingshire', PSAS, 128: 273–92. Henderson, J. ed. (2000) The Prehistory and Early History of Atlantic Europe, Papers from a Session Held at the European Association of Archaeologists Fourth Annual Meeting in Göteborg 1998, Oxford, BAR, Internat. Ser. 861.

- Henderson, J. (2007a) The Atlantic Iron Age, Settlement and Identity in the First Millennium BC, London and New York, Routledge.
- Henderson, J. (2007b) 'Resisting decay, wind and waves: New research on the lake-dwellings of southwest Scotland', in Barber, J., Clark, C. and Crone, A. eds 2007: 289–302.
- Henderson, J. (2007c) 'Recognizing complexity and realizing the potential of Scottish crannogs', in Barber, J. et al. eds 2007: 231–41.
- Henderson, J. and Cavers, G. (2011) 'An Iron Age crannog in south-west Scotland: Underwater survey and excavation at Loch Arthur', PSAS, 141: 103–24.
- Henderson, J. and Gilmour, S. (2011) 'A 1st millennium AD Atlantic roundhouse in Argyll: Survey and excavation at Loch Glashan', *PSAS*, 141: 75–102.
- Henderson, J. C., Cavers, M. G. and Crone, B. A. (2006) 'The South West Crannog Survey: Recent work on the lake dwellings of Dumfries and Galloway', TDGNHAS, 80: 29–52.
- Henry, D. ed. (1997) The Worm, the Germ and the Thorn: Pictish and Related Studies Presented to Isabel Henderson, Balgavies, Angus, Pinkfoot Press.
- Henshall, A. S. (1956) 'The long cist cemetery at Lasswade, Midlothian', PSAS, 89, 1955-56: 252-83.
- Heslop, D. (1987) The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, London, CBA Res. Rep. 65.
- Higham, N. ed. (1979) The Changing Past: Some Recent Work in the Archaeology of Northern England, Manchester, Univ. Manchester Dept. Extra-Mural Studies.
- Higham, N. (1981) 'Two enclosures at Dobcross Hall, Dalston', TCWAS, 81: 1-6.
- Higham, N. (1982) 'The Roman impact upon rural settlement in Cumbria', in Clack, P. and Haselgrove, S. eds 1982: 105–22.
- Higham, N. (1983) 'A Romano-British farm site and field system at Yanwath Wood near Penrith', TCWAS, 83: 49–58.
- Higham, N. (1986) The Northern Counties to AD 1000, London, Longman.
- Higham, N. (1989) 'Roman and native in England north of the Tees: Acculturation and its limitations', in Barrett, J. et al. eds 1989: 153–74.
- Higham, N. and Jones, G.D.B. (1975) 'Frontier, forts and farmers: Cumbrian Aerial Survey 1974–5', *Arch J*, 132: 16–53.
- Higham, N. and Jones, G.D.B. (1983) 'The excavation of two Romano-British farm sites in North Cumbria', *Britannia*, 14: 45–86.
- Hill, J. (2001) 'Romanisation, gender and class: Recent approaches to identity in Britain and their possible consequences', in James, S. and Millett, M. eds 2001: 12–18.
- Hill, P. (1979) Broxmouth Hillfort Excavations, 1977–78: An Interim Report, University of Edinburgh Department of Archaeology Occasional Paper No. 2.
- Hill, P. (1982a) 'Settlement and Chronology', in Harding, D. W. ed. 1982: 4-43.
- Hill, P. (1982b) 'Broxmouth hill-fort excavations, 1977-78', in Harding, D. W. ed. 1982: 141-88.
- Hill, P. (1983) Survey and Excavations at Hut Knowe North, Hownam, Roxburghshire, June 4th-10th, 1983, Privately circulated typescript.
- Hill, P. (1997) Whithorn and St Ninian: The Excavation of a Monastic Town, 1984–91, Stroud, Whithorn Trust. Hingley, R. (1989) Rural Settlement in Roman Britain, London, Seaby.
- Hingley, R. (1992) 'Society in Scotland from 700 BC to AD 200', PSAS, 122: 7-54.
- Hingley, R. (2014) Review of The Iron Age on the Northumberland Coastal Plain by N. Hodgson, J. McKelvey and W. Muncaster, Prehistoric Society online website Jan. 2014.
- Hingley, R., Moore, H. L., Triscott, J. E. and Wilson, G. (1997) 'The excavation of two later Iron Age fortified homesteads at Aldclune, Blair Atholl, Perth & Kinross', PSAS, 127: 407–66.
- Hodgson, N., McKelvey, J. and Muncaster, W. (2012) *The Iron Age on the Northumberland Coastal Plain*, Newcastle upon Tyne, Tyne and Wear Museums and the Arbeia Society.
- Hodgson, N., Stobbs, G. and van der Veen, M. (2001) 'An Iron Age settlement and remains of earlier prehistoric date beneath South Shields Roman fort', *Arch J*, 158: 62–160.
- Hogg, A.H.A. (1951) 'The Votadini', in Grimes, W. F. ed. 1951: 200-20.
- Hogg, A.H.A. (1965) 'Rheged and Brigantia', Antiquity, 39: 53-5.

Hogg, A.H.A. (1972) 'Hill-forts in the coastal area of Wales, in Thomas, A. C. ed. 1972: 11-23.

Hogg, A.H.A. (1975) Hill-forts of Britain, London, Hart-Davis MacGibbon.

Hope-Taylor, B. (1977) Yeavering: An Anglo-British Centre of Early Northumbria, London, HMSO.

Hope-Taylor, B. (1980) 'Doon Hill', CA, 72: 18–19.

Hunter, F. (1996) 'Recent Roman Iron Age metalwork finds from Fife and Tayside, TAFAI, 2: 113-25.

Hunter, F. (1997) 'Iron Age hoarding in Scotland and northern England', in Gwilt, A. and Haselgrove, C. eds 1997: 108-33.

Hunter, F. (2001a) 'Roman and native in Scotland: New approaches', IRA, 14: 289–309.

Hunter, F. (2001b) 'The carnyx in Iron Age Europe', AJ, 81: 77–108.

Hunter, F. (2002) 'Birnie: Buying peace on the Northern Frontier', CA, 181: 12–16.

Hunter, F. (2005) 'Traprain law', DES, 6: 56.

Hunter, F. (2006a) 'Traprain law', DES, 7: 61-2.

Hunter, F. (2006b) 'New light on Iron Age massive armlets', PSAS, 136: 135-60.

Hunter, F. (2007) Beyond the Edge of the Empire - Caledonians, Picts and Romans, Rosemarkie, Groam House Museum.

Hunter, F. (2008) Excavations at Birnie, Moray, 2007, Edinburgh, National Museums of Scotland.

Hunter, F. (2009a) Excavations at Birnie, Moray, 2008, Edinburgh, National Museums of Scotland.

Hunter, F. (2009b) 'Traprain Law and the Roman world' in Hanson, W. ed. 2009: 225-40.

Hunter, F. (2010) Excavations at Birnie, Moray, 2008, Edinburgh, National Museums of Scotland.

Hunter, F. (2013) 'Hillfort and Hacksilber: Traprain Law in the late Roman Iron Age and early historic period' in Hunter, F. and Painter, K. eds 2013: 3-10.

Hunter, F. and Painter, K. eds (2013) Late Roman Silver: The Traprain Treasure in Context, Edinburgh, Society of Antiquaries of Scotland.

Hunter, F. and Ralston, I. eds (2015) Scotland in Later Prehistoric Europe, Edinburgh, Society of Antiquaries of Scotland.

Hunter, J. (1986) Rescue Excavations on the Brough of Birsay 1974–82, Edinburgh, Soc. Ant. Scot. Mon. Ser. 4.

Hunter, J. (1990) 'Pool, Sanday: A case study for the Late Iron Age and Viking Periods', in Armit, I. ed. 1990: 175-93.

Hunter, J. (1997) A Persona for the Northern Picts, Rosemarkie, Groam House Museum Trust.

Hunter, J. (2002) 'Saints and Sinners: The archaeology of the late Iron Age in the Western Isles', in Smith, B. B. and Banks, I. eds 2002: 129-38.

Ingemark, D. (2014) Glass, Alcohol and Power in Roman Iron Age Scotland, Edinburgh, National Museums of Scotland.

Inman, R., Brown, D. R., Goddard, R. E. and Spratt, D. A. (1985) 'Roxby Iron Age settlement and the Iron Age in north-east Yorkshire', PPS, 51: 181–213.

Isaac, G. (2005) 'Scotland', in de Hoz, J., Luján, E. and Sims-Williams, P. eds 2005: 189-214.

Jackson, D., Harding, D. W. and Myres, J.N.L. (1969) 'The Iron Age and Anglo-Saxon site at Upton, Northants', AJ, 49: 202-21.

Jackson, K. H. (1955) 'The Pictish language', in Wainwright, F. T. ed. 1955: 129-66.

James, S. (1999) The Atlantic Celts: Ancient People or Modern Invention, London, British Museum Press.

James, S. and Millett, M. eds (2001) Britons and Romans: Advancing an Archaeological Agenda, London, CBA Res. Rep. 125.

Jay, M., Haselgrove, C., Hamilton, D., Hill, J. and Dent, J. (2012) 'Chariots and content: New radiocarbon dates from Wetwang and the chronology of Iron Age burials and brooches in east Yorkshire', OJA, 31 (2): 161-89.

Joass, J. M. (1890) 'The brochs of Cinn Trolla, Carn Liath and Craig Carrilo in Sutherland, with notes on other northern brochs', Archaeol. Scotica, 5: 95-130.

Jobey, G. (1959) 'Excavations at a native settlement at Huckhoe, Northumberland', AA, 4th ser., 37:

Jobey, G. (1960) 'Some rectilinear settlements of the Roman period in Northumberland, part 1', AA, 4th ser., 38: 1-38.

- Jobey, G. (1962) 'An Iron Age homestead at West Brandon, Durham', AA, 4th ser., 40: 1–34.
- Jobey, G. (1964) 'Enclosed stone-built settlements in North Northumberland', AA, 4th ser., 42: 41-64.
- Jobey, G. (1965) 'Hillforts and settlements in Northumberland', AA, 4th ser., 43: 21-64.
- Jobey, G. (1966a) 'A field survey in Northumberland', in Rivet, A.L.F. ed. 1966: 89-110.
- Jobey, G. (1966b) 'Homesteads and settlements in the frontier area', in Thomas, A. C. ed. 1966: 1-14.
- Jobey, G. (1968) 'A radiocarbon date for the Palisaded settlement at Huckhoe', AA, 4th ser., 46: 293-5.
- Jobey, G. (1970) 'An Iron Age settlement at Burradon, Northumberland', AA, 4th ser., 48: 51–95.
- Jobey, G. (1971) 'Excavations at Brough Law and Ingram Hill', AA, 4th ser., 49: 71–93.
- Jobey, G. (1973) 'A Romano-British settlement at Tower Knowe, Wellhaugh, Northumberland', AA, 5th ser., 1: 55–79.
- Jobey, G. (1974) 'Excavations at Boonies, Westerkirk and the nature of Romano-British settlement in eastern Dumfriesshire', PSAS, 105, 1972–74: 119–40.
- Jobey, G. (1976) 'Traprain Law: A Summary', in Harding, D. W. ed. 1976: 191–204 and 436–8.
- Jobey, G. (1977) 'Iron Age and later farmsteads at Belling Law, Northumberland', AA, 5th ser., 5: 1–38.
- Jobey, G. (1978a) 'Burnswark Hill', TDGNHAS, 53: 57-105.
- Jobey, G. (1978b) 'Iron Age and Romano-British settlements on Kennel Hall Knowe', AA, 5th ser., 6: 1–28.
- Jobey, G. (1980a) 'Green knowe unenclosed platform settlement and Harehope cairn', PSAS, 110, 1978–80: 72–113.
- Jobey, G. (1980b) 'Unenclosed platforms and settlements of the later second millennium BC in North Britain', *SAF*, 10: 12–26.
- Jobey, G. and Tait, J. (1966) 'Excavations on palisaded settlements and cairnfields at Alnham, Northumberland', AA, 4th ser., 44: 5–48.
- Johns, C. (2003) 'An Iron Age sword and mirror cist burial from Bryher, Isles of Scilly', *Cornish Archaeol.*, 41–2, 2002–3: 1–79.
- Johnson, B. and Waddington, C. (2008) 'Prehistoric and Dark Age settlement remains from Cheviot Quarry, Milfield Basin, Northumberland', Arch J, 165: 107–264.
- Johnson, P. with Hayes, I. eds (1996) Architecture in Roman Britain, York, CBA Research Report 94.
- Johnston, D. (1994) 'Carronbridge, Dunfries and Galloway: The excavation of Bronze Age cremations, Iron Age settlements and a Roman camp', *PSAS*, 124: 233–92.
- Johnston, S. and Wailes, B. (2007) *Dún Ailinne, Excavations at an Irish Royal Site, 1968–1975*, Philadelphia, University of Pennsylvania Museum of Archaeology and Anthropology.
- Jones, G.D.B. (1975) 'The North-Western Interface', in Fowler, P. J. ed. 1975: 93–106.
- Jones, G.D.B. and Woolliscroft, D. (2001) Hadrian's Wall from the Air, Stroud, Tempus.
- Jope, E. M. and Jacobsthal, P. (2000) Early Celtic Art in the British Isles, Oxford, Clarendon Press.
- Joy, J. (2015) 'Connection and separation: Narratives of Iron Age art in Britain and its relationship with the Continent', in Anderson-Whymark, H. et al. eds 2015: 145–65.
- Karl, R. (2006) Altkeltische Sozialstructuren, Budapest, Archaeolingua Foundation.
- Karl, R. and Leskovar, J. eds (2007) Interpretierte Eisenzeiten. Fallstudien, Methoden, Theorie. Tagungsbeiträge der 2. Linzer Gespräche zur interpretativen Eisenzeitarchäologie, Studien zur Kulturgeschichte von Oberösterreich 19, Linz, Oberösterreichisches Landesmuseum.
- Kendrick, J. (1995) 'Excavation of a Neolithic enclosure and an Iron Age settlement at Douglasmuir, Angus', PSAS, 125: 29–67.
- Kilbride-Jones, H. (1938) 'Glass Armlets in Britain', PSAS, 72: 366-95.
- King, A. (1978) 'Early agriculture in Craven, North Yorkshire', in Bowen, H. C. and Fowler, P. eds 1978: 109–14.
- King, A. (1987) 'The Ingleborough Hillfort, North Yorkshire', Bulletin of the Prehistory Research Section, Yorkshire Arch. Soc., Leeds, no page nos.
- Kirby, M. (2011) Lockerby Academy: Neolithic and Early Historic Timber Halls, a Bronze Age Cemetery, an Undated Enclosure and a Post-Medieval Corn-Drying Kiln in South-West Scotland, Edinburgh, Scottish Archaeological Internet Reports 46.
- Koch, J. and Cunliffe, B. (2013) Celtic from the West 2: Rethinking the Bronze Age and the Arrival of Indo-European in Atlantic Europe, Oxford, Oxbow Books.

- Laing, L. and Laing, J. (1984) 'The date and origin of the Pictish symbols', PSAS, 114: 261–78.
- Laing, L. and Longley, D. (2006) The Mote of Mark, a Dark Age Hillfort in South-West Scotland, Oxford, Oxbow Books.
- Lamb, R. G. (1980) Iron Age Promontory Forts in the Northern Isles, Oxford, BAR, British Series 79.
- LaMotta, M. W. and Schiffer, M. B. (1999) 'Formation processes of house floor assemblages', in Allison, P. M. ed. 1999: 19-29.
- Lane, A. (1987) 'English migrants in the Hebrides: "Atlantic Second B" revisited', PSAS, 117: 47-66.
- Lane, A. (1990) 'Hebridean pottery: Problems of definition, chronology, presence and absence', in Armit, I. ed. 1990: 108-30.
- Lane, A. (1994) 'Trade, gifts and cultural exchange in Dark-Age western Scotland', in Crawford, B. ed. 1994: 103-15.
- Lane, A. and Campbell, E. (2000) Dunadd, An Early Dalriadic Capital, Oxford, Cardiff Studs in Arch., Oxbow Books.
- Lelong, O. and MacGregor, G. (2007) The Lands of Ancient Lothian: Interpreting the Archaeology of the A1, Edinburgh, Society of Antiquaries of Scotland.
- Lethbridge, T. (1952) 'Excavations at Kilphedir, South Uist, and the Problem of the Brochs and Wheelhouses', PPS, 18: 176-93.
- Long, C. D. (1988) 'The Iron Age and Romano-British settlement at Catcote, Hartlepool, Cleveland', DA J, 4: 13-35.
- Longworth, I. (1966) 'A massive cist with multiple burials of Iron Age date at Lochend, Dunbar part 1: The archaeological report', PSAS, 98 (1965-6): 173-83.
- Love, P. (1989) 'Recent excavations at Carn Liath Broch, Golspie, Sutherland', GAJ, 15, 1988–89: 157–69.
- Lowe, C. (1999) Angels, Fools and Tyrants: Britons and Anglo-Saxons in Southern Scotland, Edinburgh, Historic Scotland.
- Lowe, C. (2006) Excavations at Hoddom, Dunfriesshire, an Early Ecclesiastical Site in South-west Scotland, Edinburgh, Society of Antiquaries of Scotland.
- Lynch, F. and Burgess, C. B. eds (1972) Prehistoric Man in Wales and the West: Essays in Honour of Lily F. Chitty, Bath, Adams and Dart.
- Lynn, C. J. (1983) 'Some "early" ring-forts and crannogs', JIA, 1:47-58.
- Lynn, C. J. (1986) 'Lagore, County Meath, and Ballinderry No 1, County Westmeath crannogs; some possible structural reinterpretations', *JIA*, 3: 69–73.
- Lynn, C. J. and McDowell, J. (2011) Deer Park Farms: The Excavation of a Raised Rath in the Glenarm Valley, Co. Antrim, Norwich, Stationery Office/Belfast, Northern Ireland Environment Agency.
- McCarthy, M. (2000) 'Prehistoric settlement in northern Cumbria', in Harding, J. and Johnston, R. eds 2000: 131-40.
- McCarthy, M. (2002) 'Rheged: An early historic kingdom near the Solway', PSAS, 132: 357-82.
- McCullagh, R. (1992) 'Lairg', CA, 131: 455-9.
- MacGregor, M. (1962) 'The early Iron Age metalwork hoard from Stanwick, N.R. Yorks, England', PPS, 28, 17-57.
- MacGregor, M. (1976) Early Celtic Art in North Britain, Leicester, Leicester University Press.
- Macinnes, L. (1982) 'Pattern and purpose: The settlement evidence', in Harding, D. W. ed. 1982: 57–74.
- Macinnes, L. (1984) 'Brochs and the Roman occupation of lowland Scotland', PSAS, 114: 235-50.
- Macinnes, L. (1989) 'Baubles, bangles and beads: Trade and exchange in Roman Scotland', in Barrett, J. et al. eds 1989: 108-16.
- McHardy, I., Barrowman, C. and MacLeod, M. (2009) STAC: The Severe Terrain Archaeological Campaign - Investigation of Stac Sites of the Isle of Lewis 2003-2005, Edinburgh, Scottish Archaeological Internet Reports 36.
- MacKay, G. (1980) A Study of Pit-alignments in Scotland, Edinburgh, MA Dissertation, Dept. of Archaeology, University of Edinburgh.
- MacKie, E. W. (1965) 'The origin and development of the broch and wheelhouse building cultures of the Scottish Iron Age', PPS, 31: 93-146.
- MacKie, E. W. (1969a) 'Radiocarbon dates and the Scottish Iron Age', Antiquity, 43: 15-26.

- MacKie, E. W. (1969b) 'The historical context of the origin of brochs', SAF, 1:53-9.
- MacKie, E. W. (1971) 'English migrants and Scottish brochs', GAJ, 2: 39-71.
- MacKie, E. W. (1974) Dun Mor Vaul, an Iron Age Broch on Tiree, Glasgow, Glasgow University Press.
- MacKie, E. W. (1975) Scotland: An Archaeological Guide, London, Faber and Faber.
- MacKie, E. W. (1976) 'The vitrified forts of Scotland', in Harding, D. W. ed. 1976: 205-35.
- MacKie, E. W. (1980) 'Dun an Ruigh Ruaidh, Lochbroom, Ross and Cromarty; excavations in 1968 and 1978', GAJ, 7: 32–89.
- MacKie, E. W. (1982) 'Excavations at Leckie broch, Stirlingshire, 1970–78: An interim report', *GAJ*, 9: 60–72.
- MacKie, E. W. (1987) 'Review of Hedges, Bu, Gurness and the Brochs of Orkney', Antiquity, 61: 492-4.
- MacKie, E. W. (1991) 'The Iron Age semi-brochs of Atlantic Scotland: A case study in the problems of deductive reasoning', Arch J, 148: 149–81.
- MacKie, E. W. (1994) 'Gurness and Midhowe brochs in Orkney: Some problems of misinterpretation', Arch J, 151: 98–157.
- MacKie, E. W. (1997) 'Dun Mor Vaul revisited: Fact and theory in the reappraisal of the Scottish Atlantic Iron Age', in Ritchie, G. ed. 1997: 141–80.
- MacKie, E. W. (2000) 'Excavations at Dun Ardtreck, Skye, in 1964 and 1965', PSAS, 130: 301-412.
- MacKie, E. W. (2002) The Roundhouses, Brochs and Wheelhouses of Atlantic Scotland c. 700 BC AD 500, Architecture and Material Culture, Part 1, the Orkney and Shetland Isles, Oxford, BAR, British Series 342.
- MacKie, E. W. (2007) The Roundhouses, Brochs and Wheelhouses of Atlantic Scotland c. 700 BC AD 500, Architecture and Material Culture, Part 2, The Northern and Southern Mainland and the Western Islands, Oxford, BAR, British Series 444.
- MacKie, E. W. (2008) 'The broch cultures of Atlantic Scotland Part 1. Early Iron Age beginnings c. 700–200 BC', OJA, 27, no. 3: 261–79.
- MacKie, E. W. (2010) 'The broch cultures of Atlantic Scotland Part 2. The Middle Iron Age: High Noon and Decline, c. 200 BC AD 550', OJA, 29, no. 1: 89–117.
- MacKie, E. W. (2015) 'Excavations at Sheep Hill, West Dunbartonshire, 1966–69: A late Bronze Age timber-framed dun and small Iron Age hillfort', *SAI*, 36–37, 2014–15: 65–137.
- MacLeod Rivett, M. (forthcoming) Barabhas Machair: Surveys of an Eroding Sandscape, Edinburgh, Society of Antiquaries of Scotland.
- McOmish, D. (1999) 'Wether Hill and Cheviot Hillforts', in Frodsham, P., Topping, P. and Cowley, D. eds 1999: 113–21.
- MacSween, A. (1985) The Brochs, Duns and Enclosures of Skye, Northern Archaeology, 5/6, Newcastle, Northern Archaeology Group.
- MacSween, A. (2002) 'Dun Beag and the role of pottery in interpretations of the Hebridean Iron Age', in Smith, B. B. and Banks, B. eds 2002: 145–52.
- MacSween, A. (2013) 'Later prehistoric pottery', in Armit, I. and McKenzie, J. eds 2013: 234-49.
- Main, L. (1998) 'Excavation of a timber round-house and broch at the Fairy Knowe, Buchlyvie, Stirling-shire, 1975–8', PSAS, 128: 293–418.
- Maldonado, A. (2013) 'Burial in early medieval Scotland. New questions', MA, 59: 1–34.
- Manby, T. G. (1980) 'Bronze Age settlement in eastern Yorkshire', in Barrett, J. and Bradley, R. eds 1980: 307–70.
- Manby, T. G. ed. (1988) Archaeology in Eastern Yorkshire: Essays in Honour of T.C.M. Brewster, Sheffield, University of Sheffield Department of Archaeology.
- Manby, T. G. (1985) 'The Thwing Project', *Prehistory Research Bulletin*, Yorkshire Archaeological Society, 22: 2–6.
- Manby, T. G. (2007) 'Continuity of monumental traditions into the late Bronze Age? Henges to ringforts, and shrines', in Burgess, C., Topping, P. and Lynch, F. eds 2007: 403–24.
- Manby, T. G. and Turnbull, P. eds (1986) Archaeology in the Pennines: Studies in Honour of Arthur Raistrick, Oxford, BAR, British Series 158.
- Mann, J. C. (1974) 'The Northern Frontier after AD 369', GAI, 3: 34-42.
- Manning, W. H. (1972) 'Ironwork hoards in Iron Age and Roman Britain', Britannia, 3: 224-50.

- Manning, W. H. (1981) 'Native and Roman metalwork in northern Britain: A question of origins', SAF, 11 (Early Technology in North Britain): 52-61.
- Marshall, D. N. (1964) 'Report on excavations at Little Dunagoil', TBNHS, 16: 1-69.
- Marshall, P., Mulville, J., Parker Pearson, M. and Ingram, C. eds (1999) The Late Bronze Age and Early Iron Age Community at Cladh Hallan, South Uist; Excavations in 1999, Sheffield, Sheffield University Dept. of Prehistory and Archaeology.
- Martin, L., Richardson, J. and Roberts, I. (2013) Iron Age and Roman Settlements at Wattle Syke: Archaeological Investigations During the A1 Bramham to Wetherby Upgrading Scheme, Leeds, WYAS.
- Matthews, K. J. (1999) 'The Iron Age of North-West England and Irish Sea Trade', in Bevan, B. ed. 1999: 173-96.
- Matthews, K. J. (2001) 'The Iron Age of North-West England, a socio-economic model', J. Chester Arch. Soc., 76, 2000-1: 1-51.
- Mattingly, D. (2006) An Imperial Possession, Britain in the Roman Empire, 54 BC-AD 409, London, Allen
- Maxwell, G. S. (1969) 'Duns and Forts A note on some Iron Age monuments of the Atlantic Province', SAF, 1: 41–6.
- Maxwell, G. S. (1976) 'Casus belli: Native pressures and Roman Policy', SAF, 7, 31–49.
- Maxwell, G. S. (1987) 'Settlement in southern Pictland A new overview', in Small, A. ed. 1987: 31-44.
- Maxwell, G. S. (1989) The Romans in Scotland, Edinburgh, Mercat Press.
- Maxwell, G. S. (1992) 'Aerial survey in South-East Perth', CA, 131: 451-4.
- Megaw, J.V.S. and Megaw, R. (2001) Celtic Art, from Its Beginnings to the Book of Kells, London, Thames and Hudson.
- Mercer, R. J. ed. (1981a) Farming Practice in British Prehistory, Edinburgh, Edinburgh University Press.
- Mercer, R. J. (1981b) 'The excavation of an earthwork enclosure at Long Knowe, Eskdale, Dumfriesshire', TDGNHAS, 56: 38-72.
- Mercer, R. J. (1985) 'Over Rig excavation and field survey, Eskdalemuir, Dumfriesshire, south-west Scotland', Univ. Edin. Dept. Arch. Ann. Rpt., 31: 19-22.
- Mercer, R. J. (1987) The Hillfort Studies Group: The Northern Cheviots, Edinburgh, typescript handbook for the Spring, 1987 meeting of the Hillforts Studies Group.
- Mercer, R. J. (forthcoming) Excavation and survey in a later prehistoric landscape in Upper Eskdale, Dumfriesshire, Scotland, and Roman/native relations on the Northern Frontier, Edinburgh, Society of Antiquaries of Scotland.
- Mercer, R. J. and Tipping, R. (1994) 'The prehistory of soil erosion in the northern and eastern Cheviot Hills, Anglo-Scottish borders', in Foster, S. and Smout, T. C. eds 1994: 1-25.
- Miket, R. (2002) 'The Souterrains of Skye', in Smith, B. B. and Banks, I. eds 2002: 77-110.
- Miket, R. and Burgess, C. B. eds (1984) Between and beyond the Walls: Essays on the Prehistory and History of Northern Britain in Honour of George Jobey, Edinburgh, John Donald.
- Miles, D. ed. (1982) The Romano-British Countryside: Studies in Rural Settlement and Economy, Oxford, BAR, British Series 103.
- Millett, M. (1990) The Romanization of Britain, Cambridge, CUP.
- Millett, M. (2006) Shiptonthorpe, East Yorkshire. Archaeological Studies of a Romano-British roadside settlement, Leeds, Yorkshire Archaeological Reports 5.
- Mills, S. (2004) 'A Bronze Age woman and an Iron Age warrior', CA, 191: 486-9.
- Moloney, C., Holbrey, R., Wheelhouse, P. and Roberts, I. (2003) Catterick Racecourse, North Yorkshire, the Re-use and Adaptation of a Monument from Prehistoric to Anglian Times, Leeds, WYAS.
- Morris, C. D. (1979) 'Birsay "small sites" excavation and survey 1978', Northern Studies, 13: 3-19.
- Morris, C. D. (1989) The Birsay Bay Project. Volume 1. Brough Road Excavations 1976-82, Durham, University of Durham Department of Archaeology Monograph Series No 1.
- Morris, C. D. (1996a). The Birsay Bay Project. Volume 2. Sites in Birsay Village (Beachview) and on the Brough of Birsay, Orkney, Durham, University of Durham Department of Archaeology Monograph Series No 2.
- Morris, C. D. (1996b) 'From Birsay to Tintagel: A personal view', in Crawford, B. ed. 1996: 37–78.

Morris, E. (1985) 'Prehistoric salt distributions: Two cases from western Britain', *Bull. Board Celtic Stud.*, 32: 336–79.

Morrison, I. (1982) 'The crannog off Ederline, Loch Awe, Argyll', IJNA, 10, no. 4: 347–9.

Morrison, I. (1985) Landscape with Lake Dwellings, Edinburgh, Edinburgh University Press.

Mowat, R. (1996) The Logboats of Scotland, Oxford, Oxbow Mon. 68.

Munro, R. (1882) Ancient Scottish Lake-Dwellings or Crannogs, Edinburgh, David Douglas.

Munro, R. (1905) Archaeology and False Antiquities, London, Methuen.

Murray, D. and Ralston, I. (1997) 'The excavation of a square-ditched barrow and other cropmarks at Boysack Mills, Inverkeilor, Angus', *PSAS*, 127: 359–86.

Murray, H. K. and Murray, J. C. (2006) Thainstone Business Park, Inverurie, Aberdeenshire, Edinburgh, SAIR 21.

Murray, R. (2007) Culduthel Mains Farm, Inverness, Phase 5. Excavation of a Late Prehistoric Settlement. Assessment Report, Edinburgh, Headland Archaeology online.

Mytum, H. (1992) The Origins of Early Christian Ireland, London, Routledge.

Neal, D. (1974) The Excavation of the Roman Villa at Gadebridge Park, Hemel Hempstead, 1963–8, London, SALResCom. Rpt 31, Thames and Hudson.

Neal, D. (1989) 'The Stanwick Villa, Northants: An interim report on the excavations of 1984–88', Britannia, 20: 149–68.

Neal, D. (1996a) Excavations on the Roman Villa at Beadlam, Yorkshire, Leeds, Yorkshire Archaeological Reports 2.

Neal, D. (1996b) 'Upper storeys in Romano-British villas', in Johnson, P. with Hayes, I. eds 1996: 33-43.

Neal, D., Wardle, A. and Hunn, J. (1990) Excavation of the Iron Age, Roman and Medieval Settlement at Gorhambury, St Albans, London, English Heritage.

Neighbour, T. and Burgess, C. (1996) 'Traigh Bostadh', DES, 1996: 113-4.

Nesbitt, C., Church, M. and Gilmour, S. (2011) 'Domestic, industrial (en)closed? Survey and excavation of a late Bronze Age/early Iron Age promontory enclosure at Gob Eirer, Lewis, Western Isles', *PSAS*, 141: 31–74.

Nevell, M. (1989) 'Great Woolden Hall Farm: Excavations on a late prehistoric/Romano-British native site', Greater Manchester Arch. J., 3: 35–44.

Nevell, M. ed. (1999a) Living on the Edge of Empire: Models, Methodology and Marginality. Late Prehistoric and Romano-British Rural Settlement in North-West England, Chester, CBA North West/University of Manchester/Chester Archaeology.

Nevell, M. (1999b) 'Iron Age and Romano-British rural settlement in North West England; theory marginality and settlement', in Nevell, M. ed. 1999a: 14–26.

Nevell, M. and Redhead, N. eds (2005) Mellor: Living on the Edge. A Regional Study of an Iron Age and Romano-British Upland Settlement, Manchester, Manchester Archaeological Monographs Vol 1.

Nevell, M. and Roberts, J. (2005), 'Towards an understanding of the rural economy and society of the Iron Age and Romano-British landscape of the Mersey Basin and Southern Pennines', in Nevell, M. and Redhead, N. eds 2005: 107–18.

Newman, R. ed. (1996) The Archaeology of Lancashire: Present State and Future Priorities, Lancaster, Lancaster University Archaeology Unit.

Nicolaisen, W.F.H. (1976) Scottish Place-Names: Their Study and Significance, London, Batsford.

Nicolaisen, W.F.H. (1995) 'Pictish Place Names', in Nicoll, E. ed. 1995: 11-14.

Nicoll, E. (1995) A Pictish Panorama, Balgavies, Angus, Pinkfoot Press.

Nieke, M. (1988) 'Literacy and power: The introduction and use of writing in Early Historic Scotland', in Gledhill, J., Bender, B. and Larsen, M. T. eds 1988: 237–52.

Nieke, M. (1990) 'Fortifications in Argyll: Retrospect and future prospect', in Armit, I. ed. 1990: 131-42.

Nisbet, H. (1994) 'Excavations of a vitrified dun at Langwell, Strath Oikel, Sutherland', GAI, 19: 51–74.

Nisbet, H. (1996) 'Craigmarloch hillfort, Kilmacolm', in Alexander, D. ed. 1996: 43–58.

Noble, G. and Gondek, M. (2011) 'Symbol stones in context: Excavations at Rhynie, an undocumented Pictish power centre of the 6th and 7th centuries AD', MA, 55: 317–21.

- Noble, P. and Thompson, A. (2005) 'The Mellor Excavations 1998 to 2004', in Nevell, M. and Redhead, N. eds 2005: 17-34.
- O'Brien, C. (1982) 'Excavations at Thirlings', Univ. Durham and Newcastle Arch. Repts for 1981, 5: 44-5.
- O'Brien, C. and Miket, R. (1991) 'The early medieval settlement of Thirlings, Northumberland', DAJ, 7:57-91.
- O'Connor, A. and Clarke, D. V. eds (1983) From the Stone Age to the Forty-Five: Studies Presented to R.B.K. Stevenson, Edinburgh, John Donald.
- Omand, D. ed. (1995) The Borders Book, Edinburgh, Birlinn.
- Oppenheimer, S. (2006) The Origins of the British, London, Constable.
- Oswald, A. (1997) 'A doorway on the past: Practical and mystic concerns in the orientation of roundhouse doorways', in Gwilt, A. and Haselgrove, C. eds 1997: 87–95.
- Oswald, A., Ainsworth, S. and Pearson, T. (2006) Hillforts: Prehistoric Strongholds of Northumberland National Park, Swindon, English Heritage.
- Owen, O. (1992) 'Eildon hill North', in Rideout, J. S., Owen, O. A. and Halpin, E. eds 1992: 21-72.
- Owen, O. and Lowe, C. (1999) Kebister: The Four-Thousand-Year-Old Story of One Shetland Township, Edinburgh, Soc. Ant. Scot. Mon. 14.
- Owen, P. (2000) Excavations at Garforth, West Yorkshire, Gifford and Richardson Ltd Report, online ADS.
- Pacitto, A. (2004) 'English Heritage excavations at Scarborough Castle, 1978', in Rigby, V. 2004: 217–23.
- Palk, N. (1984) Iron Age Bridle-bits from Britain, Edinburgh, Univ. Edin. Dept. Arch. Occ. Ppr., 10.
- Parker Pearson, M. ed. (2012) From Machair to Mountains: Archaeological Survey and Excavation in South Uist, Oxford, Oxbow Books.
- Parker Pearson, M. and Sharples, N. (1999) Between Land and Sea, Excavations at Dun Vulan, South Uist, Sheffield, Sheffield Academic Press.
- Parker Pearson, M. and Zvelebil, M. (2014) Excavations at CillDonnain: A Bronze Age Settlement and Iron Age Wheelhouse on South Uist, Oxford, Oxbow Books.
- Parry, M. L. (1985) 'Upland settlement and climatic change: The Medieval evidence', in Spratt, D. and Burgess, C. eds 1985: 35-49.
- Passmore, D. and Waddington, C. (2012) Archaeology and Environment in Northumberland, Till-Tweed Studies 2, Oxford, Oxbow Books.
- Peltenburg, E. (1982) 'Excavations at Balloch Hill, Argyll', PSAS, 112: 142–214.
- Peltenburg, E. (1984) 'Kildonan Dun, Kintyre', DES, 1984: 23.
- Perry, D. (2000) Castle Park, Dunbar: Two Thousand Years on a Fortified Headland, Edinburgh, Soc. Ant. Scot. Mon. 16.
- Peteranna, M., Birch, S. and Fraser, L. (2014) 'Comar Wood Dun, Cannich', DES, 15: 113.
- Philpott, R. and Adams, M. (2010) Irby, Wirral: Excavations on a Late Prehistoric, Romano-British and Medieval Site 1987–96, Liverpool, Liverpool National Museums.
- Piggott, C. M. (1948) 'Excavations at Hownam Rings, Roxburghshire, 1948', PSAS, 82, 1947–48: 193–225.
- Piggott, C. M. (1949) 'The Iron Age settlement at Hayhope Knowe, Roxburghshire: Excavations, 1949', PSAS, 83, 1948-49: 45-67.
- Piggott, C. M. (1950) 'The excavations at Bonchester Hill, 1950', PSAS, 84, 1949-50: 113-36.
- Piggott, C. M. (1953) 'Milton Loch Crannog I: A native house of the 2nd century AD in Kirkcudbrightshire', PSAS, 87, 1952-53: 134-52.
- Piggott, S. (1948) 'The excavations at Cairnpapple Hill, West Lothian, 1947-48', PSAS, 82: 68-123.
- Piggott, S. (1950) 'Swords and scabbards of the British Early Iron Age', PPS, 16: 1-28.
- Piggott, S. (1951) 'Excavations in the Broch and hill-fort of Torwoodlee, Selkirkshire, 1950', PSAS, 85, 1950-51: 92-117.
- Piggott, S. (1953a) 'Three metalwork hoards of the Roman period from Southern Scotland', PSAS, 87,
- Piggott, S. (1953b) 'A late Bronze Age hoard from Peeblesshire', PSAS, 87, 1952-53: 175-86.
- Piggott, S. (1958a) 'Native economies and the Roman occupation of North Britain', in Richmond, I. A. ed. 1958: 1-27.

- Piggott, S. (1958b) 'Excavations at Braidwood Fort, Midlothian and Craig's Quarry, Dirleton, East Lothian', PSAS, 91, 1957–58: 61–77.
- Piggott, S. (1962) 'Heads and hoofs', Antiquity, 36: 110-18.
- Piggott, S. (1966) 'A scheme for the Scottish Iron Age', in Rivet, A.L.F. ed. 1966: 1–16.
- Piggott, S. (1978) 'Nemeton, temenos, bothros: Sanctuaries of the ancient Celts', in I Celti e la loro cultura nell'epoca pre-Romana e Romana nella Britannia, Rome, Accademia Nazionale dei Lincei/British Academy: 37–54.
- Pococke, M. and Miket, R. (1976) 'An Anglo-Saxon cemetery at Greenbank, Darlington', MA, 20: 62–74.
- Poller, T. (2007) Forteviot, Perthshire: Excavations of a Barrow and Unenclosed Grave Cemetery, SERF online Data Structure Report.
- Pollock, D. (1997) 'The excavation of Iron Age buildings at Ironshill, Inverkeilor, Angus', PSAS, 127: 339–58.
- Pollock, R. (1992) 'The excavation of a souterrain and roundhouse at Cyderhall, Sutherland', *PSAS*, 122: 149–60.
- Pope, R. (2003) Prehistoric Dwelling: Circular Structures in North and Central Britain c 2500 BC AD 500, University of Durham PhD thesis online.
- Powell, T.G.E. (1958/80) The Celts, London, Thames and Hudson.
- Powell, T.G.E., Fell, C. I., Corcoran, J.X.W.P. and Barnes, F. (1963) 'Excavations at Skelmore Heads near Ulverston', TCWAS, 63: 1–30.
- Powlesland, D. (1988) 'Staple Howe and its Landscape', in Manby, T. G. ed. 1988: 101-7.
- Powlesland, D. (2011) Excavations at Boltby Scar Hillfort 2011. An Interim Report, www.landscaperesearch-centre.org/boltby-scar
- Powlesland, D. (2014) 'The Iron Age to Anglo-Saxon landscape in the Vale of Pickering', in Breeze, D. ed. 2014: 12–16.
- Powlesland, D., Haughton, C. and Hanson, J. (1986) 'Excavations at Heslerton, North Yorkshire, 1978–82', Arch J. 143: 414–54.
- Price, J. ed. (2000a) Glass in Britain and Ireland AD 350-1100, London, British Museum.
- Price, J. (2000b) 'Late Roman glass vessels in Britain, from AD 350 to 410 and beyond', in Price, J. ed. 2000a: 1–31.
- Proctor, J. (2009) Pegswood Moor, Morpeth: A Later Iron Age and Romano-British Farmstead Settlement, London, Pre-Construct Archaeology Limited.
- Proctor, J. (2012) Faverdale, Darlington: Excavations at a Major Settlement in the Northern Frontier Zone of Roman Britain, Darlington, Pre-Construct Archaeology Limited Monograph No. 15.
- Proudfoot, E. (1996) 'Excavations at the long cist cemetery on Hallow Hill, St Andrews, Fife', *PSAS*, 126: 387–454.
- Raftery, B. (1982) 'Knobbed spearbutts of the Irish Iron Age', in Scott, B. G. ed. 1982: 75–92.
- Raftery, B. (1984) La Tène in Ireland: Problems of Origin and Chronology, Marburg, Veröffentlichung des Vorgeschichtlichen Seminars Marburg, Sonderband 2.
- Raftery, B. ed. (1995a) Sites and Sights of the Iron Age, Essays on Fieldwork and Museum Research Presented to Ian Mathieson Stead, Oxford, Oxbow Monograph 56.
- Raftery, B. (1995b) 'The conundrum of Irish Iron Age pottery', in Raftery, B. ed. 1995a: 149-56.
- Raftery, B. and Hickey, J. eds (2001) Recent Developments in Wetlands Research, Dublin, WARP Occ. Ppr 14.
- Raistrick, A. (1937) 'Prehistoric cultivation at Grassington', YAJ, 33: 166-74.
- Raistrick, A. (1939) 'Iron Age settlements in west Yorkshire', YAJ, 34: 115-50.
- Raistrick, A. and Chapman, S. E. (1929) 'Lynchet groups in Upper Wharfedale', Antiquity, 3: 165-81.
- Ralston, I. (1980) 'The Green Castle and the promontory forts of North-East Scotland', SAF, 10: 27–40.
- Ralston, I. (1986) 'The Yorkshire television vitrified wall experiment at East Tullos, City of Aberdeen District', PSAS, 116: 17–40.
- Ralston, I. (1987) 'Portknockie: Promontory forts and Pictish settlement in the North-East', in Small, A. ed. 1987: 15–26.

Ralston, I. (1997) 'Pictish homes', in Henry, D. ed. 1997: 18-34.

Ralston, I. and Armit, I. (1997) 'The early historic period', in Edwards, K. and Ralston, I. eds 1997: 217–39.

Ralston, I. and Smith, J. S. (1983) 'High altitude settlement on Ben Griam Beg, Sutherland', PSAS, 113: 636 - 8.

Ramm, H. (1980) 'Native settlements east of the Pennines', in Branigan, K. ed. 1980: 28-41.

RCAHMS (1911) Third Report and Inventory of Monuments and Constructions in the County of Caithness, Edinburgh, HMSO.

RCAHMS (1928) Ninth Report with Inventory of Monuments and Constructions in the Outer Hebrides, Skye and the Small Isles, Edinburgh, HMSO.

RCAHMS (1933) Inventory of the Monuments and Constructions of Fife, Kinross and Clackmannan, Edinburgh,

RCAHMS (1956) An Inventory of the Ancient and Historical Monuments of Roxburghshire, Edinburgh, HMSO.

RCAHMS (1967) Peeblesshire: An Inventory of the Ancient Monuments, Edinburgh, HMSO.

RCAHMS (1971) Argyll: An Inventory of the Ancient Monuments, Vol. 1, Kintyre, Edinburgh, HMSO.

RCAHMS (1975) Argyll: An Inventory of the Ancient Monuments, Vol. 2, Lorn, Edinburgh, HMSO.

RCAHMS (1980) Argyll: An Inventory of the Ancient Monuments, Vol. 3, Mull, Tiree, Coll & Northern Argyll, Edinburgh, HMSO.

RCAHMS (1982) Argyll: An Inventory of the Monuments, Vol. 4, Iona, Edinburgh, HMSO.

RCAHMS (1984) Argyll: An Inventory of the Monuments, Vol. 5, Islay, Jura, Colonsay and Oronsay, Edinburgh, HMSO.

RCAHMS (1988a) Argyll: An Inventory of the Monuments, Vol. 6, Mid Argyll & Cowal, Prehistoric and Early Historic Monuments, Edinburgh, HMSO.

RCAHMS (1988b) Buildings of St Kilda, Edinburgh, HMSO.

RCAHMS (1990) North-East Perth: An Archaeological Landscape, Edinburgh, HMSO.

RCAHMS (1994) South-East Perth: An Archaeological Landscape, Edinburgh, HMSO.

RCAHMS (1997) Eastern Dumfriesshire: An Archaeological Landscape, Edinburgh, HMSO.

RCAHMS (2000) 'Special surveys', DES, 2000: 105 and Figure 37.

RCAHMS (2008) In the Shadow of Bennachie: A Field Archaeology of Donside, Aberdeenshire, Edinburgh, Society of Antiquaries of Scotland/RCAHMS.

RCAHMS (2014) Craig Phadrig, Inverness: Survey and Review, Edinburgh, RCAHMS/Forestry Commission Scotland.

RCAMS (1946) Twelfth Report with an Inventory of the Ancient Monuments of Orkney and Shetland, Edinburgh,

RCHME (1936) An Inventory of the Historical Monuments of Westmorland, London, HMSO.

Rees, A. (2002) 'A first millennium AD cemetery, rectangular Bronze Age structure and late prehistoric settlement at Thornybank, Midlothian', PSAS, 132: 313-56.

Rees, A. (2009) 'The excavation of an unenclosed settlement and an early historic multiple burial and metalworking area at Hawkhill, Lunan Bay, Angus', TAFAJ, 15: 23–72.

Rees, T. (1998) 'Excavation of Culhawk ring-ditch house, Kirriemuir, Angus', TAFAI, 4: 106–28.

Reid, J. (2016) 'Bullets, ballistas, and Burnswark', CA, 316: 20-6.

Renfrew, C. (1987) Archaeology and Language: The Puzzle of Indo-European Origins, London, Jonathan Cape.

Renfrew, C. and Shennan, S. eds (1982) Ranking, Resource and Exchange, Cambridge, CUP.

Reynolds, D. (1982) 'Aspects of later prehistoric timber construction in south-east Scotland', in Harding, D. W. ed. 1982: 44-56.

Reynolds, N. (1980) 'Dark Age timber halls and the background to excavation at Balbridie', Settlements in Scotland 1000BC-AD 1000, SAF, 10: 41-60.

Reynolds, P. J. (1993) 'Experimental reconstruction', in Harding, D. W., et al. eds 1993: 93-113.

Richardson, G.G.S. (1977) 'A Romano-British farmstead at Fingland', TCWAS, 77: 52-9.

Richardson, J. (2012) Iron Age and Roman Settlement Activity at Newbridge Quarry, Pickering, North Yorkshire, Leeds. WYAS.

Richmond, I. A. (1925) Huddersfield in Roman Times, Huddersfield, Tolson Memorial Museum.

Richmond, I. A. (1954) 'The geography of Brigantia', in Wheeler, R.E.M. ed. 1954: 61-2.

Richmond, I. A. ed. (1958) Roman and Native in North Britain, London, Nelson.

Richmond, I. A. (1968) Hod Hill Volume Two: Excavations Carried out between 1951 and 1958, London, British Museum.

Richmond, I. A. and St Joseph, J. K. (1982) 'Excavations at Woden Law, 1950 by the late Sir Ian Richmond and Professor J. K. St Joseph', *PSAS*, 112: 277–84.

Rideout, J. S. (1995) 'Carn Dubh, Moulin, Perthshire: Survey and excavation of an archaeological landscape 1987–90', PSAS, 125: 139–95.

Rideout, J. S. (1996) 'Excavation of a promontory fort and a palisaded homestead at Lower Greenyards, Bannockburn, Stirling, 1982–5', PSAS, 126: 199–269.

Rideout, J. S., Owen, O. A. and Halpin, E. (1992) Hillforts of Southern Scotland, Edinburgh, Historic Scotland/AOC.

Rigby, V. (2004) Pots in Pits, the British Museum Yorkshire Settlements Project 1988–1992, Hull, East Riding Archaeological Society.

Ritchie, A. (1970) 'Palisaded sites in North Britain: Their context and affinities', SAF, Glasgow, 1970: 47–67.

Ritchie, A. (1977) 'Excavation of Pictish and Viking Age Farmsteads at Buckquoy, Orkney', *PSAS*, 108, 1976–77: 174–227.

Ritchie, A. (1987) 'The Picto-Scottish interface in material culture', in Small, A. ed. 1987: 59-67.

Ritchie, A. (1989) Picts, Edinburgh, HMSO/Historic Scotland.

Ritchie, A. (1995) 'Meigle and lay patronage in Tayside in the 9th and 10th centuries AD', TAFAJ, 1:1-10.

Ritchie, A. (2003) 'Paganism among the Picts and the conversion of Orkney', in Downes, J. and Ritchie, A. eds 2003: 3–10.

Ritchie, J.N.G. (1981) 'Excavations at the Machrins, Colonsay', PSAS, 111: 263-81.

Ritchie, J.N.G. ed. (1997) The Archaeology of Argyll, Edinburgh, Edinburgh University Press.

Ritchie, J.N.G. and Lane, A. (1980) 'Dun Cul Bhuirg, Iona, Argyll', PSAS, 110, 1978-80: 209-29.

Ritchie, W. (1985) 'Inter-tidal and sub-tidal organic deposits and sea level changes in the Uists, Outer Hebrides', Scottish J. Geology, 21/2: 161–76.

Rivet, A.L.F. (1958) Town and Country in Roman Britain, London, Hutchinson.

Rivet, A.L.F. ed. (1966) The Iron Age in North Britain, Edinburgh, Edinburgh University Press.

Rivet, A.L.F. and Smith, C. (1979) The Place-names of Roman Britain, London, Batsford.

Roberts, I. (2003) Excavations at Topham Farm, Sykehouse, South Yorkshire, a Late Iron Age and Romano-British Settlement in the Humberside levels, Leeds, WYAS.

Roberts, I. (2005) The Iron Age Settlement at Ledston, a Report on the Excavations of 1976 and 1996, Leeds, WYAS.

Roberts, I. and Richardson, J. (2002) Iron Age and Romano-British Settlement Enclosures at Moss Carr, Methley, West Yorkshire, Leeds, WYAS.

Robertson, A. (1970) 'Roman finds from non-Roman sites in Scotland: More Roman "drift" in Caledonia', Britannia, 1:198–226.

Robertson, A. (1975) 'The Romans in North Britain: The coin evidence', in Temporini, H. ed. 1975: 364–426. Robertson, A. (1978) 'The circulation of Roman coins in North Britain: The evidence of hoards and site-finds from Scotland', in Carson, R.A.G. *et al.* eds 1978: 186–216.

Rodwell, W. (1978) 'Buildings and settlements in south-east Britain in the late Iron Age', in Cunliffe, B. and Rowley, T. eds 1978: 25–42.

Romankiewicz, T. (2009) 'Simple stones but complex constructions: Analysis of architectural development in the Scottish Iron Age', World Archaeology, 41, no. 3: 379–95.

Romankiewicz, T. (2011) The Complex Roundhouses of the Scottish Iron Age: An Architectural Analysis of Complex Atlantic Roundhouses (Brochs and Galleried Duns), with Reference to Wheelhouses and Timber Roundhouses, BAR Brit. Ser. 550.

Romankiewicz, T. and Ralston, I. (2012) 'Dun Troddan Survey', DES, 13: 104–5.

Ross, A. (1968) 'Shafts, pits, wells – sanctuaries of the Belgic Britons?' in Coles, J. and Simpson, D. eds 1968: 255–85. Ross, A. (1970) Everyday Life of the Pagan Celts, London, Batsford.

Ross, C. (2011) 'Tribal Territories' from the Humber to the Tyne: An Analysis of Artefactual and Settlement Patterning in the Late Iron Age and Early Roman Periods, Oxford, BAR, British Series 540.

Roth, H. (1974) 'Ein Ledermesser der Atlantischen Bronzezeit aus Mittelfranken', Archäologisches Korrespondenzblatt, 4, no. 1:37–48.

Rowntree, A. ed. (1931) The History of Scarborough, London and Toronto, Dent.

Roy, M. (2015) 'An Iron Age burial with weapons, on a site of medieval and post-medieval occupation from Dunbar, East Lothian', *PSAS*, 145: 153–76.

Rutherford, A. and Ritchie, G. (1974) 'The Catstane', PSAS, 105, 1972-4: 183-8.

Rynne, E. (1991) 'Dún Aengusa – Daingean nó Teampall?', Archaeology Ireland, 5: 19-21.

Rynne, E. (1992) 'Dún Aengus and some similar Celtic ceremonial sites' in Bernelle, A. ed. 1992: 196-207.

Samson, R. (1992) 'The reinterpretation of the Pictish symbols', JBAA, 145: 29-65.

Sanderson, D., Placido, F. and Tate, J. (1988) 'Scottish vitrified forts: TL results from six study sites', Nuclear Tracks and Radiation Measurements, 14, No. 1/2, 307–16, Oxford, Pergamon.

Sands, R. and Hale, A. (2001) 'Evidence of later prehistoric use of the Firth of Clyde from marine crannogs', *JWA*, 1: 41–3.

Schoenwetter, J. (1982) 'Environmental archaeology of the Peckforton Hills', Cheshire Arch. Bull., 8:10-11.

Scott, B. G. ed. (1982) Studies on Early Ireland, Essays in Honour of M. V. Duignan, Belfast, Association of Young Irish Archaeologists.

Scott, R. and Jack, A. (2008) 'Laikenbuie ring-ring, Auldearn', DES, 2008: 98-9.

Scott, Sir Lindsay. (1947) 'The problem of the Brochs', PPS, 13: 1-37.

Scott, Sir Lindsay. (1948) 'Gallo-British colonies: The aisled roundhouse culture in the North', PPS, 14: 46–125

Scull, C. (1991) 'Post-Roman phase 1 at Yeavering: A reconsideration', MA, 35: 57-63.

Scull, C. and Harding, A. F. (1990) 'Two early medieval cemeteries at Milfield, Northumberland', DAJ, 6: 1–30.

Sharples, N. (1998) Scalloway: A Broch, Late Iron Age Settlement and Medieval Cemetery in Shetland, Oxford, Oxbow Mon. 82.

Sharples, N. (2003) 'From monuments to artefacts: Changing social relationships in the later Iron Age', in Downes, J. and Ritchie, A. eds 2003: 151–65.

Sharples, N. (2011) Review of Lelong, O. and MacGregor, G., *The Lands of Ancient Lothian: Interpreting the Archaeology of the A1*, Edinburgh, Society of Antiquaries of Scotland, 2007, Haselgrove, C., *The Traprain Law Environs Project: Fieldwork and Excavation 2000–20004*, Edinburgh, Society of Antiquaries of Scotland, 2009, Dunwell, A, *Cist Burials and an Iron Age Settlement at Dryburn Bridge, Innerwick, East Lothian*, Edinburgh, Society of Antiquaries of Scotland Scottish Archaeological Internet Report 24, 2007, Prehistoric Society online 2011.

Sharples, N. (2014) 'Review', in Armit, I. and McKenzie, J. eds. *An Inherited Place: Broxmouth Hillfort and the South-east Scottish Iron Age*, Edinburgh, Society of Antiquaries of Scotland, 2013.

Shepherd, I. (2007) 'An awesome place: The Late Bronze Age use of the Sculptor's Cave', in Burgess, C., Topping, P. and Lynch, F. eds 2007: 194–203.

Shepherd, I. and Shepherd, A. (1995) 'The Sculptor's Cave, Covesea, Moray: From Bronze Age ossuary to Pictish shrine?', *PSAS*, 125: 1194–5.

Sheridan, A. (2004) 'The National Museum of Scotland radiocarbon dating programmes: Results obtained during 2003/4', *DES*, 5: 174–6.

Sherlock, S. (2012) Late Prehistoric Settlement in the Tees Valley and North-East England, Hartlepool, Tees Archaeology Monograph 5.

Sherlock, S. and Vyner, B. (2013) 'Iron Age saltworking on the Yorkshire coast at Street House, Loftus, Cleveland', YAI, 85: 46–67.

Simpson, D.D.A. (1969) 'Excavations at Kaimes Hillfort, Midlothian', GAI, 1:7–28.

Sims-Williams, P. (2006) Ancient Celtic Place-names in Europe and Asia Minor, Oxford, Blackwell.

Sims-Williams, P. (2012) 'Bronze- and Iron-Age Celtic-speakers: What don't we know, what can't we know, and what could we know? Language, genetics and archaeology 1998–2008', A.J. 92: 1–23.

Small, A. (1969) 'Burghead', SAF, 1: 61-8.

Small, A. ed. (1987) The Picts: A New Look at Old Problems, Dundee, Dundee University/Dundee City Council.

Small, A. and Cottam, M. B. (1972) Craig Phadrig: Interim Report on 1971 Excavation, Dundee, Univ. Dundee Dept. Geog. Occ. Ppr., 1.

Smith, A. (1995) 'The excavation of Neolithic, Bronze Age and early historic features near Ratho, Edinburgh', *PSAS*, 125: 69–138.

Smith, B. (2013) 'How not to reconstruct the Iron Age in Shetland; modern interpretations of Clickhimin broch', Northern Studies, 22: 1–32.

Smith, B. (forthcoming) 'Did the broch of Mousa have a roof? – and why not?'

Smith, B. B. ed. (1994) Howe: Four Millenia of Orkney Prehistory, Edinburgh, Soc. Ant. Scot. Mon. 9.

Smith, B. B. and Banks, I. eds (2002) In the Shadow of the Brochs: The Iron Age in Scotland, Stroud, Tempus.

Smith, I. (1991) 'Sprouston, Roxburghshire: An early Anglian centre of the eastern Tweed Basin', *PSAS*, 121: 261–94.

Smith, J. T. (1978) 'Villas as a key to social structure', in Todd, M. ed. 1978: 149-86.

Smith, J. T. (1997) Roman Villas: A Study in Social Structure, London, Routledge.

Smith, R. A. (1927) 'Pre-Roman remains at Scarborough', Archaeologia, 78: 179-200.

Smout, T. C. ed. (1993) Scotland since Prehistory: Natural Change and Human Impact, Aberdeen, Scottish Cultural Press.

Smyth, A. (1984) Warlords and Holy Men: Scotland AD 80-1000, London, Edward Arnold.

Sofaer, J. and Sørensen, M.L.S. (2012) 'Death and gender', in Tarlow, S. and Stutz, L. eds 2012: 527-41.

Spearman, R. (1990) 'The Helmsdale bowls, a re-assessment', PSAS, 120: 63-78.

Spratt, D. (1981) 'Prehistoric boundaries on the North Yorkshire Moors', in Barker, G. ed. 1981: 87–103.

Spratt, D. (1982) 'The Cleave Dyke System', *YAJ*, 54: 33–52.

Spratt, D. (1989) Linear Earthworks of the Tabular Hills, Northeast Yorkshire, Sheffield, Sheffield University Department of Archaeology and Prehistory.

Spratt, D. and Burgess, C. eds (1985) Upland Settlement in Britain: The Second Millennium BC and After, Oxford, BAR, British Series 143.

Spratt, D. and White, R. F. (1986) 'Further information on the Cleave Dyke system', YAI, 58: 195-7.

Stead, I. M. (1965) The La Tène Cultures of Eastern Yorkshire, York, Yorkshire Philosophical Society.

Stead, I. M. (1968) 'An Iron Age hill-fort at Grimthorpe, Yorkshire, England', PPS, 34: 148-90.

Stead, I. M. (1976) Excavations at the Winterton Roman Villa and other Roman Sites in North Lincolnshire 1958–1967, Department of the Environment Arch Rpts 9, London, HMSO.

Stead, I. M. (1979) The Arras Culture, York, Yorkshire Philosophical Society.

Stead, I. M. (1991) Iron Age Cemeteries in East Yorkshire, London, English Heritage/British Museum.

Stead, I. M. (2006) British Iron Age Swords and Scabbards, London, British Museum Press.

Stead, I. M., Bourke, J. and Brothwell, D. (1986) Lindow Man: The Body in the Bog, London, British Museum.

Steer, K. A. (1956) 'The early Iron Age homestead at West Plean', PSAS, 89, 1955-56: 227-51.

Steer, K. A. and Keeney, G. S. (1947) Excavations in two homesteads at Crock Cleugh, Roxburghshire', *PSAS*, 81, 1946–7: 138–57.

Stephens, M. (1986) Interim Report on the Excavation of Devil's Hill, Heslerton, Malton, East Riding Archaeological Research Committee.

Stevenson, J. B. (1984) 'Garbeg and Whitebridge: Two square-barrow cemeteries in Inverness-shire', in Friell, J.G.P. et al. eds 1984: 145–50.

Stevenson, R.B.K. (1949a) 'Braidwood Fort Midlothian: The exploration of two huts', *PSAS*, 83, 1948–9: 1–11.

Stevenson, R.B.K. (1949b) 'The Nuclear Fort at Dalmahoy, Midlothian, and other Dark Age capitals', *PSAS*, 83, 1948–9: 186–98.

Stevenson, R.B.K. (1952) 'Long Cist Burials, particularly those at Galson (Lewis) and Gairloch (Wester Ross), with a symbol stone at Gairloch', *PSAS*, 86, 1951–52: 106–14.

Stevenson, R.B.K. (1955a) 'Pins and the chronology of Brochs', PPS, 21: 282-94.

Stevenson, R.B.K. (1955b) 'Pictish art' in Wainwright, F. T. ed. 1955: 97-128.

- Stevenson, R.B.K. (1956) 'Native bangles and Roman glass', PSAS, 88, 1954-56: 208-21.
- Stevenson, R.B.K. (1966) 'Metalwork and some other objects in Scotland and their cultural affinities, in Rivet, A.L.F. ed. 1966: 17-44.
- Stewart, M. (1969) 'The Ring Forts of Central Perthshire', Trans. Proc. Perthshire Soc. Nat. Sci., 12:21-32.
- Stoertz, C. (1997) Ancient Landscapes of the Yorkshire Wolds: Aerial Photographic Transcription and Analysis, Swindon, RCHM(Eng).
- Strachan, D. (2013) Excavations at the Black Spout, Pitlochry and the Iron Age Monumental Roundhouses of North West Perthshire, Perth, Perth and Kinross Heritage Trust.
- Strickertsson, K., Placido, F. and Tate, J. O. (1988) 'Thermoluminescence dating of Scottish Vitrified Forts', Nuclear Tracks and Radiation Measurements, 14, No. 1/2, 317-20, Oxford, Pergamon.
- Strickertsson, K., Sanderson, D., Placido, F. and Tate, J. (1987) Thermoluminescence Dating of Scottish Vitrified Forts: New Results and a Review, Glasgow, Archaeological Sciences Meeting, 1987.
- Suddaby, I. (1995) Practical Aspects of Archaeology with Reference to Iron Age Drystone Structures in Atlantic Scotland, Edinburgh, MA Dissertation, University Edinburgh Department of Archaeology.
- Tabraham, C. (1977) 'Excavation at Dun Carloway broch, Isle of Lewis', PSAS, 108, 1976-77: 156-73.
- Tarlow, S. and Stutz, L. eds (2012) The Oxford Handbook of the Archaeology of Death and Burial, Oxford, OUP.
- Taylor, D. B. (1982) 'Excavation of a promontory fort, broch and souterrain at Hurly Hawkin, Angus', PSAS, 112: 215-53.
- Taylor, D. B. (1990) Circular Homesteads in North-west Perthshire, Dundee. Abertay Historical Society Publications 29.
- Taylor, J. (2001) 'Rural society in Roman Britain, in James, S. and Millett, M. eds 2001: 46-59.
- Taylor, S. (2011) 'Pictish Place-names revisited', in Driscoll, S., Geddes, J. and Hall, M. eds 2011: 67–118.
- Temporini, H. (1975) Aufstieg und Niedergang der Römischen Welt, II, 3, Berlin, de Gruyter.
- Thomas, A. C. (1959) 'Imported pottery in dark-age western Britain', MA, 3: 89-111.
- Thomas, A. C. (1960) 'Excavations at Trusty's Hill, Anwoth, Kirkcudbright, 1960', TDGNHAS, 38, 1959-60: 58-70.
- Thomas, A. C. (1961) 'The animal art of the Scottish Iron Age and its origins', Arch J. 118: 14-64.
- Thomas, A. C. (1968) 'The Evidence from North Britain', in Barley, M. and Hanson, R. eds 1968: 93-122.
- Thomas, A. C. (1971) The Early Christian Archaeology of North Britain, London and Glasgow, OUP.
- Thomas, A. C. (1984) 'The pictish class I symbol stones', in Friell, J. and Watson, W. eds 1984: 169–88.
- Thomas, A. C. (1992) 'The early Christian inscriptions of southern Scotland', GAJ, 17: 1–10.
- Thomas, A. C. ed. (1966) Rural Settlement in Roman Britain, London, CBA Res. Rep. 7.
- Thomas, A. C. ed. (1972) The Iron Age in the Irish Sea Province, London, CBA Res. Rpt., 9.
- Thomas, F.W.L. (1870) 'On the primitive dwellings and hypogea of the outer Hebrides', PSAS, 7:153–95.
- Thomas, F.W.L. (1878) 'Dunadd, Glassary, Argyllshire: The place of inauguration of Dalriadic kings', PSAS, 13, 1877–78: 28–47.
- Thomas, F.W.L. (1890) 'On the Duns of the Outer Hebrides', Archaeol. Scotica, 5: 365–415.
- Thomas, G. (1988) 'Excavations at the Roman civil settlement at Inveresk, 1976–7', PSAS, 118: 139–76.
- Thorneycroft, W. (1933) 'Observation of hut-circles near the eastern border of Perthshire, north of Blairgowrie', PSAS, 67, 1932-3: 187-203.
- Thorneycroft, W. (1946) 'Further observations on hut-circles', PSAS, 80, 1945-6: 131-5.
- Tinkler, B. N. and Spratt, D. A. (1978) 'An Iron Age enclosure on Great Ayton Moor, north Yorkshire', *YA J*, 50: 49–56.
- Tipping, R. (1997) 'Pollen analysis and the impact of Rome on native agriculture around Hadrian's Wall', in Gwilt, A. and Haselgrove, C. eds 1997: 239-47.
- Tipping, R. (2008) 'Blanket peat in the Scottish Highlands: Timing, cause, spread and the myth of environmental determinism', Biodivers. Conserv., 17: 2097-113.
- Tipping, R. (2015) "I have not been able to discover anything of interest in the peat" Landscapes and environment in the later Bronze and Iron Ages in Scotland', in Hunter, F. and Ralston, I. eds 2015: 103-17.

Todd, M. (1978) Studies in the Romano-British Villa, Leicester, Leicester University Press.

Todd, M. (1985) 'The Falkirk hoard of denarii; trade or subsidy?', PSAS, 115: 229-32.

Tooley, M. J. (1974) 'Sea-level changes during the last 900 years in north-west England', Geogr. J., 140: 18–42.

Toolis, R. and Bowles, C. (2013) 'Excavations at Trusty's Hill, 2012', TDNHAS, 87: 27-50.

Topping, P. G. (1985) 'Later prehistoric pottery from Dun Cul Bhuirg, Iona, Argyll', PSAS, 115: 199-209.

Topping, P. G. (1986) 'Neutron activation analysis of later prehistoric pottery from the Western Isles of Scotland', *PSAS*, 52: 105–29.

Topping, P. G. (1987) 'Typology and chronology in the later prehistoric pottery assemblages of the Western Isles', *PSAS*, 117: 67–84.

Topping, P. G. (1989) 'Early cultivation in Northumberland and the borders', PPS, 55: 161-79.

Topping, P. G. and McOmish, D. (2001) 'Summary report on the excavations at Wether Hill, Northumberland: 2000', Northumberland Archaeological Group Newsletter, October 2001: 1–7.

Toynbee, J.M.C. (1964) Art in Britain under the Romans, Oxford, Clarendon Press.

Triscott, J. (1982) 'Excavations at Dryburn Bridge, East Lothian', in Harding, D. W. ed. 1982: 117-24.

Tuohy, T. (1999) Prehistoric Combs of Antler and Bone, Oxford, BAR, British Series 285.

Turner, R. and Scaife, R. (1995) Bog Bodies: New Discoveries and New Perspectives, London, British Museum.

Turner, V., Nicholson, R., Dockrill, S. and Bond, J. eds (2005) *Tall Stories? 2 Millennia of Brochs*, Lerwick, Shetland Amenity Trust.

Van de Noort, R., Chapman, H. and Collis, J. (2007) Sutton Common, the Excavation of an Iron Age 'Marsh-Fort', York, CBA Research Report 154.

van der Veen, M. (1992) Crop Husbandry Regimes: An Archaeobotanical Study of Farming in Northern England 1000 BC – AD 500, Sheffield, Sheffield Arch. Mon. 3.

van der Veen, M. (2016) 'The arable economy', in Haselgrove, 2016: 287–303.

Varley, W. J. (1935) 'Maiden Castle, Bickerton: Preliminary excavations, 1934', Liverpool Univ. Annals Arch. Anth., 22: 97–110.

Varley, W. J. (1936a) 'Further excavations at Maiden Castle, Bickerton, 1935', Liverpool Univ. Annals Arch. Anth., 23: 101–12.

Varley, W. J. (1936b) 'Maiden Castle, Bickerton: A summary of the results of the excavations of 1934 and 1935', Chester Arch. Soc., 31: 113–21.

Varley, W. J. (1950) 'Excavations of the Castle Ditch, Eddisbury, 1935–38', Trans. Hist. Soc. Lancashire and Cheshire, 102: 1–68.

Varley, W. J. (1964) Cheshire before the Romans, A History of Cheshire, Vol. 1, Chester, Cheshire Community Council.

Varley, W. J. (1976) 'A summary of the excavations at Castle Hill, Almondbury, 1939–72', in Harding, D. W. ed. 1976: 119–32.

Vyner, B. (1988) 'The hill-fort at Eston Nab, Eston, Cleveland', ArchJ, 145: 60-98.

Vyner, B. and Daniels, R. (1989) 'Further investigation of the Iron Age and Romano-British settlement site at Catcote, Hartlepool, Cleveland, 1987', DAJ, 5: 11–34.

Waddington, C. (1998) 'Humbleton Hill Hillfort Survey', NA, 15/16: 71–82.

Waddington, C. (2009) 'A note on Neolithic, Bronze Age and Anglo-Saxon remains at Lanton Quarry near Milfield', AA, 5th ser., 38: 23–9.

Waddington, C. (2012) 'Excavations at Fin Cop, Derbyshire: An Iron Age hillfort in conflict?', ArchJ, 169: 159–236.

Wainwright, F. T. ed. (1955) The Problem of the Picts, Edinburgh, Nelson.

Wainwright, F. T. (1963) The Souterrains of Southern Pictland, London, Routledge and Kegan Paul.

Wait, G. (1985) Ritual and Religion in Iron Age Britain, Oxford, BAR, British Series 149.

Walker, J. (2003) The Dating of Timber Halls from the Aerial Photograph Record: A Selective Site Analysis, Edinburgh, MA Hons Dissertation, Edinburgh University Archaeology.

Warner, R. (1980) 'Irish souterrains: Later Iron Age refuges', Archaeol. Atlantica, 3, 81–99.

Waterman, D. (1997) Excavations at Navan Fort 1961–71, County Armagh, ed. C. J. Lynn, Northern Ireland Archaeological Monographs 3, Belfast, Stationery Office.

- Watkins, T. (1980a) 'Excavation of an Iron Age open settlement at Dalladies, Kincardineshire', PSAS, 110, 1978-80: 122-64.
- Watkins, T. (1980b) 'Excavation of a settlement and souterrain at Newmill, near Bankfoot, Perthshire', PSAS, 110, 1978-80: 165-208.
- Watkins, T. (1982) 'Saint Germains enclosure, Tranent, East Lothian', in Harding, D. W. ed. 1982: 106-16.
- Watkins, T. (1984a) 'Where were the Picts? An essay in settlement Archaeology' in Friell, J. and Watson, W. eds 1984: 63-86.
- Watkins, T. (1984b) Rullion Green 1983: Report on the 1983 Season of Excavations, Edinburgh, Univ. Edin. Dept. Arch. Project Paper No 1.
- Watkins, T. (1986) Rullion Green, 1984: Report on the 1984 Season of Excavations, Edinburgh, Univ. Edin. Dept. Arch. Project Paper No 3.
- Watkins, T. and Murray, J. (1990) Rullion Green, 1985: Report on the 1985 Season of Excavations, Edinburgh, Univ. Edin. Dept. Arch. Project Paper, No. 11.
- Watkins, T. and Selkirk, A. (1992) 'Doughnuts and bananas: The Leuchars Cropmark Project', CA, 131: 472-4.
- Watson, W. J. (1915) 'Circular forts in Lorne and North Perthshire with a note on the excavation of one at Borenich, Loch Tummel', PSAS, 59, 1914-15: 17-34.
- Watson, W. J. (1926) The History of the Celtic Place-names of Scotland, Edinburgh, reprinted Shannon, Irish Univ. Press 1973.
- Webster, J. (1999) 'Here be Dragons! The continuing influence of Roman attitudes to northern Britain', in Bevan, B. ed. 1999: 21-32.
- Webster, J. (2001) 'Creolizing the Roman provinces', Am. J. Archaeol., 105: 209-25.
- Webster, R. A. (1972) 'Excavation of a Romano-British settlement at Waitby, Westmorland', TCWAS, 72: 66-73.
- Wedderburn, L. and Grime, D. (1984) 'The cairn cemetery at Garbeg, Drumnadrochit', in Friell, J. and Watson, W. eds 1984: 151-68.
- Welfare, H., Topping, P. Blood, K. and Turnbull, P. (1990) 'Stanwick, North Yorkshire, Part 2: A summary description of the earthworks', Arch J, 147: 16-36.
- Welti, A. (2013) 'Wedigs Community Project', DES, 14: 102-4.
- Wheeler, R.E.M. (1931) 'Prehistoric Scarborough' in Rowntree, A. ed. 1931: 34–9, with Appendix 'The "Linear Earthworks" of the Scarborough District'.
- Wheeler, R.E.M. (1943) Maiden Castle, Dorset, Oxford, SALResCom. Rep. 12, OUP.
- Wheeler, R.E.M. (1954) The Stanwick Fortifications, North Riding of Yorkshire, Oxford, SALResCom. Rep. 17, OUP.
- Whimster, R. (1981) Burial Practices in Iron Age Britain: A Discussion and Gazetteer of the Evidence c. 700 BC-AD 43, Oxford, BAR, Brit. Ser. 90.
- Whittaker, C. R. (1989) 'Supplying the system: Frontiers and beyond', in Barrett, J. C. et al. eds 1989: 64 - 80.
- Whittington, G. (1975) 'Place-names and the settlement pattern of dark-age Scotland', PSAS, 106, 1974-5: 99-110.
- Whittle, A., Keith-Lucas, M., Milles, A., Noddle, B., Rees, S. and Romans, J. (1986) Scord of Brouster. An Early Agricultural Settlement on Shetland, Oxford, OUCA Mon. 9.
- Willis, S. (1998) 'Samian Pottery in Britain: Exploring its distributional and archaeological potential', Arch J, 155: 82–133.
- Willis, S. (1999) 'Without and within: Aspects of culture and community in the Iron Age of northeastern England', in Bevan, B. ed. 1999a: 81-110.
- Willis, S. (2010) "Roman Piercebridge", review of Cool, H. and Mason, D., Roman Piercebridge: Excavations by D. W. Harding and Peter Scott, 1969-1981', Arch J, 167: 228-33.
- Willis, S. and Carne, P. (2013) A Roman Villa at the Edge of Empire, Excavations at Ingleby Barwick, Stocktonon-Tees, 2003-04, York, CBA Research Report 170.
- Wilson, D. (1851) Archaeology and Prehistoric Annals of Scotland, Edinburgh, Constable.
- Wilson, D. R. (1966) 'Roman Britain in 1965', JRS, 56: 207.

- Wilson, P. R., Jones, R.F.J. and Evans, D. M. eds (1984) Settlement and Society in the Roman North, Leeds, School of Archaeological Sciences, Univ. Bradford and Roman Antiquities Section, Yorkshire Arch.
- Winlow, S. (2011) 'A review of Pictish burial practices in Tayside and Fife', in Driscoll, S. et al. eds 2011: 335–69.
- Woolf, G. (1998) Becoming Roman: The Origins of Provincial Civilization in Gaul, Cambridge, CUP.
- Wordsworth, J. (1999) 'A later prehistoric settlement at Balloan Park, Inverness', PSAS, 129: 239-49.
- Wrathmell, S. and Nicholson, A. (1990) Dalton Parlours Iron Age Settlement and Roman Villa, Wakefield, Yorkshire Archaeology 3.
- Wright, R. P. and Gillam, J. (1951) 'Second report on Roman buildings at Old Durham', AA, 4th ser. 29: 203–12.
- Young, A. (1953) 'An aisled farmhouse at Allasdale, Isle of Barra', PSAS, 87, 1952-3: 80-105.
- Young, A. (1956) 'Excavations at Dun Cuier, Isle of Barra, Outer Hebrides', PSAS, 89, 1955–6: 290–327.
- Young, A. (1966) 'The sequence of Hebridean Pottery', in Rivet, A.L.F. ed. 1966: 45–58.
- Young, A. and Richardson, K. (1960) 'A Cheardach Mhor, Drimore, South Uist', PSAS, 93, 1959–60: 135–73.
- Young, M. (2002) A Consideration of the Use of Space in a Late Iron Age Figure-of-Eight Domestic Dwelling at Bostadh Beach, Isle of Lewis, Edinburgh, MA Dissertation, Edinburgh University Hons. Archaeology.

INDEX

Abercromby, J. 14	Allt Cill Chriosd, Mull, Argyll 177
Aberlemno, Angus 254, 297–8	Alt Clut see Dumbarton Rock
Abernethy culture 143	Alyth Burn, Perthshire 130
aceramic communities 8, 27, 45, 68, 180, 357	Ammianus Marcellinus 302
A' Cheardach Bheag, S. Uist 254, 305, 310, 351	Anderson, J. 14, 294-5, 302, 330
A' Cheardach Mhor, S. Uist 254, 305, 323, 351	An Dunan, Lewis 167, 351
Achnahaird, Wester Ross 185	Angles, Anglian settlement 4–5, 253, 257–8, 266,
Achtercairn, Weser Ross 185	270–5, 277–80, 352, 354
Ackergill, Caithness 284	Anglo-Saxon Chronicle 257
Acklem, Yorkshire 35	animal husbandry see pastoralism
Ad Gefrin 271; see also Yeavering	An Sean Dun, Mull, Argyll 173
Adomnán 327–9	Arbory Hill, Lanarkshire 101, 103
Aesica brooch 223–4	archaeomagnetic dating, see chronology
Agricola 64, 237	Archwood Hill, Dumfriesshire 84
agriculture 9–12, 27, 32, 47, 51–2, 56, 58, 60,	Ardestie, Angus 126, 247, 254, 291–3
62, 65, 82, 97–8, 118, 124–5, 133, 142, 163,	Ardifuar, Argyll 254, 324–5
172, 175, 180, 198–9, 203, 210, 214–15, 217,	Ardnave, Islay, Argyll 324
219, 227–8, 248, 257, 266, 291, 345, 356–7;	Ardownie, Angus 248
arable 28, 32, 51, 65, 212, 342–3; mixed 28,	Armit, I. 91, 125, 161, 164, 248–50, 304, 310, 312,
41, 47, 98, 134, 163, 171, 213; cord-rig 78–9,	344, 348
81, 89, 98, 101–4, 129, 234; intensification/	armlets: glass 183, 232, 238; massive 109, 241-3,
extensification of 11, 42, 54, 56, 97, 100,	295; spiral knobbed 144, 243; spiral snake 144,
103, 215, 237, 343, 357; see also cereal	241–3; see also bangles, bracelets
cultivation, field systems, linear earthworks,	Arras, Yorkshire 34–5
lynchets, pastoralism, terraces, trackways,	'Arras culture' 6, 9, 34–42, 213
transhumance	Auchlishie, Angus 125
Aird Quarry, Castle Kennedy, Wigtownshire	Auchterforfar, Angus 254, 282
55, 77	auk, great 310
Alcock, E. 174	Auldearn, Morayshire 244
Alcock, L. 174, 258, 287, 289, 303, 327	Avaricum 110
Aldborough, Yorkshire 25–6	axes: bronze socketed 29, 31, 67, 161, 182; mould
Aldclune, Perthshire 75, 131–3	for 180, 182; iron socketed 174; lead 60
Aldro, Yorkshire 28	Ayton, Berwickshire 84–5
All Cannings Cross, Wiltshire 167	
Allen, J. Romilly 294	Bac Mhic Connain, N. Uist 305-6
Alloa, Clackmannan 106, 350, 356	Bailiehill, Dumfriesshire 83, 229-31, 233

394 Index

Balbridie, Aberdeenshire 274, 293 Blagdon Park, Northumberland 26, 56, 58–9 Ballacagen, Isle of Man 122, 124, 263 Blair Drummond, Stirlingshire 143, 352 Ballanoris, Isle of Man 263 blanket peat 10 Ball Cross, Derbyshire 60 blockhouses see hillforts/forts; gatehouse/ Ballinderry, Co. Offaly 263 blockhouse forts Balloan Park, Inverness 142 bog bodies 68 Balloch Hill, Argyll 75, 175, 178 Boltby Scar, Yorkshire 49–50 Bonchester Hill, Roxburghshire 77, 79, 253-6 Ballyedmond, Co. Galway 246 Ballykinvarga, Co. Clare 86 bone implements 180, 357; antler 'cheek pieces' Ballymeanoch, Argyll 177 182; awls 144; counter 184; handle 184; Ballymoney, Co. Antrim 246 needles 82, 167, 182; pins 144, 182, 184, 333; Ballywilline, Argyll 175 weaving combs (composite) 167, 262, 333, 336; Balmaclellan, Kirkcudbrightshire weaving-combs (long-handled) 82, 171; whistle bangles, Roman glass 51-2, 237; see also armlets, 182; -working 245 bracelets Boonies, Dumfriesshire 26, 93–4, 232, 348 Bankhead of Kinloch, Perthshire 284 Borenich East, Perthshire 129, 131 Borgadel Water, Argyll 173 Bann disc 221 Bannockburn, Lower Greenyards, Stirlingshire 55, Borve, Lewis 10 Bostadh, Great Bernera, Lewis 12, 254, 320-1, 323 Barber, J. 99, 328 Bowmont valley, Roxburghshire 74 Barclay, G. 250 Boysack Mills, Angus 283 Barean loch, Kirkcudbrightshire 96, 262 Bozeat, Northamptonshire 207 Bargany House, Ayrshire 108 bracelets: gold 67; glass 232; Hallstatt type 28-9; Barhapple Loch, Wigtownshire 96 jet 31-2, 120, 144; lignite 29, 31-2, 144, 180, Barmekin of Echt, Aberdeenshire 117 182; shale 31, 167, 286; silver 282; see also Barrett, J. 344 armlets, bangles Barr Iola, Argyll 176 Bracken Rigg, Teesdale 52 Barr Mor, Argyll 176 Bradley, R. 198, 273 Barvas, Lewis 166 Braehead, Govan, Lanarkshire 109-110 basketry 21 Bragar, Lewis 75 Beadlam, Yorkshire 201-4 Braidwood, Midlothian 74-7, 89, 91-2 beads 119, 171, 182-3, 357; amber 183; blue glass Branigan, K. 203 178, 182, 253; class 8, 13, 14, 132, 144, 295; Breeze, D. 217 dumb-bell 182, 326; group 6, 47; melon 232; Bridle-bits 36-7, 121, 244; derivative three-link/ yellow glass 132, 174 straight bar type 219-20; iron two-link 184; see bear carving 312 also harness equipment Brieryshaw Hill, Dumfriesshire 84 Beattock Hill, Dumfriesshire 84 Bede 17, 257, 270-1, 273, 277, 349 Brigantes 5, 16, 25, 62, 199, 208, 213, 217, 257, Beeston Castle, Cheshire 67 301-2, 347; economy 27; types 107 Beinn a Chaistel, Argyll 177 Brigantia (goddess) 25 Beirgh, Riof, Lewis 12-13, 75, 153, 165-8, 254, Brigantia (territory) 25, 216, 219, 221, 224, 257 310, 312-13, 315, 317-23, 336-7, 345, 349 briquetage 52, 212 Belgae/Belgic 160, 197 Britons, Britanni 5, 17 Belling Law, Northumberland 58, 90, 93, 229 Broadford, Skye 184 Bell Slack, Yorkshire 42 brochs 4, 6–7, 9, 13–15, 22, 121, 145–66, 171–2, Ben Griam Beg, Sutherland 116 183-4, 186, 188, 235, 304, 306, 312, 314, 317, Bersu, G. 6, 121, 124, 263 330-3, 343-5, 348-9, 356, 359; broch 'villages' Bevan, B. 41 153-4, 172, 332-3, 342, 344, 356; groundgalleried 156-7; lowland 229, 235-7, 240; Beveridge, E. 157, 159, 306 Birnie, Moray 13, 75, 137, 139, 142, 244, 294, 346 solid-based 156-7; scarcements 146, 157, 165, Birrens, Dumfriesshire 229, 270 186, 189, 191, 313, 319; semi-brochs 157; see also Birsay, Orkney 254 crannogs, duns, houses Blackbrough Hill, Roxburghshire 77 Brodie, Morayshire 297 Blackburn Mill, Berwickshire 107, 245 bronzeworking 4, 117, 139, 161, 178, 180, 314, Black Loch, Inch, Wigtownshire 262 317, 357, 359; crucibles 13, 117, 119, 167, 180, Black Loch of Myrton, Wigtownshire 75, 97 182-3, 258, 263, 321, 328; moulds 13, 161, Black Spout, Perthshire 75, 131-2 163, 180, 182, 183, 257-8, 263, 285-6, 323,

Burwens, Westmorland 72, 257 336; slag 180, 328; see also metalworking, iron technology Buteux, S. 334 brooches 239-40, 282; annular 256, 263; Butser Ancient Farm, Hampshire 345 dragonesque 21, 223-4, 237, 239; fan-tailed 223-4; headstud 239; involuted 39; La Tène 3, Cadbury Castle, Somerset 17, 198 21, 39, 79, 143, 174, 182; Marzabotto type 39; Cademuir, Peeblesshire 86-8 penannular 106, 133, 167, 232, 257, 286, 321, Caesar, Julius 17, 20, 27, 40, 110, 186, 197, 219, 326, 328, 333, 336; trumpet 223-4, 233, 239; 301, 347, 353 with Plastic Style ornament 178 Cahercommaun, Co. Clare 318 Brough Law, Northumberland 80 Cairnmuir, Peeblesshire 108, 351 Brough-on-Humber, Yorkshire 26, 40 Cairnpapple, West Lothian 106 Broughton Knowe, Peeblesshire 106 cairns, clearance 129 Brown Caterthun, Angus 75, 117-19 Cairns, South Ronaldsay, Orkney 163-4 Broxmouth, East Lothian 74-5, 77, 80, 82, 89, 91, Caisteal a' Mhorair, Lewis 326 93-4, 105, 107, 268, 286, 342, 356 Caisteal Suidhe, Cheannaidh, Argyll 173 Caledones 27, 237, 301-2 Bruce, J. 161 Bruen Stapleford, Cheshire 26, 65-6 Calf of Eday, Orkney 161, 309 Bruthach a Tuath, Benbecula 308 Camaslaich, Seil, Argyll 156 Bryher, Scilly 19 Cameron Bay, Loch Lomond, Dunbartonshire 75, bucket, iron bound wooden 213 135 - 6Bugthorpe, Yorkshire 35, 38, 350 Camp Tops, Roxburghshire 74, 76 Buckquoy, Orkney 320, 334 Campbell, E. 266 Camulodunon 62 Buiston, Ayrshire 254, 260-3, 266 bull carvings 290, 295 Caracalla 248 bullion-based economy 240; see also market Carlingwark, Kirkcudbrightshire 107, 245–7 economy, monetary economy Carlisle, Cumbria 217, 257 Bunbury Camp, Staffordshire 60 Carloway, Lewis 75, 146-7, 153, 342 Bunrannoch, Perthshire 242 Carlungie, Angus 126, 247, 254, 291-3 Bu, Orkney 75, 160-1, 163 Carn Dubh, Perthshire 129 Burgess, Colin 28 Carn Liath, Sutherland 254, 314-16, 329-30 Burghead, Morayshire 110, 165, 254, 289-91, 295, Carradale Point, Argyll 178, 181 299, 351 Carriden, West Lothian 237 Burgi Geos, Shetland 75, 191-2 Carrock Fell, Cumbria 26, 68-9, 107, 116 burials 4, 7, 9, 15, 19, 21, 34-5, 39, 46, 105-7, 143, Carronbridge, Dumfriesshire 44, 93, 232–3 167, 209, 241, 281–5, 299, 350, 352, 355–6; Cartimandua 16, 208 Carvetii 25, 217 animal 21, 167, 309-10; Anglian 278; barrow-41, 50, 71, 281; bucket- 213; cairn- 143, 270, Casey, J. 244 cashels 15 281, 356; chariot/cart 7, 19, 34–7, 39, 50, 106, 213, 352; cist- 105-6, 108, 268, 281; cremation Cassius Dio 27, 244, 248, 302 21, 213; curation 143, 350; 'dumb-bell' 282; Castercliff, Lancashire 67 excarnation 310, 350-1; fragmentation 105, 'castle complex' 6 350, 356; Hallstatt 21, 28; 'horned cairn' 282; Castle Eden, Co. Durham 278 infant's 34; La Tène 21; lintel-grave 267; Castle Head, Lancashire 67 Castle Hill, Almondbury, Yorkshire 26, 62, 113 log-coffin- 268, 284; long-cist- 270, 282-3; massacre 60, 62; mirror 19; pit- 39, 282; round Castle Hill, Scarborough, Yorkshire 26, 28–9 barrow 33, 258 283-4; 'simple' or 'dug' graves Castle Law, Abernethy, Perthshire 75, 110-11 270, 281, 283, 356; square barrow 33-4, 41-2, Castle New, Strathdon, Aberdeenshire 242 50, 258, 270, 283-4; 'warrior' 19, 34-5, 38-9, Castle O'er, Dumfriesshire 26, 75, 83, 229–33, 341 Castle Point, Troup see Cullykhan 106, 278; Welwyn type 21, 197; see also bog bodies, cemeteries Castlesteads, Midlothian 98-101 Burland, Shetland 186-8 Catcote, Hartlepool, Co. Durham 56–7 Burnmouth, Berwickshire 105, 108, 247 Catstane, Midlothian 268 Burnswark, Dumfriesshire 26, 75, 80, 82-3, Catterick, Yorkshire 26, 45, 257 233-4, 341 cauldrons 107, 246-7, 357 Burradon, Northumberland 26, 58, 93, 233 Cavers, G. 96 Burrian, N. Ronaldsay, Orkney 309 caves 181, 184, 245 Burton Fleming, Yorkshire 35, 39 Cawthorn Camps, Yorkshire 35, 96

climate 6, 10, 28; deterioration 10, 15, 62, 103, Ceann nan Clachan, N. Uist 323 Celts, Celtic 17-19; languages 352; La Tène art 116, 342 Close-Brooks, J. 286 21, 219, 350; 'Celtic paradigm' 20 Close ny chollagh, Isle of Man 188, 318 cemeteries: Anglian 278; 'Arras' 34-42, 350, Cnip, Lewis 12, 75, 254, 305, 306–8, 310, 314, 352, 356; Champagne 34; cairnfield 103, 106; Hallstatt 28; long-cist- 6, 266-70, 281-2, 350, 321, 351 Cnoc a' Chaisteal, Lergychoniebeag, Argyll 173 354, 356; square-ditch barrow- 7, 34-42, 283-4; see also burials Cnoc Araich, Argyll 177 cereal cultivation 10-11, 22, 27, 47, 51-2, 54, 56, Cnoc na Sroine, Argyll 176 58, 65, 103, 124, 209–10, 212, 263, 289, 356–7; coins, coinage 20, 198; absence of 27, 198; Angloards 263; barley 56, 127, 163, 184, 263; barley Saxon 270; distributions 200; hoards 244 monoculture 11, 357; emmer 11, 56; grain Coggins, D. 52 storage 30, 42, 47, 124, 127, 163, 184, 250; oats Coile a Ghasgain, Skye 183 263; spelt 6-7, 11, 56, 213; see also agriculture Colchester, Essex 198, 212 chain mail 247 Collingwood, R. G. 15, 68, 71, 227 chains, silver 240, 296, 301, 303, 355 Collingwood, W. G. 72 colonia 200, 202 Challis, A. 27, 29, 40, 62 Chapman, S. 63 Columba 266, 328-9 chariot/cart burials see burials Constantine's Cave, Fife 245 Charles-Edwards, T. M. 347 Cook, M. 117 Chatto Craig, Roxburghshire 260 Cool, H. 107, 208 Chesters, Drem, East Lothian 75, 85-6, 98-9; see corbelling 164, 247-8, 306-8, 311, 317-18, 323; also Drem partial 317-18, 321, 323 Chesters, Spott, East Lothian 82-3 Corbie Cleugh, Northumberland see Wether Hill chevaux-de-frise 68, 86-7, 191-2 Corbridge, Northumberland 217, 257 Cheviot Quarry, Northumberland 273 cord-rig see agriculture Childe, V. G. 5, 8, 14, 17, 110, 112–13, 115, 132, core-periphery model 357-8 143-4, 160-1, 171, 174, 324, 354 Corieltauvi 27, 62, 199 Cork horns 221 chisels 29, 120 Chorley, Lancashire 223 Corsehope Rings, Midlothian 77 Christianity/Christian sites 266-70, 297, 299, 326, courtyard houses see houses 328-9, 354, 356 Cowlam, Yorkshire 34-5, 39 chronology 3-5, 9, 15-16; archaeomagnetic Coxhoe, Co. Durham 54, 56 dating 113, 174, 312; dendrochronology Craigie, Dundee 281 262; historical dating 16; optically-stimulated Craig Phadrig, Inverness 114, 117, 254, 285 luminescence 312; radiocarbon dating 16, 27, Craigmarloch Wood, Renfrewshire 117 45, 60, 62, 65, 70, 80, 82–3, 85–6, 89, 91, 93, Craik Moor, Morebattle, Roxburghshire 74 Cramond, Midlothian 237 96–7, 113, 117, 119, 124–5, 132–3, 137, 163, 165-6, 172, 175, 184-5, 212, 227, 231-2, 260, crannogs 6, 95-7, 109, 133-6, 260-3, 328, 342; see 262, 268, 273, 277, 281-2, 290, 294, 312, 314, also brochs, houses 321; thermoluminiscent dating 45, 57, 60, 62, Crawford, I. 314 113, 115-17, 174, 260 Crawford, O.G.S. 9 Church Close, Hartlepool, Co. Durham 270 Craw Stane, Aberdeenshire 299 Crawthat Hill, Dumfriesshire 103 Cill Donnain, S. Uist 309, 314 civitas/civitates 25, 196-7, 199-200, 216-17 Cree, J. 86, 238 Clack, P. 214 Creighton, J. 197 Cladh a' Bhearnaig, Kerrera, Argyll 329 Crock Cleugh, Roxburghshire 229, 256 Cladh Hallan, S. Uist 14, 167 Cromar Wood, Cannich, Inverness-shire 185 Clarke, D. 295 Crone, A. 262 Clatchard Craig, Fife 254-5, 285-6 Cronk Sumark, Isle of Man 260 Claudian 301 Crosby Garrett, Westmorland 26, 70 Claudius 197 Crosby Ravensworth, Westmorland 70-1, 246 Clava, Inverness-shire 143 cross: pectoral 278; sculptural stone 280; slabs of Cleave Dyke, Yorkshire 49-50 Class II 289 Clettraval, N. Uist 254, 304-5, 308, 323 Crosshill, Penrith, Cumbria 70 Crosskirk, Caithness 75, 165, 330 Clickhimin, Shetland 75, 150, 161, 189-91, 334 clientship 20, 25, 196, 216, 266, 343, 347 Croy, Dunbartonshire 237

crucibles see bronze-working Dun Aengus, Inishmore, Co. Galway 86, 188 Cruden, S. 238 Dunagoil, Bute 75, 112-13, 178-82, 337 Culbin Sands, Morayshire 144, 242 Dun Ailinne, Co. Kildare 49 Culduthel, Morayshire 13, 75, 139-42, 346 Dun Aisgain, Mull, Argyll 156 Dun an Ruigh Ruaidh, Ross-shire 149, 184-5 Culhawk, Angus 75, 125–6 Cullykhan, Baffshire 119-20 Dun an Sticer, N. Uist 156, 342 Culswick, Shetland 150, 152 Dunan an t-Seasgain, Gigha, Argyll 176 Dun Ardtreck, Skye 159 Cults Loch, Wigtownshire 96 Cunliffe, B. 41, 198 Dun Ballymeanoch, Argyll 173 Dunbar, East Lothian; Castle Rock 254, 271, Curle, A. O. 77, 86, 161, 238-9, 257, 330 Cyderhall, Sutherland 127, 250 276-8; Lochend 105; 'warrior' burial 106, 356 Dun Beag, Struan, Skye 75, 183 Dun Beag, Torrin, Skye 326 daggers, wooden 232 Dun Bharabhat, Cnip, Lewis 7, 144, 155, 165-7, Dalladies, Kincardineshire 75, 125–6 Dall Bay, Loch Tay, Perthshire 75, 135–6 169–70, 310, 321, 351 Dalmahoy, Midlothian 254, 258-60, 287, 326 Dun Boreraig, Skye 155 Dun Breac, Ardvergnish, Argyll 176 Dalmeny, Midlothian 278 Dál Riata, Dalriadic settlement 4, 108, 295, 299, Duncan, A.A.M. 349 303, 327, 353-5 Dun Chonallaigh, Argyll 180 Dalruzion, Perthshire 129-30 Dun Chroisprig, Islay, Argyll 156 Dalton-on-Tees 202, 209-10 Dun Colbost, Skye 155 Dalton Parlours, Yorkshire 26, 42, 44-5, 47, Dun Cuier, Barra 254, 315, 323 202-4, 209 Dun Cul Bhuirg, Iona, Argyll 180 Danebury, Hampshire 42 Dun Dornadilla, Sutherland 150, 152 Danes Graves, Yorkshire 35, 40 Dun Dubh Cathair, Inishmore, Co. Galway 86 Deer Park Farms, Co. Antrim 318 Dundurn, Perthshire 254, 258-9, 287-9, dendrochronology see chronology 327, 341 Dent, J. 34 Dun Fhinn, Argyll 174, 254, 325-6 Deskford, Banffshire 247 Dun Fiadhairt, Skye 183 Devils Hill, Heslerton, Yorkshire 30, 32 Dun Foither, Aberdeenshire 303 Dicalydones 302 Dun Glashan, Argyll 174 diffusionism 14-15, 28, 74, 80, 143, 150, 157, 278 Dun Grugaig, Skye 254, 325-6 Diodorus Siculus 17 Dun Hallin, Skye 155 Diviciacus 353 Dun Hanais, Tiree, Argyll 156 Dobcross Hall, Cumbria 70 Dun Heanais, Tiree, Argyll 156 Dobson, B. 212, 217 Dun Ila, Skye 326 Dobunni 199 Dunion, Roxburghshire 260 Dockrill, S. 344 Dun Lagaidh, Wester Ross 75, 112, 184 Doon Hill, East Lothian 254, 272, 274, 293 Dun Leigh, Argyll 173 Dorman's Island, Wigtownshire 96 Dun Mac Sniachan, Argyll 175 Douglasmuir, Angus 75, 89, 91-2, 124-5 Dun Mara, Lewis 186–7 Drax, Yorkshire 203 Dun Mhadaidh, Mull, Argyll 177 Drem, East Lothian 99; see also Chesters Dun Mor, Vaul, Tiree, Argyll 75, 153, 155, 157, dress 21 170, 172, 180, 183, 309, 314–15, 324, 337 dress fastener 237 Dun Mucaig, Argyll 325-6 Dreva, Peeblesshire 86–7 Dun na Cleite, Tiree, Argyll 181 Driffield, Yorkshire 41 Dun na Maraig, Argyll 178 drinking service 21, 219, 241 Dunnicaer, Aberdeenshire 254, 291 Drumturn Burn, Perthshire 129 Dunnideer, Aberdeenshire 114, 116-7 Dryburn Bridge, East Lothian 55, 75, 89, 91-2, Dun Ormidale, Argyll 177 94, 105 Dun Pharuig, Skye 326 Dryden, Sir Henry 191 Dunragit, Wigtownshire 257 Dumbarton Rock, Clyde 254, 258, 264 Dun Rostan, Argyll 156 Dumbuck, Dunbartonshire 75, 136 duns 6-7, 14-15, 133, 145, 172-5, 184-5, 236, Dumyat, Stirlingshire 254, 286, 302 286, 324-6, 330, 359; 'dun enclosures' 175-6;

'dun houses' 173-4, 177; galleried duns 153,

161, 165, 173, 324; island duns 7, 145, 153,

Dunadd, Argyll 176, 254, 256, 258-9, 263, 266,

287-9, 323, 326-7, 341

398 Index

Falkirk, Stirlingshire 244

farming see cereal cultivation, pastoralism

Fasset Hill, Morebattle, Roxburghshire 256 156-9, 165; see also houses; Atlantic round-houses, crannogs Faverdale, Darlington 213-4 Dunsinane, Perthshire 286 Feachem, R. W. 77, 161, 178, 258, 260, 286-7, 327 Dun Skeig, Argyll 175, 184 Fearnan, Loch Tay, Perthshire 136 Dun Telve, Glenelg, Inverness-shire 75 Fell of Barhullion, Wigtownshire 87 Dun Torcuill, N. Uist 155 Fenton Hill, Northumberland 91 Ferry Fryston, Yorkshire 35-6 Dun Totaig, Skye 325 Dun Troddan, Glenelg, Inverness-shire 75, 149-51 field systems, field boundaries 27, 56, 62, 64, 70, Duntroon, Argyll 175-6 89, 97-8, 103-4, 119, 199, 237, 342; see also Dun Vulan, S. Uist 12, 75, 160, 165, 254, 320, 323 dykes, linear earthworks, lynchets, terraces Durotriges 198-9, 219, 221 Finavon, Angus 110, 112-16, 144 dyer's madder 263 Fin Cop, Derbyshire 26, 60, 62 dykes, dyke systems 49-51, 72; see also field Fingland, Cumbria 70 systems, linear earthworks, lynchets, terraces fish, fishing 12, 134 Fitzpatrick, A. 14 ear-rings, basket-shaped 49 flax 263 East Brunton, Northumberland 56, 58 Fojut, N. 163 Eastburn, Yorkshire 35, 40 Forcegarth Pasture, Teesdale 52 Easter Kinnear, Fife 210, 254, 294 Forgandenny, Perthshire 110, 113-14, 116 Easter Rarichie, Easter Ross 185 Forres, Grantown Road, Morayshire 139 East Galdenoch, Wigtownshire 84 Forse, Caithness 254, 330-2 East Lomond Hill, Fife 285 Forteviot, Perthshire 254, 284 East Tullos, Aberdeenshire 112 forts, hillforts 6-7, 13, 22, 32, 41-2, 45, 47, Ebberston, Yorkshire 28 49, 60-2, 67, 77, 80, 98, 103, 105, 109-10, Ecgfrith 297 113-17, 175-83, 198-9, 227, 233-5, 253-60, Eckford, Roxburghshire 245 273, 285-7, 341-2, 351, 356; bivallation Eddisbury, Cheshire 26, 67 74, 178; casemate construction 113, 177–8; Eddius Stephanus 277 'causewayed forts' 117-9; citadel 258, 260, Ederline Pier, Loch Awe, Argyll 75, 133-4 286; cliff-edge 85, 185, 188; 'contraction' Edin's Hall, Berwickshire 235-6 model 175; 'developed' hillforts 41; with Edgerston, Roxburghshire 229 dump or glacis ramparts 50, 115, 119; 'Gallic' Eildon Hill North, Roxburghshire 26, 75, 80, 86, forts 110; gatehouse/blockhouse 163, 175, 88, 107, 238, 341 188-92; guard chambers 72, 178; hill-slope 84; Eileach an Naoimh, Garvellach Islands, Argyll medial walls 177-8, 184, 324; 'minor oppida' 308, 329 287; multivallation 74, 76, 85, 89, 120, 183, Eilean Olabhat, N. Uist 166, 323, 336 186, 188, 198, 229; murus duplex 177; murus Gallicus 110; nuclear 258-60, 287-9, 326-8, Einzelhof 121, 342; see also settlements; homestead 341, 354; 'oblong' 113-17; oppidum, oppida Elmet 257 68, 80, 86, 89, 177, 180, 198, 200-1, 210, 212, 341; promontory, headland 68, 119-21, 159, Elmswell, Yorkshire 221, 223 enclosure 342, 251, 256; 'dedicated' 342; 'implicit' 175, 185-8, 289-91, 341, 351; ring-fort 132, 342; progression/trend towards 7; see also forts, 286-7, 342-3; ring-work 32, 131, 134; stack settlements 185; with stone-revetted rampart 60, 62, 67, 80, 83, 115, 257; terrain 180-1, 183, 212; 341; Ephorus 17 epigraphy, epigraphic evidence 268 with timber-laced rampart 32, 60, 67, 83, 89, Eskbank, Midlothian 99 110, 112–13, 117, 119, 174, 177, 257–8, 285, Eston Nab, Yorkshire 26, 49 290-1; univallate 74; vitrified 109-10, 112-13, Eumenius 301 115-17, 119, 165, 174, 176-8, 180, 184, 257, Ewe Close, Westmorland 26, 71-2 258, 260; see also palisades; settlements Ewe Locks, Westmorland 72 Foshigarry, N. Uist 306, 308 experimental archaeology 345 Foster, S. 336 fosterage 343, 348, 351 Fairhurst, H. 150, 324 four- and six-post settings 34, 42, 45-7, 124, 137 Fairless, K. 52 Fox, Sir Cyril 15, 28 Fairy Knowe, Stirlingshire 235, 238, 240 Frere, S. S. 353

Frilford, Oxfordshire 200

Fulford, M. 239

Gabrantovici 25 hanging-bowl 263; escutcheon mould 285; Gadebridge, Hertfordshire 201 'hanging-bowl style' 117, 286 Garbeg, Inverness-shire 284, 299 Hanging Craig, East Lothian 99 Gargrave, Yorkshire 203 Hangingshaw Hill, Roxburghshire 89 Garphar, Dumfriesshire 84 Harehope, Peeblesshire 77 Garton Slack, Yorkshire 35 harness equipment 219, 229, 241; see also Garton Station, Yorkshire 35, 39 bridle-bits Gibb's Hill, Dumfriesshire 77–8, 89, 102 Harris, J. 129 Giles, M. 41 Haselgrove, C. 28, 42, 54, 95, 198, 212 Gillam, J. 248 Haverfield, F. 201 Gilmour, S. 318, 330 Hawkes, C.F.C. 6, 15, 28, 40, 223 Glamis, Angus 297 Hawkhill, Angus 129, 254, 282, 294 glass 15, 182, 239-41, 282; beakers 264, 278, Hawkhill, Fife 210, 294 289; boss with spiral ornament 289; bracelet Hayes, R. 51 232; post-Roman continental imports 264–5; Hayhope Knowe, Roxburghshire 26, 76–7, 89, Rhenish 257, 264; Roman 72, 82, 217, 284, 101, 341 337; window 270 Hayknowes, Dumfriesshire 44, 84 Gob Eirer, Lewis 188, 254 Hayton, Yorkshire 209 Gododdin 274; see also Votadini hearths 51-2, 93, 97, 125, 129, 132, 146, 161, Gododdin, Y 257, 277 184-5, 262, 267, 286, 294, 304-5, 312, 318-19, Gorhambury, Hertfordshire 200-1 324, 332, 334, 346 gouge, bronze socketed 29, 67 Hecataeus 17-18 grain storage see cereal cultivation Hedges, J. W. 153, 332 Grangemount, Perthshire 127–8 heirlooms 9, 14, 250 Grassington, Yorkshire 62, 64 Helmsdale, Sutherland 244-5 Grauballe Man 68 Henderson, I. 295 Gravlaba, Shetland 162 Henderson, Jon 134, 262 Great Ayton Moor, Yorkshire 51 henge monuments 273, 350 Great Chesters, Northumberland see Aesica Hengistbury Head, Dorset 198 brooch herbs 264 Great Tower Street, London 221 Herodotus 17 Heslerton Yorkshire 32, 41 see also Devil's Hill Great Woolden Hall, Lancashire 26, 65-6 Greaves Ash, Northumberland 227-8 Hetha Burn, Northumberland 228 hierarchy, social 4, 7, 20, 32, 86, 161, 171-2, Greenbank, Darlington, Co. Durham 278 Greenbrough, Roxburghshire 90, 342 183, 188, 200, 216, 258, 263, 266, 287, 342–4, Green Castle, Portknockie, Banffshire 254, 291 347 - 9.358Greenhillhead, Dumfriesshire 84 High Knowes, Alnham, Northumberland 26, 55, Greenlands, Yorkshire 41 76, 89-91, 341-2; cairnfield 106; Irish ring-Grimthorpe, Yorkshire 26, 32, 35, 38-9, 41 headed pin 106, 108 Guido, M. 47, 144, 295 High Pasture Cave, Skye 184, 350 Guinnerso, Lewis 166 Hill, J. 197 Gullane, East Lothian 105 Hill, P. 82, 93, 103, 229 Gurness, Orkney 75, 153-4, 164, 241, 254, Hilton of Cadboll, Ross-shire 297 318–19, 332–4, 337 Hingley, R. 88, 227, 343 Gussage All Saints, Dorset 49 hoards 32, 67, 107, 240, 244-5, 350-1, 359; see also Hacksilber 240 Hoddom, Dumfriesshire 254, 270 Hale, A. 136 Hod Hill, Dorset 198-9 Halkon, P. 40 Hodgson, N. 58, 227 Halliday, S. 88, 97, 103, 137, 235 Hogbridge, Peeblesshire 274 Hallow Hill, St Andrews, Fife 254, 281–2 Hogg, A.H.A. 186, 239, 257 halls see houses Hog Island, Fetlar, Shetland 188 Hallstatt culture 15; types 28, 32, 120, 357 Holme House see Piercebridge Hambledon Hill, Dorset 199 Hope-Taylor, B. 274 Hambleton Hills, Yorkshire 49–50 Hornish Point, S. Uist 310, 314 Hamilton, J.R.C. 149, 157, 160-1, 163, 188-9, horse-gear see harness equipment

Horsehope, Peeblesshire 32

308, 311

Houbie, Fetlar, Shetland 188 Huskie Rig, Peeblesshire 89 household 20, 217, 250, 342-3, 345 Hut Knowe, Hownam, Roxburghshire 75, 102-4 houses 13, 42, 47; aisled round-houses 306, 308, 310-12, 334, 349; 'barn house' 125-6, 137, Iceni 198 208; buttressing 271, 273; 'byre house' 91, 125, identity 20–2, 41, 107, 171, 196, 224, 245, 295, 137, 208; cellular/conjoined 3, 13, 52, 72, 167, 337, 342, 344, 349, 353, 357 Inchtuthill, Perthshire 120-1 186, 239, 256, 306, 311, 317–19, 321, 323–4, 332-4, 345; with central post setting 54, 73, 84, Ingemark, D. 241 206, 346; complex Atlantic round-houses see Ingleborough, Yorkshire 26, 62-3, 68, 107, 116, brochs; courtyard 314, 345; double-ring stone 341, 351 round-houses 127, 129-30; drainage ring-Ingleby Barwick, Cleveland 202, 208-9, 214 ditches 42, 45, 47-8, 51-2, 56-9; figure-of-Ingram Hill, Northumberland 80 inheritance 201, 232, 344, 348 eight/ventral 13, 48-9, 210, 306, 313, 318-21, 323, 330-2, 334, 345; Grubenhäuser 125, 210, 'interventionalist/non-interventionalist' model 273–8, 293; halls, 'Anglian' 270–5, 278, 291; 197, 353 invasions see diffusionism house platforms 116-17; interiors, division Inveresk, Midlothian 237, 239 of 273-4; linear buildings 308, 321, 330; log cabin 293; with median wall-faces 173-4; oval Iona, Argyll 254, 328-9 51, 256, 292-3; Pitcarmick 293; polygonal 65; Irby, Cheshire 65 post-ring 30, 41-2, 53-4, 56, 121-3, 125, 132, Ironshill, Angus 75, 92, 127, 129 137-8, 140, 142; radial construction 97, 124, iron technology 41; hammerscale 210; production 136, 139, 149, 262; radial division of space 52, 40, 50, 52, 119, 141-2, 245, 357; slag 161; see also 91, 161, 309; radial piers 161, 299, 304, 306, bronzeworking, metalworking 308-9, 311-12; rectangular/rectilinear 184, Isaac, G. 303 188, 199–200, 237–9, 256, 267, 286, 294, 323, 325-6, 328, 330-3, 343-4, 356; ring-ditch 55, Jackson, K. 303 65, 84–5, 89–93, 101, 119, 124–6, 137–42, 346; Jarlshof, Shetland 75, 161-4, 254, 306-8, 310-12, ring-groove 41-2, 45-6, 51-4, 56-7, 59, 66, 72, 314, 334 84, 91, 109, 121–3, 132, 209, 213, 231–3, 270; Jarrow, Co. Durham 270 round-houses 22, 41, 343, 356; timber 22, 82-3, jet 29, 52, 120, 185; see also lignite, shale Jobey, G. 54, 58, 72, 80, 91, 103, 227–9, 233, 260 93, 97, 201, 231; stone 13, 22, 51, 62, 67, 72, 80, 82, 93, 97, 129, 205–9, 227–9, 253, 256, 314–17, Jope, E. M. 40, 224 324, 330; 'shamrock' 318-19, 323, 333-4; sill-beam 65, 267, 271, 293; simple Atlantic Kae Heughs, East Lothian 98-9 round-houses 161, 166, 173-4, 185, 309; stake-Kaimes, Midlothian 86-7, 107 wall 51-2, 57, 97; 'strip houses' 217; sunken, Karl, R. 20 stone-revetted 127, 210, 294; sunken, sub-Kebister, Orkney 161 rectangular 210-11; turf roofing 308, 345; with Keiss, Caithness 330 two entrances 42, 44-5, 51, 65, 72, 83-4, 233; Kendrick, J. 93, 124 Votadinian 82, 93, 127; 'wags' 14, 323, 330-1, Kennel Hall Knowe, Northumberland 58, 90, 334; wall-trench 271-5, 277, 293; wheelhouses 93, 229 7, 125, 145, 172, 299, 304–14, 317, 321, 341, Kildonan, Argyll 174, 254, 324 343-5, 348; see also brochs, crannogs, duns Kilham, Yorkshire 34 Howe, Orkney 75, 153-4, 160-1, 163, 254, 332 Kilphedir, S. Uist 254, 305, 308 Howmae Brae, N. Ronaldsay, Orkney 309 Kilphedir, Sutherland 133 Hownam culture/sequence 6, 74, 77, 82, 110, kin, kinship 20, 58, 196-7, 232, 323, 342-5, 117, 119 347 - 9,356Hownam Law, Roxburghshire 75, 86, 88 Kincardine Moss, Stirligshire 246 Hownam Rings, Roxburghshire 26, 76-7, 80, 107, King, A. 63 227, 229, 253 Kinkell, St Andrews, Fife 245 Huckhoe, Northumberland 89, 256 Kintore, Aberdeenshire 75, 136-8, 141 Humbleton Hill, Northumberland 259-60 Kirkburn, Yorkshire 35, 38-9 Hunter, F. 237-8, 245 Kirkmadrine, Wigtownshire 266 Hunterston, Ayrshire 4 knife, tanged 67; handle 184 Huntfold Hill, Roxburghshire 85 Knock Scalbert, Argyll 175, 177-8 hunting 134 Knowes, East Lothian 94 Hurley Hawkin, Angus 121, 238, 240 Koch, J. 19

Lower Greenyards see Bannockburn Lagore, Co. Meath 263 Laikenbuie, Nairn 143 Luchruban, Lewis 326, 329 Laing, J. 295 Laing, L. 295 Lairg, Sutherland 133 Lamb, R. 191 Lane, A. 321, 323 Langbank, Renfrewshire 136 Langlaw Hill, Peeblesshire 106 Langton, Yorkshire 203 Langwell, Sutherland 149, 165, 174 Lanton Quarry, Northumberland 273 Largiemore, Argyll 177 MacKay, G. 99 La Tène culture 15, 18-19; types 357 Lathom, Lancashire 26, 65–6 Lathrisk, Fife 293 Latinus stone 266-7 lead 60, 62, 215, 264 leather working 180; shoes 328; worker's knife 29, 31-2; vessels 27, 357 Leckhampton, Gloucestershire 112 Leckie, Stirlingshire 149, 235, 240 Ledston, Yorkshire 26, 27, 47 Leeds, E. T. 276 Lethbridge, T. 308 Levisham Moor, Yorkshire 50-1 Lightcliffe, Yorkshire 62 lignite 144, 180; see also jet, shale Mason, D. 208 Lindow Moss, Cheshire 26, 68 linear earthworks 32, 41-2, 45, 49, 52, 98, 129, Matthews, K. 65 231, 235, 356; see also dykes, field systems, lynchets, terraces Maxwell, G. 293 Lingro, Orkney 153-4 Lisnacrogher, Co. Antrim 336 Litigan, Perthshire 131-2 Little Dunagoil, Bute 179-81, 254, 328 Little Waltham, Essex 65 Little Woodbury, Wiltshire 6, 49, 54, 121, 198, 201, 207, 342, 345-6 Llyn Fawr, Glamorgan 32 Loch an Duin, Shader, Lewis 75, 155-6 Loch an Duna, Bragar, Lewis 153, 157 Loch Arthur, Kirkcudbrightshire 96, 262 Loch Ceann Hulavig, Lewis 9 Loch Glashan, Argyll 254, 262, 328 Loch Heron, Wigtownshire 96 Lochlee, Ayrshire 254, 260-3 Loch of Huxter, Shetland 75, 189, 191 mirror 19, 37 Loch Raa, Wester Ross 185 Lockerbie, Dumfriesshire 275 log-boats 136, 261-2 Longbridge Deverill, Wiltshire 167 Long Knowe, Dumfriesshire 232 Longniddry, East Lothian 268 Longworth, I. 67 loom 171; -weights 276-7

Loughnashade, Co. Armagh 15, 108, 247

Luing, Ballycastle, Argyll 176 Lundin Links, Fife 254, 282 lynchets 97; see also dykes, field systems, linear earthworks, terraces McCarthy, M. 257 MacGregor, M. 221, 224 Machrins, Colonsay, Argyll 324 Macinnes, L. 236, 238-9 MacKie, E. W. 113, 153, 157, 160, 183, 309, 326, Maeatae 27, 237, 244, 248, 286, 302 Maelmin see Milfield Maiden Castle, Bickerton, Cheshire 67 Maiden Castle, Dorset 16, 198-9 Maldonado, A. 268 Mam Tor, Derbyshire 26, 60–1, 341 Mann, J. 301-2, 354 Manning, W. 245 mansio 217-18, 237 market economy 197-8, 216, 266; see also bullionbased economy, monetary economy Marlborough, Wiltshire 213 matrilineal system 349 Mattingly, D. 208 Meigle, Perthshire 297 Melsonby, Yorkshire 52-3, 57, 212-13, 219 Melton, Yorkshire 34, 223 Menteith, lake of 134 Mercer, R. 74, 83, 88, 212 metalworking 4, 13, 163, 257, 263, 323, 328; see also bronzeworking; iron technology Micklefield, Yorkshire 26-7, 45-7 Middlebie, Dumfriesshire 219 Midhowe, Orkney 153 Milfield, Northumberland 272-3, 276-8 Millett, M. 195, 197, 199, 226, 353 Milton Loch, Kirkcudbrightshire 26, 75, 95–6, 262 Mine Howe, Orkney 75, 164, 337, 351 Minsca, Dumfriesshire 84 Mither Tap of Bennachie 285 Moat Knowe, Buchtrig, Roxburghshire 254, monasteries, monasticism 266, 280, 328-9 Moncrieffe Hill, Perthshire 259 monetary economy 197, 216, 266, 354; see also bullion-based economy, market economy Monkwearmouth, Co. Durham 270 Mons Graupius 17, 226

402 Index

monumentality 3, 6-7, 13, 22, 41, 89, 125, 137, open settlements see settlements, unenclosed 141, 145, 178, 186, 235, 304, 317, 342, 344–5, oppida see forts, hillforts 349, 356 Orchard Rig, Peeblesshire 102 Morangie, Tarlogie, Easter Ross 185 Ousedale, Caithness 214, 216 Over Rig, Dumfriesshire 107, 231–2 Moredun, Perthshire 287 Morrison, I. 133 Mortonhall, Edinburgh, Midlothian 107, 356 Packwerk 96, 134 Moss Carr, Yorkshire 47–9 Paddock Hill, Thwing, Yorkshire 26, 32-4, 41 Mote of Mark, Kirkcudbrightshire 254, 257-8, palisades see settlements Palk, N. 219 263, 266 Mousa, Shetland 75, 146, 148, 153, 214-16 Parisii 40 Moynagh Lough, Co. Meath 263 Parkburn, Midlothian 254, 268 Mucking, Essex 32 Parker Pearson, M. 160 Mudhall, Perthshire 127 Park Law, Morebattle, Roxburghshire 256 Muir of Gormack, Perthshire 130 pastoralism/stock-raising 11–12, 27–8, 32, 50–2, 54, 83, 132, 134, 210, 212, 231, 233, 235, 257,municipium, municipia 200 Munro, R. 14, 136, 260, 262-3 289, 342, 356–7; cattle 12, 36, 41, 54, 56, 82, Must Farm, Cambridgeshire 134 91, 123, 132, 163, 212, 216–17, 231, 235, 263, Mycenae 16 271, 289, 309–10; horse 36, 219, 229, 244, Myres, J.N.L. 277 271; pigs 263, 289; red deer 12, 310; seal 310; Mytum, H. 266 sheep 54, 56, 132, 263, 289, 309-10; see also agriculture; field systems; linear earthworks; Navan, Co. Armagh 49, 358 transhumance Neal, D. 203 Pegswood Moor, Northumberland 26, 60 Nechtansmere 297 Peltenburg, E. 178, 324 Peniel Heugh, Roxburghshire 255 Nennius 277 Ness of Burgi, Shetland 75, 189, 191 Pennymuir, Roxburghshire 235 New Bewick, Northumberland 276 Percy Rigg, Kildale, Yorkshire 26, 49, 51 Newbridge, Midlothian 75, 106, 352 'personhood' 21 Newbridge Quarry, Yorkshire 210 Petillius Cerialis 16 Newhall Hill, Dumfriesshire 84 'Petrie crown' 221 Newmill, Perthshire 126-7, 248, 291 Petrus stone 270 Newstead, Roxburghshire 351 Pexton Moor, Yorkshire 35-6, 50 Nicolaisen, W. 301 Phantassie, East Lothian 94 Nieke, M. 174 Picti, Picts 4-5, 9, 238, 247, 258, 285, 291, 295, Ninian 266 301-3, 329, 334, 347, 349, 354-5 Norman's Law, Fife 286 Piercebridge, Co. Durham; fort 202, 214; Holme Norrie's Law, Fife 254, 336; hoard 240, 295, House villa 202, 203, 205-9; Tofts field 214; vicus 200, 217 Pierowall Quarry, Orkney 161 Norse settlement 3-4, 9, 161, 188, 291, 303, 323, 333-4, 336, 353-4 Piggott, C. M. 77, 79, 253 North Cave, Yorkshire 41 Piggott, S. 6, 12, 14, 27–8, 74, 107, 109, 133, 171, North Rona, Lewis 329 219, 245 North Straiton, Fife 127 Pilsdon Pen, Dorset 201 Norton in Teesside 278 Pimperne, Dorset 201, 345 pins 240, 357; bone 82, 167; bronze 167; crook-Oakbank, Loch Tay, Perthshire 75, 134 headed 79; disc-headed 121; hand- 301, 336; obsides 197 hipped 336; Irish type 106, 108; projecting ogham 284, 299, 334 ring-headed 143, 163, 171, 184; proto-hand-Olabhat, N. Uist 254 336; ring- 262; ring-headed 82, 143, 171, 182; Oldbury, Kent 198 yoke-shafted 82 Old Carlisle, Cumbria 202, 217-8 Pitcarmick, Perthshire 130, 254, 293 Old Durham, Co. Durham 209 Pitcur, Perthshire 247 Old Scatness, Shetland 13-14, 75, 150, 152, 160, Pit-names 279, 302-3 163, 171–2, 254, 295, 299, 306, 308, 311–12, Pitroddie, Perthshire 127 314, 334-5, 349 pits 27, 45-7; alignments 32, 41, 50, 58-60, olive oil 264 98-101, 270; burials 39, 46-7, 55; dwellings

195; storage 27, 42, 45, 47, 124, 184, 346; see also cereal cultivation; wattle-lined place-names 17-18, 25, 278-9, 302-3 Plean Colliery, Stirlingshire 112 Pocklington, Yorkshire 35, 39 Polybius 18 polygyny 343, 348 Pool, Sanday, Orkney 254, 299, 333 Pope, R. 124 Portfield, Whalley Lancashire 67 Port Seton, East Lothian 77 Posidonius 17 pottery 6-7, 13-14, 28-9, 31, 34, 49, 51, 63, 82, 107, 143-4, 167, 180, 184, 228, 232, 286, 310, 321–2; *amphorae* 221; Arretine 198; B-ware amphorae 264, 299; cauldron 34; Clettraval ware 21, 170, 172, 312; coarse barrel-shaped jars 68, 117; cordoned pottery 29, 31–2, 167, 312, 321-3; Dressel 1 amphorae 197-8; D-ware 257, 264; Dunagoil ware 117, 182; E-ware 9, 15, 133, 257-8, 263-5, 286, 289, 324, 328; everted rim pottery 312, 323; finger-tip ornament 28-9, 31-2, 58, 167, 330; Gallo-Belgic 198; Glastonbury ware 21; haematite slip 167; Huntcliffe ware 72; incised geometric ornament 167, 312; lid-seated 34; miniature pots 182; mortaria 213; Phocaean Red Slipware 264; 'plain wares' 28, 39, 321–3; Rhenish 289; Rhodian amphorae 212; Roman 51, 57, 71, 117, 274; samian ware 9, 72, 82, 201, 206, 212–13, 217, 223, 238-40, 285-6, 324, 326; Spanish amphorae 212, 241; Vaul ware 172; Very Coarse Pottery (VCP) 65; wheel-thrown 39, 198, 256; see also aceramic communities Poulton, Cheshire 65 prestige goods economy 229, 236-8, 357-8 Prestonkirk, E. Lothian 278 promontory forts see forts Ptolemy 17, 25, 40, 62 Purser, J. 247 Pytheas 15, 301, 358 Quanterness, Orkney 161 Queen's View, Perthshire 131–2

Quanterness, Orkney 161 Queen's View, Perthshire 131–2 querns 124, 132, 210; beehive 47–8; bun-shaped 185; discoid 171, 185; rotary 123, 263, 312, 328; saddle 47, 51, 54, 79, 97, 163, 175, 178, 286, 310, 312, 326 quern transition/replacement 171, 312

radial division of space see houses radiocarbon dating see chronology Raftery, B. 27 Rahoy, Morvern, Argyll 172–4, 324 Raistrick, A. 63 Rait, Perthshire 120 Ramm, H. 209

Ranachan Hill, Argyll 177, 183 Ratho, Midlothian 276-7 razors 31-2 Redcastle, Angus 254, 283-4 Redcastle, Beauly Firth 136 Red Craig, Birsay, Orkney 332 Reynolds, P. 103 Rezé, Loire-Atlantique 302 Rheged 256-8 Rhynie, Aberdeenshire 254, 299 'ribbon style' 289 Richmond, Sir Ian 25, 80, 199, 201, 234–5, 253 Riggs Farm, Yorkshire 40 rings: bronze spiral 143, 171, 182; gold spiral 263; Roman 282; shale, jet or lignite 182 Risehow, Cumbria 214 Rispain Camp, Wigtownshire 44, 83 Ritchie, A. 89, 115, 191, 299 Rivet, A.L.F. 62 Robertson, A. 244 Romankiewicz, T. 146 Romanno Bridge, Peeblesshire 280 Rosemount, Perthshire 120-1 Ross, C. 25 Roxby Moor, Yorkshire 44, 51 Rubers Law, Roxburghshire 254, 259-60 Rubh' an Dunain, Skye 159, 186, 191 Rubha na Beirgh, Shawbost, Lewis 186 Rudchester, Northumberland 101 Rudston, Yorkshire 34-6 Rullion Green, Midlothian 106 runic inscriptions 258

St Albans, Hertfordshire 200 St Blane's, Kingarth, Bute 328-9 St Cuthbert 278 St Germains, Tranent, East Lothian 77 St Joseph, J. K. 80 St Kentigern 270 St Martin of Tours 266 St Patrick 266 St Peter 270 salt 52, 65, 67-8 Salway, P. 353 Santon, Norfolk 223 scabbards see swords Scalloway, Shetland 314 Scamridge, Yorkshire 50 Scatness, Shetland 189, 191 Schliemann, H. 16 Scorborough, Yorkshire 34–6 Scord of Brewster, Shetland 10 Scots, Scoti 5, 302; see also Dál Riata Scotstarvit, Fife 75, 122-4 Scott, Sir Lindsay 160, 308, 312 Scott, P. 214 Sculptor's Cave, Covesea 75, 142-3, 245, 350

Index

Seafield West, Inverness 141–2 seal box 282	South Shields, Tyneside 53, 57, 101 spear-butts 108, 240, 336; doorknob type 336–7;
sea-level change 9-10	Lisnacrogher type 336–7; moulds for 182, 336–7
Sedgefield, Co. Durham 200, 202	'spear ritual' 39, 68
Selgovae 80, 86, 238	spears 19, 34, 39, 106, 184, 221
Setantii 25	spelt wheat see cereal cultivation
settlements: dispersed 27, 88, 136, 199, 216,	Spetisbury, Dorset 198
341, 344, 356; enclosed 13, 22, 52, 109, 342;	spices 263–4
embanked palisade 77, 80; homesteads 6, 52,	spindle-whorls 29, 67, 117, 119, 132, 143, 167,
54, 56, 58, 70–2, 80, 83–5, 89–90, 110, 121,	182–3, 286, 334
123, 132–4, 199, 227, 235, 253, 256, 263, 304,	spoons, bronze 108, 246–7
342–3, 345, 347, 356; 'ladder settlement' 42,	Spratt, D. 49–50
209–10; lake, lakeside 75, 97; linear enclosure	Sprouston, Roxburghshire 254, 272–4, 277
33; palisaded or stockaded 13, 28, 30, 32, 49,	Sròn an Duin, Bernerary 186
54–5, 67, 74, 76, 79–80, 82, 84, 89–91, 101–3,	Standingstone, East Lothian 94
109, 117, 119, 121, 127, 234, 271–4, 291;	Staney Knowe, Morebattle, Roxburghshire 256
'polyfocal' 213; polygonal palisaded 273-4;	Stanshiel Hill, Roxburghshire 89
scooped 84, 93-5, 103, 227, 232; unenclosed	Stanwick, Northamptonshire 208
or open 41, 45, 51, 54, 57–8, 60, 74, 77, 84, 89,	Stanwick, Yorkshire 16, 26, 56–7, 198, 203, 212,
94, 109, 124, 128, 139, 178, 210, 212–13, 342;	231, 341
unenclosed platform settlements (UPS) 103;	Staple Howe, Yorkshire 25, 28, 30–2, 89, 120
villages 58, 80, 90, 97, 134, 136, 153, 161, 304,	Stead, I. M. 40
356; Wandersiedlungen (shifting settlement) 32,	steatite 323
356; 'washing-line settlements' 209-11; see also	Stevens, C. E. 256
enclosure; forts	Stevenson, R.B.K. 14, 91, 108, 237, 258, 268, 285,
Severus 248, 302	287, 289, 295, 297, 312, 326, 336
Sgor nam Ban-naomha, Canna 329	Stevenson Sands, Ayrshire 108
shale 117, 121, 167, 286; see also jet, lignite	Stewart, M. 132
Shank End, Roxburghshire 256	Stichill, Roxburghshire 221–2, 352
Sharples, N. 82, 95, 160	Stirkfield, Peebleshire 89
Sheep Hill, Dunbartonshire 112	stone implements 357; cups 121, 132, 182–3;
shields 34, 39, 107	hammerstones 97, 143, 167, 174, 183; lamps
Shiptonthorpe, Yorkshire 209	150; perforated discs 324; polishing stones 143,
siegeworks 98, 233–5	167, 174, 324; pounders 117; strike-a-light 183;
Silchester, Hampshire 198, 212	weights, thatch or net 167; whetstones 117,
silk 264	143, 183, 324
Silloth, Cumbria 70	Strabo 17, 266
Sims-Williams, P. 18–19	stratigraphy 12–13
Simy Folds, Teesdale 52	Street House, Loftus, Cleveland 52–3
Skaill, Orkney 254, 309, 333	stringed instrument 184
Skelmore Heads, Lancashire 67	Studland, Dorset 200–1
slaves, slavery 62, 203, 266	Suessiones 353
sling bullets 233–4	Suetonius 198
Small, A. 290	Sulma Water, Shetland 162
Smith, Brian 163, 191	Sumburgh airport, Shetland 161–2, 171
Smith, J. T. 201	Sundhope Kip, Roxburghshire 85
Smyth, A. 257, 302, 349 Smythyrell, Combridgeshire 241, 351	Sutton Bank, Yorkshire 49
Snailwell, Cambridgeshire 241, 351	Sutton Common, Yorkshire 26, 42–3
Snape, Suffolk 203 Snattisham, Norfalk 108	Sutton Courtenay, Oxfordshire (Berkshire) 276 Sutton Hoo, Suffolk 289
Solles N. Hist 254 305 6 300 10 314 351	
Sollas., N. Uist 254, 305–6, 309–10, 314, 351	Sutton Walls, Herefordshire 198
souterrains 2, 93, 126–9, 161, 184, 195, 241, 247–50, 282, 291–3, 303, 308, 318, 325, 346.	Swandro, Rousay, Orkney 164 Swarthy, Hill, Cumbria 26, 70
247–50, 282, 291–3, 303, 308, 318, 325, 346;	Swarthy Hill, Cumbria 26, 70
function of 247–8, 250; proto or Dalladies type 125–6, 248, 283–4; proto (ring-ditch) 124	swords 19, 34, 37–9, 106, 247; Anglian 278; Ewart Park type 28; Group III 107; Group IV 107,
South Barrule, Isle of Man 68	219–21; Gündlingen 28; Late Bronze Age 161;
South Cave, Yorkshire 26, 221	scabbards 38; La Tène 1 chapes 39
,	- · · · · - · · · · · · · · · · · · · ·

symbol-stones 22, 294–9, 302, 354; Class I 258, 284, 294-5, 297, 299, 303; Class II 294-5, 297; Class III 294; symbol art 355 Tabular Hills, Yorkshire 49–50 Tacitus 16, 25, 231, 302 Taliesin 257 Tamshiel Rig, Roxburghshire 97–8 taphonomy 12-14 Tap o' Noth, Aberdeenshire 75, 113-14, 116, 341, 351 terraces, cultivation 74, 256, 278, 280; see also dykes, field systems, linear earthworks, lynchets terrets: Donside 109, 144, 241, 243-4; knobbed 220; platform 219-20 textiles 7, 21, 265; containers 27, 357; see also loom, loomweights Thainstone, Aberdeenshire 142 thatch/thatching 21, 308, 345 thermoluminescence see chronology Thirlings, Northumberland 272–3, 277 Thomas, A. C. 258, 266, 281 Thomas, Capt. F.W.L. 186, 308, 327 Thorneycroft, W. 112, 129 Thornybank, Dalkeith, Midlothian 254, 268, 270, 284, 293 Thorpe Thewles, Cleveland 26, 53, 56-7 Tigh Talamhanta, Barra 254, 304-5, 308, 312, 323 Tipping, R. 10 Tirefour Castle, Lismore, Argyll 155 Toftcombs, Lanarkshire 106 Toft's Ness, Sanday, Orkney 161, 309 Tom a Chaisteil, Argyll 173 Tombreck, Perthshire 132 Tollund Man 68 Topham Farm, Sykehouse, Yorkshire 42 torcs 219; beaded 143, 220-1; gold 143, 351-2; ribbon 143 Torr, Shielfoot, Argyll 175 Torrs, Kirkcudbrightshire 14, 108, 247 Torwoodlee, Selkirkshire 105, 235, 238 Tower Knowe, Northumberland 58, 90, 229 Toynbee, J.M.C. 224 trackways 32, 42, 47, 129, 256, 273, 342 trade 16, 28 transhumance 27, 62, 356; see also pastoralism Traprain Law, East Lothian 6, 75, 80, 86, 88, 94-5, 107, 238–41, 244, 254, 301, 337, 341, 351; hoard 240 Tress-Barry, Sir Francis 165, 330 troughs, stone 146, 304-5 Trusty's Hill, Anwoth, Kirkcudbrightshire 254, 258, 266 Tulloch Field, Enochdhu, Perthshire 129 Tungadale, Skye 184 Turin Hill, Angus 113, 115, 286

tweezers 31, 182, 321

Udal, N. Uist 254, 314, 321, 323 Upton, Northamptonshire 276–7 urbanization 199, 238, 354 Urien 257 Urnfield types/culture 4, 15, 19 Urswick Stone Walls, Lancashire 67, 72 Usinish, S. Uist 308

Vallum 217 van der Veen, M. 11, 56 Varley, W. 62 vehicle fittings 36-7, 40 Veneti 186 Venutius 16 Verona List 302 Verturiones 302 Vespasian 16 vicus, vici 200, 213, 216–19, 239 villas 65, 195-6, 200, 202-9, 213; aisled 200-1, 203, 209; corridor 200; 'cottage' 201, 203-4, 206; courtyard 200; halled 200-1; unit 201, 203; winged corridor 200, 203, 209 Vindolanda 219 vitrification 22, 67, 112-13 Votadini 80, 86 votive deposits 245-7, 282, 310, 314, 350, 357

wags see houses Wainwright, F. T. 247-8, 250, 291 Wait, G. 106 Waitby, Westmorland 72 Warner, R. 248 Warton Crag, Lancashire 67 Watkins, T. 248, 250, 291 Watson, W. 129 Wattle Syke, Yorkshire 26, 209-11 weaving 21, 171, 263, 276-7 Webster, J. 196 wells 113-14, 161, 164-5, 290 West Brandon, Co. Durham 26, 53-5, 90 West Brunton, Northumberland 26, 56, 58-9 West Plean, Stirlingshire 75, 121-3 Wether Hill, Northumberland 80, 93 Wetwang Slack, Yorkshire 19–20, 34, 37–9, 41 Wetwang Village, Yorkshire 37 Wheeler, Sir Mortimer 16, 25, 57, 84, 212–13 wheelhouses see houses whetstones see stone implements Whitebridge, Inverness-shire 284 White Caterthun, Angus 75, 119 Whitecleugh, Lanarkshire 295 Whitekirk, East Lothian 274-5 White Meldon, Peebleshire 88 Whithorn, Wigtownshire 254, 257, 264, 266–8, 270 Whitley Castle, Alston, Cumbria 202, 215 Whittaker, C. 225 Whittingehame Tower, East Lothian 94

406 Index

wicker baskets 27
wildfowling 134
Willis, S. 208
Wilson, Daniel 14, 302
Wiltrow, Shetland 162
Wincobank, Yorkshire 60
Winterton, Lincolnshire 202, 207
Winton House, East Lothian 268
Woden Law, Roxburghshire 26, 75, 80–1, 98, 101, 233–5
Woden Law East, Roxburghshire 101–2

Woden Law East, Roxburghshire 101–2 Wolsty Hall, Cumbria 26, 44, 72–3 Woodbury/Stanwick economies model 28 Woodend, Dumfriesshire 85, 233 woodland, clearance 65, 97, 356; management 150; regeneration 10–11, 150, 257 Woolley, Sir Leonard 16 Worsley, Manchester 68 Wraxall. Somerset 221

Yanwath Wood, Cumbria 72 Yarrows, Caithness 315, 330 Yeavering, Northumberland 254, 271–4, 278, 293 Yeavering Bell, Northumberland 75, 86, 273, 351 Yetholm, Roxburghshire 107 York 293, 210