

ASPECTS OF THE LATE ATLANTIC IRON AGE

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VOLUME I

Thesis submitted in accordance with the requirements for the degree  
Doctor of Philosophy in the Faculty of Arts of the University of  
Glasgow, September, 1989. © Sally M Foster, 1989.



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## ACKNOWLEDGEMENTS

The germ of this project (part II) was suggested to me by my supervisor Professor Leslie Alcock. I have him to thank for encouraging me to come to Glasgow in the first place and for all the very hard work he has put into improving all aspects of this and other work which I have subsequently produced. Credit for the directions in which this work ultimately led (parts I and III) must go to him and other colleagues and friends in the department who provided a stimulating, testing, yet friendly environment in which to work, particularly John Barrett, Dr Stephen Driscoll, Pam Graves and Ross Samson. In addition I am grateful to them for their comments on parts of this text. Throughout Dr Euan MacKie has kindly allowed me access to his data, but in particular he has also been a valuable source of stimulating discussion, constantly pushing me to clarify my thoughts.

Chapter 10 has largely appeared in print (Foster 1989a and b) after benefiting from much thorough and helpful criticism from the editors (Chris Chippindale and John Barrett), anonymous referees and colleagues.

In the course of this research I have had the pleasure of coming into contact with many archaeologists, other professionals and various members of the public who have, with the exception of Iain Crawford, warmly given me access to data and artefacts and/or ideas, and/or advice, and/or comments on specific sections of text. I am grateful to them all: Dr Marion Scott for spending a considerable period of her time on my C-14 statistics, Dr Tom Aitchison for lending the programme she used; Deborah Kennedy, Amanda Clydesdale and Jim Spriggs; Ian Armit, Prof D W Harding, Dr P Topping, Dr Ian Ralston and Roger Mercer (Edinburgh University); John Barber (AOC); Iain Banks, Alan Leslie, Nick Aitchison, Tony Pollard, Dr Alex Morrison and Dr Liz Slater (Glasgow University); Dr Colleen Batey and Dr James Graham-Campbell (University College London); Bernard Bell; Anne Brundle (Tankerness House Museum, Kirkwall); Simon Buteux (Birmingham University Field Archaeology Unit); Joanna Close-Brooks; Trevor

Cormac  
Bourke  
(Ulster  
Museum)

Cowie, Dr Mike Spearman, Dr Alison Sheridan and Ian Scott (Royal Museum of Scotland, Queen Street); Andy Foxon (Glasgow Museums and Art Galleries); Jill Harding (Inverness Museum and Art Gallery); John W Hedges for much information, advice and hospitality; Peter Hill and Jean Comrie (Whithorn); Dr John Hunter and Steve Dockrill (Bradford University); Bob Gourlay (Highland Regional Archaeologist); Dr Raymond Lamb (Orkney Archaeologist) and Beverley Smith for repeated advice and warm hospitality in Orkney; Paula Love; the staff of the NMR; Mrs Margaret Rosie (Freswick); Seamus Ross (Oxford University); Dr David Sanderson for much constructive advice and support; Lord Strathnaver (Dunrobin Castle); Dr Carol Swanson for advice on Caithness and access to aspects of her unfinished PhD (Strathclyde Planning Department); Ann MacSween (ARU); Dr Dominic Tweddle (York Archaeological Trust); A Williamson (Shetland Museum) and Peter Yeoman.

My thanks also extend to my parents, John Foster and Jonquil Alpe for financial and moral support. Flat-mates Cath, Janet, Liz and Marion have cheerfully and tolerantly lived with me and my thesis.

Finally I wish to repeat my gratitude to my supervisor, colleagues and friends in Glasgow, because I have learnt from them all much more than could be evident in this text.



## SUMMARY

The Scottish Atlantic Iron Age is recognised as falling into four periods, the EIA, MIA, LIA I and LIA II. Least is known of the LIA I, the immediate post-broch period. Original analysis of the C-14 record confirms these divisions; they result as a combination of the effects of the Trondheim calibration curve but mainly the history of archaeological survival and previous excavation strategy. A large data base of pins and combs is examined and analysed, following on the earlier work of Stevenson (1955<sup>a</sup>), because these are some of the more ubiquitous and chronologically sensitive artefacts belonging to the LIA. This provides the basis for a reconsideration of the nature of LIA settlement throughout the Atlantic Province as a whole, more particularly in the study area of Orkney and Caithness. There are still severe problems in recognising LIA, particularly LIA I activity.

This analysis forms the basis for a case study of Orkney and Caithness from around the early centuries of the first millennium BC to the eighth or ninth century AD. A scheme is suggested for the structural developments witnessed over this period, and on the basis of the general trends observed, a social interpretation is put forward. An attempt is made to apply *Fields of Discourse*, which is contrasted with previous work in this area, because of its sound methodological approach. Archaeological application of the technique of access analysis is described and used to investigate how the use of space structured and reproduced these changing social relations.

The shift from locally based power sources to more centralised, in relation to Orkney and Caithness more distant, sources of authority is demonstrated, and related to the development of the southern Pictish kingdom. This change reflects the move from intensive to extensive sources of power. Other aspects of social reproduction are examined to see if they fit within this framework. On analogy with contemporary situations elsewhere and the evidence to hand, the means by which this power may have been exercised, specifically changing agricultural practice and land tenure, and the ideological power of Christianity are speculated upon.

## ABBREVIATIONS



AP	Atlantic Province	Inv	Invernessshire
Aber	Aberdeenshire	K	Tankerness House Museum, Kirkwall
Ag	silver	Kintyre	
Argyl	Argyllshire	Kirkcudbrightshire	Kirkcudbright Museum
Armit	c/o I Armit, Edinburgh University	Kirkcudbright Museum	length/long
Ayrsh	Ayrshire	L	Lerwick Museum, Shetland
B	Bradford University	L	Lamont, New York
B-	Bern, Switzerland	LBA	Late Bronze Age
BA	Bronze Age	LIA	Late Iron Age
BW-	British Museum	LN	Late Norse
BSM	Birsay Site Museum	Lanar	Lanarkshire
Banf	Banffshire	MIA	Middle Iron Age
Ber	Berwick	MN	Middle Norse
Br	bronze	Midlo	Midlothian
Bu	unclassified, K	N	North
C-14	radiocarbon/carbon-fourteen	N	Norse
CCase	comb case	N-	Nishina Memorial (Tokyo)
Caith	Caithness	NGR	National Grid Reference
Cattlefld	Cattlefold	NL	not located
Cblank	Comb blank	Nairn	Nairnshire
Chyard	Churchyard	Ork	Orkney
Cu	copper	Perth	Perthshire
D	depth	Pict	Pictish
D&E	Discovery and Excavation	Q-	Cambridge
Diam	diameter	R	Roman
Dunb	Dunbartonshire	RMS	Royal Museum of Scotland, Queen Street
Dur	c/o Durham University Department of Archaeology	Ross	Rosshire
E	East	Rox	Roxburghshire
EC	Early Christian	S	South
EIA	Early Iron Age	SD	Standard Deviation
ELoth	East Lothian	SF	special/small find ;
EdinUni	c/o Edinburgh University Department of Archaeology	SRR-	Scottish Univer_sites Research and Reactor Centre
Ersk Bev C	Erskine Beveridge Collection	Shet	Shetland
Fe	iron	Stirl	Stirlingshire
Freswick	c/o Mrs Rosie, Midtown, Freswick	Suth	Sutherland
GAGM	Glasgow Art Galleries and Museums	TL	Thermoluminescence
GU-	Glasgow University	UB-	Belfast
GX-	Geochron Laboratories, Massachusetts	V	Viking
GaK-	Gakushuin University, Japan	W	West
Gall	Galloway	W	width/wide
Gallanach	?Gallanach Museum	X	cross
H	Hunterian Museum, Glasgow University	aband	abandonment
HAR-	Harwell	ani	animal
HBM	Historic Buildings and Monuments, SDD	ant	antler
IA	Iron Age	approx	approximate
Inv	Inverness Museum & Art Gallery	artic	articulation/articular
		assoc	associated
		astrag	astragaloid

b	broch	hand	handle
b	back	hd	head
back	background	horiz	horizontal
bal	baluster	hse	house
build	building	i	in
c	circa	inc	incised
c-pl	connecting plate	incl	including/include(s)
cblank	comb blank	int	interlace
cet	cetacean	int	intentional
cf	compare	intersect	intersecting
circ	circular	irreg	irregular
circum	circumference	kid	kidney
classi	classification	kid r skeu	kidney ring skeumorph
comp	composite	l	line(s)
conc	concave	l-handle	long-handled comb
cont	context	lge	large
conv	convex	longit	longitudinal
corr	corrugated	loz fillet	lozenge with fillet(s)
crut(c)	crutch	misc	miscellaneous
cyl	cylindrical	mush	mushroom
d	double	nec	neck
d-s	double-sided	nr	near
dec	decorative/decorated	o-w	open-work
det	determination	occas	occasionally
dia	diamond	opp	opposite
diam	diameter	orig	originally
dimen	dimensions	orn	ornament
e-pl	end-plate	p c	personal communication
e-sp	end-space	partic	particularly
eccle	ecclesiastical	pat	pattern
ellip	elliptical	penann br	penannular brooch
encirc	encircling	pent	pentagonal
encl	enclosure	perf	perforated
ex	excavation	perp	perpendicular
exp	expanding	ph	phase
fib	fibula	pin-imp	pin-impressed
fill	fillet	pl	plate
fish-t	fish-tailed	poly	polyhedral
fl	floor	poss	possibly
fl(a)	flat/flattened	pp	parallel/opiped dice
fnd	found	presum	presumably
forth	forthcoming	proj	projecting
frag	fragment	r	rows
geom	geometric	r&d	ring and dot
gl	glass	r-hd	ring-head
glob	globular	rect	rectangular
grad	graduation/graduated	rhse	roundhouse
h	hole	riv	rivet(s)
h-b	high-backed	rm	room
h-pin	hand-pin	s	single



s-p	single-piece/simple
sect	section
sh	shaft
shap	shape
sing	singular
sk	skeletal/skeleton
sm dome	small dome
sp	space
spi(r)	spiral
sq	square
sq pl proj	square plate with projections
sq'd	squared
stir(r)	stirrup
str(uct)	structure
stratig	stratigraphy/stratigraphic(ally)
struct	structure
susp	suspension
swanneck	swan's neck
t	teeth
t-pl	tooth-plate
tag	terminus ante quem
tpq	terminus post quem
trans	transverse(ly)
tri	triangular
u/reg	unregistered
u/s	unstratified
unfinish	unfinished
v	very
vert	vertical
w	with
wheel-hd	wheel-head
wkshop	workshop
wted	weighted
yd	yard
zoo	zoomorphic

## PART I

### CHAPTER 1: SYNOPSIS



## PART I: INTRODUCTION

### CHAPTER 1: SYNOPSIS

All archaeologists need a clear understanding of the way in which material culture is related to past social processes. This calls for theory. However, the real world, both past and present, is both untidy and poorly documented, which theory should not be. This means that the two may never be quite compatible, yet a better understanding of human existence cannot be achieved unless the data available to us are analysed from within a clearly defined theoretical perspective.

This dissertation aims to present such a social synthesis for the Atlantic Province of Scotland, more particularly Orkney and Caithness, during the Iron Age, that is from around the early centuries of the first millennium BC to the eighth or ninth century AD. It attempts to achieve this by firstly providing a steadier, redefined empirical footing. A model of the past is then constructed from within a clearly defined theoretical stance. The achievements of this work, if such they are considered, are that a different light has been shed on the interpretation of this evidence, much of which is not new data, and potential directions for future work have been suggested.

#### 1.1 PART I: DEFINING THE TOPIC

After a synopsis (this chapter) the aims of the thesis are outlined in chapter 2. In particular the methodological stance, ultimately derived from *Fields of Discourse*, is described and justified. The concept of the Atlantic Province is discussed and the reasons behind the choice of Orkney and Caithness as the specific study area are laid down. In chapter 3 we are introduced to the resources available to the student of the Atlantic Iron Age and certain of the problems associated with its basic chronological and cultural sequence, which is defined as falling into four broad horizons, the Early, Middle, Late I and Late II Iron Ages. These divisions, more particularly the most recent one, are seen in part to be a factor of the radiocarbon calibration curve. (All relevant C-14

dates are listed in appendix I). Attention is focussed on the post-broch period (Late Iron Age) settlement. Few distinctive artefacts can be specifically assigned to the fourth, fifth and sixth centuries AD, and our attention is therefore drawn to certain pins and combs which are some of the more ubiquitous and chronologically sensitive artefacts belonging to the Late Iron Age. These are a means of reassessing LIA settlement throughout the Atlantic Province, but more particularly in the study area where their distribution is pronounced.

## 1.2 PART II: PINS, COMBS AND THE CHRONOLOGY OF ATLANTIC IRON AGE SETTLEMENT

In 1955 R B K Stevenson published a paper entitled *Pins and the chronology of brochs* (Stevenson 1955a) where he brought our attention to the fact that certain distinctive pins and combs would seem to have a post-Roman date, and are thus considerably later than the broch sites on which they were found. In effect he demonstrated that a Late Iron Age continued in Scotland into post-Roman times, and he sought to bridge a part of the gap between the third century AD, when the brochs fall into disrepair and the ninth century evidence. Since 1955 the data base has expanded considerably and new absolute dating techniques have been developed. In chapters 4-6 most of the Iron Age and many of the immediately post Iron Age pins and combs (appendices II-III) are examined to see what chronological horizons and stylistic trends emerge, and how these compare to Stevenson's original conclusions. Chapter 7 provides an overview of the dating evidence and makes some suggestions for future research. Whilst the limitations of present evidence are expressed, in chapters 8-9 the location and distribution of these artefacts is examined, and provides a basis for a reassessment of Middle Iron Age and Late Iron Age settlement as a whole, thus amplifying our minimal state of knowledge of this period. In particular the dates of wheelhouses and broch outbuildings are brought up to date, and the nature of subsequent activity on them is summarised (appendix IV). The implications of these observations are followed up in detail for Orkney and Caithness in the following part.



### 1.3 PART III: A MODEL FOR ORKNEY AND CAITHNESS IN THE IRON AGE

Chapter 10 suggests a comprehensive structural sequence for Orkney and Caithness from around the early centuries of the first millennium AD to the eighth or ninth century AD. It goes on to examine the way this architecture structured society in Orkney and Caithness. Space, particularly man-made space - architecture - provides the setting for all social discourse. When studied in terms of its development through time it is a resource which can be understood not only as the context, but also the structuring agent and product of acts of social reproduction. Access analysis is introduced as a useful tool for articulating an understanding of the part space plays in structuring social relations and the part social relations play in structuring space. The prehistoric structures of Orkney and Caithness provide one of the best data bases with which to do this because of their unprecedented survival (specific sites are described on this basis in appendix V). As a result a shift can be seen from a ranked society where the ultimate authorities were locally based to more remote sources of authority, that is a change from *intensive* to *extensive* sources of power.

The remaining chapter (11) examines the way that other aspects of social reproduction fitted within this framework and identifies the resources through which this power was exercised. It investigates the agricultural basis of society, focussing on changing agricultural practices and land tenure, because they are held to lie behind many of the changes in society. Suggestions are made as to how future work might elucidate some of the issues raised in this chapter. Finally, it examines the history of the church in this area and the nature of its rôle as a form of ideological power (metalwork from the ecclesiastical site at Warebeth is described in detail in appendix VI). This raises issues which are much tied up with the changes in land tenure described earlier in the same chapter.

The conclusions (chapter 12) draw together the various strands of evidence discussed in chapters 10-11 to consider in general and speculative terms how it was that Orkney and Caithness could become drawn into the Pictish kingdom and how social authority became founded in more centralised institutions. The answer, it is suggested, is found in overlapping and developing modes of political, military, but more particularly economic and ideological sources of

- CHAPTER 1 -

social power.

The text is divided into subsections, henceforth §.



## CHAPTER 2: INTRODUCTION

## CHAPTER 2: INTRODUCTION

### 2.1 ARCHAEOLOGISTS AND SOCIAL THEORY

My main aim in this thesis is to write a history for Orkney and Caithness from the beginning of the Iron Age until the arrival of the Norse. But in order to write history we need to first understand how societies operate. There is therefore

*the need for archaeologists to develop a theory of material culture as the initial step in the analysis of past social and cultural change (Barrett 1981, 205)*

Few archaeologists can claim to work as yet from such a stance; we all use theory, either explicitly or implicitly, but rarely consistently nor necessarily of such intrinsically fundamental importance. But the problem is not specific to this particular discipline. Help can be sought from the social sciences, for if 'the main concern of social theory is the illumination of the concrete processes of social life' (Giddens 1984, xvii), then we can find a theory and set of concepts which presents us with the most realistic and plausible view of the functioning of society:

*a strong sense of theory enables us to decide what might be the key facts, what might be central and what marginal to an understanding of how a particular society works. We select our data, see whether they confirm or reject our hunches, refine the latter, collect more data, and continue zigzagging across between theory and data until we have established a plausible account of how this society, in this time and place 'works'. (Mann 1986, vii).*

As 'societies are much messier than our theories of them' (*ibid*, 4), we need concepts which are suited to dealing with a mess.

In my opinion the only current theory to represent history satisfactorily is Giddens' *Theory of Structuration* (1984), which has been rightly described as:

*the rediscovery of competent methodological procedures employed in structuring particular social practices (Barrett 1988, 8).*

In its quest for realism and objectivity it is necessarily complex; the intricacies and nuances of Giddens' theory are lengthy and all-embracing, but the main thrust of his arguments is as follows. All social interaction is recognised as being situated interaction,



situated in space and time. All human agents are seen to create the world through their actions (which exercise some form of power over people and/or materials, either consciously or otherwise), but they are conditioned and constrained by the world of their creation, that is to say all life is of a recursive nature - Giddens' 'Duality of Structure' and Pred's 'Becoming'. In using the world people get to know it (Barrett 1987, 471) and what they do in it, how they employ cultural codes, is determined by this knowledge (carried in practical consciousness, discursive consciousness and the unconscious) and the resources of the material world which are available to them. All this activity, much of which is routine or repetitive, takes place in space and through time, a framework within which structured actions of human agents can be observed reproducing institutionalised forms of social systems, and the moment of production is also one of reproduction. The 'institutions' of society (cf Giddens 1984, 17) consist of those structures which have the greatest time-space extension within society, and these structures are again both enabling and constraining.

If we are agreed that 'social practices are the object of our study' (Barrett 1988, 9), then the next step is to understand how the material culture which constitutes the archaeological database<sup>#</sup> relates to these, and how we can infer one from the other.

## 2.2 SOCIAL THEORY AND ARCHAEOLOGY

*Fields of Discourse* has been derived from Structuration Theory and a fusion of time-space geography (of which there are many exponents, particularly Carlstein 1982; Pred 1981, 1984, 1985, 1986) in an attempt to produce an archaeological application of social theory (Barrett 1988). It is a theory which can accurately represent social processes and provide the framework for their analysis, an heuristic device by which the archaeological problems of time and space, the crux of all social relations, can be considered. It is a theory capable of accommodating the archaeologically and historically major changes in the period under review: major changes in settlement pattern (including the 'rise and fall' of the architectural form known as the broch); potential relations with a very remote power (the Romans); the

introduction of a new ideology (Christianity); and the arrival and melding of a dominant migrant population (the Norse).

Each 'field' is an area in time and space occupied by virtue of a particular discourse, discourse being the communicative action by which people reproduce social relations. It is instigated by the mobilisation of authoritative symbols and, where the authority is accepted and thus reproduced, is maintained by the mobilisation of symbols of domination (Barrett 1989, 307). No field is closed and may overlap with others in areas of time and space. The analytical strengths of this method are that it is concerned with human relationships not material identities, that time-space is fundamental to its definition, and the idea of single units of material residues as having fixed historical meaning can be refuted:

*Material culture represents the material universe which was partially available for humans to draw upon as a medium for action. It is thus both the condition for action and the results of action. As such material culture is the medium of discourse (the code) by which social relations are negotiated and reproduced; it is meaningful (Barrett 1989, 305)*

This code may have its origin in 'ideas in people's heads' but these ideas cannot be recovered (Barrett 1987; contra Hodder's 1986 proposal for 'contextual archaeology'). Rather than trying to read meanings in the past back from modern archaeological remains it is better to explore the implications of particular material conditions for the structuring of specified social relations, to think through specific contexts by which some understanding of the code may be possible. This leads to 'historical knowledge' (Barrett 1987; 1989). The analytical components through which a 'specified context' should be investigated are those of temporal frequency, spatial extent, the cultural resources of fields, and the transformations which take place in the available cultural resources as the field is reproduced (Barrett 1988, 11-12).

I should perhaps emphasise why I have adopted an archaeological approach which applies Structuration Theory rather than any other social theory. Fortunately the answer can be succinct: Structuration Theory, the backbone of Fields of Discourse, is realistically credible and methodologically secure; I know of no other theory which can so accurately represent history and provide



the framework for its analysis. This cannot be tested *per se* (cf A F Chalmers 1978, xiv on the testability of scientific theories as a whole); its acceptance means that effectively I am working over this material from within a different 'disciplinary matrix' (cf Kuhn, discussed in Chalmers 1978, 97) to some of my predecessors in this field. This approach does not ignore the fact that history is very complicated, a statement which is obvious yet does need stating. For example, contrast it to the apparent neatness of Renfrew's *Systems Thinking* (1984, 248-49). There systems are broken down to 'static parameters' which can then be reduced to some kind of comprehensible order over 'the multiple causal influences of interacting variable<sup>s</sup><sub>λ</sub>', the subsystems of which regulate themselves to regain homeostasis when one of them changes. This is very neat, but there can be no such general theory of ideology [or otherwise] which will specify universal conditions, significances and effects of discourse (Asad 1979, 620). Social processes - history - cannot be represented two dimensionally on a piece of paper. Pred's 'uninterrupted flux of human practice' (1985, 337) is possibly the most apt phrase with which to summarise the complex nature of history, encapsulating as it does both the flowing and continuously changing nature of discourse. Each field is so intimately involved with others, at each moment of time the conditions and circumstances are so different, that there can be no generalisations about processes, nor can there be any formal testing of the evidence. This does not mean there is anything wrong with this approach other than that it has a close affinity with practice. Most theories, such as Marxism, are only testable to a limited extent, not least because all the relevant aspects may not be measurable in terms of material correlates. Rather, Fields of Discourse can be seen as a means of forming the questions which can be posed by researchers enquiring into real-life situations in actual settled places or regions (cf Pred 1986, 12). Behind it lies the hardcore of Structuration Theory, which is considered immutable; it is this which indicates what should and should not be done in order to explain what happened in the real world.

This approach thus contrasts strongly with that of Mackie (refer to numerous references in bibliography), the foremost scholar of the Atlantic Iron Age. It is necessary to clearly explain the

difference in these approaches because this fundamental difference explains most of our differing interpretations. MacKie works by selecting a model from the observed anthropological/ethnographical repertoire and testing the archaeological evidence against this until he finds a model which fits the archaeological evidence. His methodology is limited by the fact that he can only draw on known circumstances, and that these are situations which were not necessarily recorded prior to the influence of western culture upon the relevant primitive culture. Structuration theory has not been derived from a series of specific given circumstances, but is based upon a general theoretical notion of how society and material culture are inter-related. It is thus divorced from the limitations of an approach which depends entirely on anthropologically-derived parallels for any set of circumstances, cannot satisfactorily accommodate the diversity of the archaeological record and has a naïve understanding of the nature of the archaeological record itself (see below). The value of anthropological study is that it creates an awareness of the extraordinary social relations which may be feasible. The argument that fields of discourse is not objective and does not make empirical use of the data cannot, however, be sustained (see below).

Now it is not my intention at this stage to spell out all the further details of this theory, or the reasoning behind it, as this is published in full elsewhere (Barrett 1988; 1989). A point is also reached at which one has to be uncritical of the framework in which one is working if any detailed work is ever to be done. Moreover I do not need to highlight the main failings of previous approaches to the Atlantic Province because the Atlantic Iron Age has already been discussed in relation to this theory (Barrett 1981); this was a 'relatively exploratory' foray (Mercer 1985, 96), and it is the intention of this study to develop this further. But before I proceed I must try to clarify certain aspects of this approach.

### 2.3 USING FIELDS OF DISCOURSE

Three matters will be addressed here: how fields of discourse theory makes objective use of the empirical evidence; how 'specific contexts' are selected for investigation; and how historical changes



are recognised.

By employing Fields of Discourse theory archaeology is seen as the empirical examination of material evidence to discover how social practices were maintained within particular material conditions (Barrett 1988, 9). The archaeological data base is evidence for particular social processes which can be explored in terms of the implications of particular material conditions for the structuring of specified social relations (Barrett 1988, 6; 1987). Thus reliance on the empirical adequacy of reported observations is as common to this archaeological approach as to others. Critics of this work must distinguish faults in the theory from faults in the methodology and data which I apply to it. Fields of discourse theory still calls for critical use of the data base in order to understand what the data actually are, taking into account all the cultural transformation processes (Schiffer 1976) through which the material has passed before reaching the archaeologist's trowel, but there will always be different ways of observing even this. Any doubts about the objectivity of this approach stem ultimately from a failure to understand the relationship between the material culture and history, or to understand the nature of the archaeological data base. Patrik (1985) suggests that the archaeological data base has been viewed in two ways: a *fossil record*, a static record where physical things are the causal effects of what they record; and an *historical record*, an active record which needs reading and interpreting, a text composed of material symbols. Ultimately Patrik rejects both of these as unsatisfactory and suggests that we need a new model of the archaeological evidence which does not borrow from the concept of a record. Fields of discourse is such a model because the rôle of human beings as historical agents is recognised. It is no less objective than other theories and associated methodologies; the relative objectivity of this approach cannot be enumerated, but <sup>t</sup>is results can simply be set in opposition to previous interpretations. The superiority of this method lies in its theoretical underpinnings.

Thus what I am saying is that this approach calls for as empirical an interpretation of *what the data actually are* as any other objective approach. Divergences of opinion stem from a disagreement over the most fundamental of all issues, *the nature of*

*the archaeological record* itself. Closely bound up with this issue is a misunderstanding of the contention that 'Things have no meaning until they are employed in acts of social reproduction' (Barrett 1989), where meaning denotes social meaning, significance in terms of wider social practice. For whilst the writing of history through the study of long term social change is the final and most important end to which the study of material culture should be employed, the fact that other levels of interpretation exist and are the subject of legitimate study is not to be denied. Ultimately all evidence has a past social dimension, but not all practitioners aim to elucidate this. They can be criticised for not realising/understanding the true potential of their material, or for displaying a naïve understanding of the relationship between material culture and social behaviour, but nonetheless their empirical observations are often a prerequisite for an understanding of wider social issues.

Let us imagine a study where a classified corpus has been compiled, and each artefact described in terms of its fabric, method of manufacture, stylistic parallels (leading, for example, to the recognition of workshops and 'schools') and date. In the first place the corpus was classified because this helps the archaeologist to recognise, describe and summarise regularities in the data and to distinguish the significant from the haphazard features (Hodson 1980, 8). This is a perfectly valid initial approach so long as we do not use classifications to equate an artefact type, or group of artefacts with a people or culture (Barrett 1981, 205-6). The material must also be considered in terms of the context of manufacture - who was making them and for whom, through what exchange mechanisms were the raw materials procured? - where and under what circumstances were they manufactured, and how did these items circulate? - what importance did they have in structuring and reproducing social relations?

The second issue I wish to expand upon is the choice of which 'specific contexts' to investigate. The selection is ultimately limited by the originality of the researcher, tempered in the first place by the nature of the relevant archaeological data currently available to her or him. For example, it is impossible to investigate social relations and the structure of society from



burials where these do not exist (as in the case for the Atlantic Province during most of the Iron Age). Naturally enough attention will tend to focus on the aspects of the material culture which seem to be pre-eminent at any particular time. Any potential distortion in the archaeological evidence is thus perpetuated in resultant social syntheses, but then this is not a problem specific to this approach. Indeed, such potential distortions should be mitigated by the overlapping and open nature of all the fields studied; the more fields that are investigated the more detailed and realistic the ultimate history will be. The data base for the Atlantic Iron Age is deficient in many respects, but certain fields immediately suggest themselves for investigation: the manner in which architecture (the best-known archaeological resource in this area) structured and reproduced society; the context of craft specialisation and its patronage; the agricultural basis of society (the pivot of all societies which live in close relation to nature); and the rôle of Christianity (introduced towards the end of the period) as a form of ideological power. There are many other possibilities, but these are the main areas to spring forth from the data available.

The final point which I want briefly to discuss is the question of how historical changes are recognised, and what it is we are actually looking for. Essentially we are trying to elucidate the nature of asymmetrical relationships of power between different individuals, groups and institutions, and how these alter with time. Mann (1986) contends that a general account of societies and their transformations can only be given in terms of the inter-relationship of four sources of power: ideological, economic, military, and political. Power or authority is the primary aspect of most social relationships, whether as a reflection of differences in age, gender, social status or ethnicity. Within society it is sustained because it reproduces relations of autonomy and dependence (Giddens 1981, 50). Change occurs when relations are re-negotiated, either by extending the authority of certain cultural resources or by rejecting those authoritative symbols (Barrett 1989). Power itself is not a resource, but is exercised through material culture (Giddens 1985, 16; Mann 1986). Therefore the material culture has to be examined in order to elucidate the different manners in which power was organised, the codes and forms of authority which were



employed, accepted, acted upon, and transformed society. In order to do this we need to be able to distinguish between where symbols were a source of authority, and when they were secondary to that authority but signalled its presence. Change will then become apparent from a study of the transformations in the spatial extent, temporal frequency and material resources pertaining to fields. An approach such as this contrasts starkly with, for example, a functionalist approach which sees changes in society as solely environmentally or technologically determined. Structuration theory denies environmental or technological change such a primary rôle, but would see architectural differences as being instituted by changes in aspects of the resources, which might be affected by the climate, and which are being drawn upon in the structuring of social relations.

Having described the theoretical approach this thesis will attempt to adopt, it is time to introduce the area of study.

#### 2.4 AREA OF STUDY

S Piggott (1966) divides the north of Britain during the Iron Age into four provinces: the Atlantic, North-Eastern, Tyne-Forth and Solway-Clyde. This study concentrates on the former, more specifically the counties of Orkney and Caithness (fig 1). The Atlantic Province was reviewed by Ralston fairly recently (1979, 446-49; 460-74): it covers the Northern Isles of Orkney and Shetland; the Western Isles and the west coast of Scotland (the counties of Inverness, Argyll and Ross and Cromarty); the upland area of Sutherland and the plateau of Caithness. Of all the four provinces, this is the one with the most frequent and fragmented, inhospitable and uninhabitable uplands. Difficulties in settlement and communication were probably most pronounced in this province, and nowhere else in north Britain is the role of the sea liable to have been so critical. Whilst many archaeologists consider the premisses behind Piggott's original scheme for Scottish archaeology now rather obsolete (D W Harding 1982, 1), Ralston (1979, 448) advocates the continued application of Piggott's four provinces because they remain a useful means of orientation and can be retained as convenient geographical labels. Ideally this area should be studied as an entirety, but this is outside the realistic

ambit of a research project intended to take three years. This study therefore focuses on the counties of Orkney and Caithness.

In terms of a regional perspective these two counties form a convenient geographical block whose topography has always resulted in a degree of archaeological and historical conformity. Various examples can be used to illustrate this point. For example, Orkney and Caithness together contain more than half the known broch sites (Mercer 1985, 62). The brochs of Caithness form a distinct group which shares some common characteristics with the Orkney examples (Swanson 1986; 1988; compare also the two major traditions of Iron Age fortified roundhouse building in Scotland suggested by MacKie 1986). But perhaps the most striking common characteristic is the broch outbuildings, which are almost exclusively found in Orkney and Caithness, albeit with outliers in Sutherland and even further afield at Bow in Midlothian and Cockburn Law in Berwickshire. Their distribution is a reflection of the terrain; the potential for greater social diversification and development (which these might seem to imply) is greater in areas where the land was fertile enough to maintain large populations and thus hilly land was always unlikely to attract subsidiary settlement. In historical times the Norse Orkney earldom centred on these counties, perhaps a further indication of the common ground between them.

Practical factors have also been significant in the choice of this area. Research can be divided up into three types: field research (which is more effective when conducted on a large scale as a carefully designed long term project, and is not usually within the means of an individual research student), laboratory research, and problem-orientated research based largely on the published field or laboratory work of others and leading to new syntheses, commonly with an emphasis on social theory (*Field Archaeol* 1987, 98). This thesis realistically falls within the scope of the latter, it was therefore necessary to choose an area where other persons and institutions have done, or are in the process of completing, detailed new field work. Orkney and Caithness both suit this criterium admirably (fig 2). Orkney has benefited from the concentration of resources and attention, mainly on the Iron Age, which the now defunct North of Scotland Archaeological Services applied to it until recently, most notably at Howe (Carter et al

1984) and Bu (Hedges 1987 I). In conjunction with excavation there was considerable reinterpretation of old excavations, most notably Gurness (Hedges 1987 II) and Lingro (Hedges and Bell forth), and the compilation of gazetteers, both of sites and their respective material assemblages (Hedges 1987 III; Bell 1982). In addition current excavations by Hunter and Dockrill (of Bradford University) at Pool and Tofts Ness are revolutionising our perceptions of this period (*Archaeol Extra*). An up-dated computerised Sites and Monuments Record has been compiled, and this has involved a degree of new fieldwork by Lamb. Caithness has received less attention with regard to excavation, exceptions being Durham University's work at Freswick (Batey 1987a), the late Horace Fairhurst's excavations at Crosskirk (Fairhurst 1984) and recent excavations by Mercer at Cnoc Stanger (Mercer 1981a, 52-56). But this area has seen an outburst of fieldwork, mainly as a result of the threats of reafforestation and severe coastal erosion. The universities of Glasgow, Edinburgh and Durham have all been active in this respect, and in most cases their results have been published in interim form (Batey 1984; Mercer 1980; 1981a; 1985; forth a; Morrison 1986). In addition, Swanson (1988) has undertaken extensive survey of broch sites as a part of her recent doctoral research at Edinburgh University.

Naturally, in choosing to focus on Orkney and Caithness eyes are not being shut to the rest of the Atlantic Province, but only limited aspects of the evidence in these other areas will be examined, and then mainly for purposes of comparison. Current fieldwork by Edinburgh University is available in interim form (Topping 1986a; Armit 1986, 1987, 1988b), but the main site of interest in the West is the Udal, North Uist, which has now been the subject of fieldwork for nearly thirty years. Little has been published except in summary form (latterly I A Crawford 1986), and as the excavator was unco-operative, no further details have been forthcoming.

In conclusion, Orkney and Caithness suggest themselves as a convenient and justifiable unit for study because they form a geographical entity, of manageable proportions, an area where there has been a large body of recent excavations and fieldwork, much of



which is published, and where the researchers concerned have kindly been very forthcoming with their unpublished data and ideas.

## 2.5 THE CHRONOLOGICAL FRAMEWORK

Definition of the Iron Age is rather blurred in North Britain both chronologically and culturally, probably more so than anywhere else in the British Isles. Its traditional range is from circa 600 BC-AD 400 (RCAHMS 1984, 20), although it has been speculated that it might better be ascribed to the period up to the eleventh century AD (D V Clarke 1978, 76). Around the beginning of this period, with the changing metal technologies, the importance of local metalworking in defining regional traditions declines markedly. In the Atlantic Province pottery has been taken as some gauge of cultural and chronological changes, but on the whole, in view of the impoverished artefactual record, reliance has been on architectural studies. This study of the Atlantic Iron Age commences from the period when large roundhouses are introduced into the archaeological record (in the early centuries of the first millennium BC) to the arrival of the Norse in about the eighth or early ninth century AD, a span of approximately 1500 years. The period can be divided into four phases: the Early, Middle, Late I and Late II Iron Ages (henceforth EIA, MIA, LIA I, LIA II), terminating in the Norse period (NP). These divisions are introduced to avoid cultural and geographically specific ascriptions such as 'Pictish' or 'Dalriadic', or a 'post-Roman', which is irrelevant in an area of the country which did not have a Roman period. This is not the first time these words have been coined - MacKie (1986) has used MIA of Atlantic Iron Age Scotland to describe the period at Howe after the arrival of new broch artefacts, and Carter *et al* (1984) refer to late Iron Age or Pictish settlement at the Howe - but it is the first time, to my knowledge, that these terms have been so prescribed. The background to all of these, particularly the LIA, will be filled out in later chapters. Suffice briefly to describe here why these divisions have been adopted, and to what they refer. Firstly, the Atlantic Iron Age is recognised as having extended until the arrival of the Norse. The starting point of this thesis is the establishment of the nature of settlement belonging to the post-broch/pre-Norse period. In addition, in recent years native IA

antecedents for brochs have been established in Orkney and Caithness. Thus we can broadly divide this period into the EIA (pre-fully-developed broch), the MIA (when the brochs were the prevalent architectural form) and the LIA (the period when the brochs were no longer being utilised in their original form, and when new structural types and settlement patterns evolved). Future discussion will show that on the basis of present evidence the LIA can be broken into two phases, LIA I and LIA II.

\* \* \* \* \*

This chapter has defined and described the theoretical stance which this work attempts to adopt, and defined the areal and chronological boundaries to which it applies. Chapter 3 discusses the nature of the archaeological resources available to this study, defining empirical lacunae which need resolving (in part II) before the attempt can be made to write a history of Iron Age Orkney and Caithness (in part III).



### CHAPTER 3: ARCHAEOLOGICAL RESOURCES IN THE ATLANTIC PROVINCE



## CHAPTER 3: ARCHAEOLOGICAL RESOURCES IN THE ATLANTIC PROVINCE

This chapter introduces the archaeological resources available for study to the student of the Atlantic Iron Age in terms of three of the analytical components of fields of discourse: temporal frequency, spatial extent and the cultural resources of the field. It is only when all these components have been assessed that the fourth, the transformations which take place in the available cultural resources as the field is reproduced, can be assessed. We are concerned here with the nature of these resources rather than their specific details. However dating is considered in a little more detail by way of an introduction to part II.

### 3.1 TEMPORAL FREQUENCY

Archaeologists are traditionally concerned with the measurement of time. For some this is our sole rôle (I A Crawford 1988); undeniably 'dating' is a principal consideration in all primary data collection and collation. We use such information to consider 'events' and long term historical processes, *les longues durées*. But if we are to write history in the manner described in Chapter 2 we should place equal emphasis on the temporal frequency of the *fields* whose very existence makes that history. Their temporal frequencies can be defined broadly as prescribed by nature, or socially contrived.

#### 3.1.1 'Natural' cycles

Since the Neolithic Scottish prehistoric society was deeply rooted in agriculture, and there can be little doubt that it was in the process of producing food that most of the debts and affiliations between people were created, enacted, and reproduced. These activities took place on a diurnal, mensual, seasonal and annual basis. In addition major changes in the balance of social relationships can be expected to have taken place at times of birth, marriage and death, events affecting patterns of inheritance. As archaeologists we cannot identify such specific cycles, but can

consider such data as are available to us in terms of these considerations.

### 3.1.2 'Social' cycles

Activities such as gift-giving may create debts of obligation which are socially prescribed and need bear no relation to natural time, the cycle simply being completed when the obligation is returned. Again the temporal frequency of such a set of circumstances cannot be gauged, but it is necessary to recognise that a chain of events such as this almost certainly did occur, probably frequently, and would have been important in the structuring of social relations.

### 3.1.3 Historical cycles: *les longues durées*

The brevity of the two preceding paragraphs should not detract from the primacy of the temporal frequencies discussed, because it is only 'at the scale of actual human practices that a society is reproduced and that its inhabitants are socialized' (Thrift 1981). Yet it is in the recognition of long term historical process and change (Giddens' 'episodes': 1984) that the archaeologists' best prospects for successful observation lie. In order to compare data across time and space we are dependent on the techniques of absolute and relative dating. I am now going to discuss in a little more detail the nature of the dating available throughout the Atlantic IA. Some reference will be made to the four phases into which it is divided, in particular the basis for a distinction between a LIA I and LIA II. This is not yet the place to describe these phases in detail, but some of the chronological gaps, the attempted resolution of which is the subject of future sections, will be highlighted.

At present available radiometric dating derives from the techniques of radiocarbon and thermoluminescence (henceforth C-14 and TL respectively). C-14 dates (full details of which are to be found in appendix I) as yet outnumber published TL dates, and cover wider types of settlement. Thus it is that the C-14 dates provide the basic chronological framework to which the cultural data is applied.

All C-14 dates in this thesis are calibrated against the Trondheim calibration curve (Stuiver and Pearson 1986; Pearson and Stuiver 1986). These include a number of weighted means which have



been calculated when two or more determinations have been made from samples which cannot be assumed to derive from the same object (the archaeological norm) but relate to the same phases of activity. The technique used is that advocated by Ward and Wilson (1978), where the chi-square test statistic has been used as a means of testing that a series of determinations provide essentially the same value:

*where the members of a series are found statistically to be insignificantly different from one another, and where archaeological criteria allow, a pooled mean ... may be calculated ... for the mean of the grouped determinations (ibid, 30).*

In fig 3 187 of the C-14 dates presently available for Iron Age and early Norse activity in the Atlantic Province of Scotland have been plotted by region at both the 1- $\sigma$  and 2- $\sigma$  levels. The resultant distribution has been compared to the characteristics of the Trondheim calibration curve. I was moved to undertake this comparison because as I calculated by hand the calibration of these dates, I found that the resultant dates were being bracketed together, notably at steep sections of the calibration curve. On this basis it seemed that steep sections of the calibration curve are reflected in the histogram as jumps, and inversions in the curve as plateaux. Jumps in the graph tend to be steepest when associated with the beginning or end of an inversion. Steeper sections of the calibration curve mean that a wide span of radiocarbon dates is calibrated to a narrow range of calendar years, whilst inversions in the curve, even where they occur on steep sections, have the effect that certain radiocarbon dates must be given wider calibrated date spans. Another result of these multiple intercepts is that what is only a small span in radiocarbon years may be represented by along span of calendar years. Where the beginning or end of a steep section of slope corresponds or overlaps with an inversion, then the number of C-14 dates which must be calibrated to a limited range of calendar dates is accentuated, and the result is a jump in the histogram. The effect of all this is that the C-14 record seems to break up into three or four units, each of which largely corresponds with changes in the material record. I shall thus describe these as the EIA (about cal BC 800-400), the MIA (about cal BC 400-200 cal AD) and the LIA (cal AD 200-800). The bracket for the EIA is a factor of the C-14 calibration curve, which is essentially flat here: 'it is



impossible to resolve the radiocarbon dates of any samples whose true ages lie between 400 and 800 BC' (Baillie and Pilcher 1983, 58). But there is also a significant gap between the MIA and about 650 AD, which may partly be an artefact of the calibration curve, and on the basis of which I have divided the period from the end of the MIA until the ninth century into a LIA I and LIA II.

Whilst the observations which have been derived from this analysis appear to be very significant, this graph, compiled relatively early in this research project, is not strictly speaking accurate. This is because each date has not been given an equal weighting. A graph such as this would have been difficult to compile manually; each date span has to be plotted as a box, the area of which is the same for each. In view of the large number of dates involved this method would be mathematically little different to the alternative method of summing normal density curves for each date with the standard deviation varying from date to date (pers comm Marian Scott). Each date does not necessarily have an equal weighting, but we must routinely accept that there is an unknown distribution within the calibrated range (Pearson 1987, 103). Yet whilst figure 3 was not strictly accurate, it raised questions concerning the relationship of C-14 dates, their calibration and the settlement record which needed resolving.

Subsequent to the compilation of figure 3 an expanded data base of Scottish dates (261 in total)<sup>1</sup> was calibrated using a computerised high precision calibration programme (*University of Washington Quaternary Isotope Laboratory radiocarbon calibration program 1987, rev 2.0*). From this data, relevant parts of which were supplied to the university mainframe, figure 3 was revised (fig 4B) to show the distribution of calibrated Scottish dates at the 1- $\sigma$  level using a non-parametric density estimation technique (kernel density estimation: pers comm Marian Scott). But in addition, the distribution of the same *uncalibrated* dates was also plotted at the 1- $\sigma$  level (fig 4A).<sup>2</sup>

1. Includes all dates listed in appendix I with the exception of all Dundurn dates (bar GU-1041 and GU-1043).

2. I am very grateful to Dr Marian Scott and Dr Tom Aitchison of the Department of Statistics, Glasgow University in this respect. The former discussed this issue with me and produced the graphs on which figs 4 and 5 are based with a programme devised by the latter.

The question to ask now is whether the distinction between a LIA I and II on the basis of the effects of the calibration curve can still be upheld. The most obvious point to make is that the distribution of the uncalibrated dates has a major effect on the ultimate distribution of the calibrated version. Thus in Orkney (a total of 97 dates) a large number of the dates fall into the period 600 BC-AD 100, then there is a substantial drop, rising significantly between the period of about AD 600-1000. In Caithness and Sutherland (18 dates) the number of available dates is small, but the profile is largely similar to that for Orkney. For the west coast and islands (74 dates) there is a peak in the EIA/MIA, a gap in the MIA/LIA I transition, but then a large number of dates fall into the LIA II dating bracket. The distribution of dates from the central mainland (71 dates) is different from the other areas, which are all in the Atlantic Province. It too has a peak at around 250 BC, but a large number of dates are in the period from about 200 AD, that is the period for which few dates have been derived from elsewhere.

Why are there similar high and low spots/brackets in each of the three areas of the Atlantic Province? The answer (as will become apparent in chapters 8-10) is related, naturally enough, to the source of the dates. There has been considerable excavation of brochs, roundhouses and wheelhouses, the monumental structures which constitute the archaeological record of the EIA and MIA, but until recently little attention has been paid to the archaeology which succeeds it. This is largely because the structures of this period are less substantial and monumental in character. Recent research, particularly in Orkney, has discovered and dated some non-monumental architecture. However, with few exceptions, these stem from the period of about cal AD 600 onwards.

In distinction to the Atlantic Province, the mainland archaeological record does span the LIA I. The source of these dates is from burials (of which the Atlantic Province has few), but largely from forts, further monumental architectural forms which develop here at the time when the broch, and the social system which maintained it, has declined; these two factors may be inter-related (§10.3).

The effect of calibration upon these dates is that in general the graph is smoothed out, and the gap between the MIA and LIA II dating brackets is slightly reduced. Nonetheless, the shapes of the curves



are essentially similar, with peaks, where applicable, in the MIA and LIA II. In all the areas of the Atlantic Province, sharp, narrow peaks coincide between about cal AD 600 and 750. Figure 5 has been produced in an attempt to examine how much of this bracketing is due to limitations of the calibration curve. In fig 5B the distribution of C-14 calibrations (at the 1- $\sigma$  level) for each decade between 3000-950 bp (with a constant standard deviation of  $\pm 50$  years) has been plotted against the characteristics of the Trondheim calibration curve. This was done in order to examine the effect of the calibration curve on date ranges which were not necessarily represented in the Scottish evidence, and without the element of bias produced by the irregular distribution of the Scottish data. As with fig 4B, neither graph takes into account the fact that there would be different probabilities within the date range of any given date with multiple intercepts, and thus there is some levelling of the graph. None the less, to a very large measure, the observations made on the basis of figure 3 still stand; the peaks in this curve correspond largely with those on fig 5B.

In conclusion, calibration must have some bearing on the clumping of C-14 dates, but the original archaeological data set is of more significance. Having said this, there is thus a gap in the archaeological record which is recognisable in both archaeological and radiometric terms between approximately cal AD 200-650. On this basis I will continue to distinguish between a LIA I and II, but in the knowledge that this is an archaeological construct devised on the basis of present knowledge, and which may not stand the test of time. Alternative means of recognising LIA settlement are needed if the data from earlier excavations are to be better understood (see below).

In future, TL dates may have the potential to transform the character of the dating sequence, and if necessary to iron out some of the gaps in the C-14 graph, because the technique is totally devoid of the problems of radiocarbon calibration, and there is often much less uncertainty surrounding the relationship of the sample and the event being dated. TL can date when pottery was fired (or the last time it was heated to a minimum of 300°C), but more importantly it can date with a reasonable degree of accuracy the last time a hearth was used; this is of the utmost importance because of the unequivocal

relationship between the event dated and the cultural resources in question. TL has also been used on burnt stone (Huxtable *et al* 1976). Measures have to be taken to remove completely geological TL, and in this case there was an encouraging agreement between TL dates on samples of burnt stone, pottery and a related C-14 date. TL dating has also been used to date vitrified forts (Sanderson *et al* 1985; 1988). If current work by Clark at the Scottish Universities Research and Reactor Centre proves successful, it will also be possible to date destratified pottery. The recent radiometric dates have mainly been used to tie down and amplify a <sup>r</sup>ceived cultural sequence which has been evolving for well over a century. This sequence was largely constructed on the basis of architectural studies, and has had to undergo some substantial revision in recent years. Still very little is known of LIA settlement patterns; the prominent visibility of brochs means that the MIA continues to dominate Iron Age studies. In general the artefactual record is impoverished, and continuity is displayed in much of the material culture (for example see Hedges 1987 III, 44-7). Chronological sequences such as exist for native pottery, even at the local level, are crude at best, and in many cases derived from unreliable stratigraphies with poor associated dating (Topping 1987). A limited quantity of Roman pottery and other artefacts dating to between the second and fourth centuries AD has been found in northern contexts, but there are problems because we do not know how long these circulated prior to deposition. There are few native artefacts which can be specifically assigned to the fourth, fifth and sixth centuries (the period of the major gap in the C-14 record in this area). Some brooches (Fowler 1963), class I stones and *art mobilier* decorated with Pictish symbols, parallelpiped dice and painted pebbles may belong to this period, but unfortunately not exclusively. Certain pins and combs (Stevenson 1955a) constitute some of the more ubiquitous and chronologically sensitive group of artefacts belonging to this period. Thus their re-examination is a means of reassessing LIA settlement throughout the Atlantic Province, but more particularly in the study area where their distribution is pronounced. A reassessment of Stevenson's paper is necessary because of our minimal state of knowledge of LIA settlement, despite considerable progress over the last decade or so, and the need to



reassess the large body of material from early excavations. Attempts to fix the date of relative artefactual chronologies will obviously also meet with the problems of the calibration curve, but some attempts can be made at a finer chronology by examination, where possible, of relative stratigraphy, archaeological context and art-historical context.

### 3.2 SPATIAL EXTENT

All discourse takes place somewhere, and it is therefore necessary to consider how its location structured that activity. Interior space, architecture, is naturally the most common locale or setting for activity and social interaction. It is also the dominant locale (which can be recognised), in that time must be allocated to it in each life-path (Thrift 1983, 40). Certainly it is more difficult to provide evidence for the part which the open environment or ordered landscape played in discourse. It is thus appropriate that a large proportion of the time of archaeologists is spent in measuring, describing and recording the attributes pertaining to man-made space - architecture - which is much easier to recognise and separate into analytical elements than open-space, and where richness in the differentiation of interior structures means that they carry more social information than exterior relations. Indeed it is particularly fortunate that domestic architecture constitutes the primary archaeological resource in the Atlantic Province during the Iron Age. Here, despite subsequent robbing and other vagaries of time, the wide availability of natural building blocks has resulted in the unprecedented survival of prehistoric resources, a prehistoric resource unrivalled in the British Isles. None the less, the structural sequence is not complete, particularly in the LIA I, and the full range of site variability may not be represented.

There are two ways in which this impressive resource should be examined, both as a cultural resource *per se*, and in terms of its rôle as the locale for discourse within it. In practice it is difficult to totally differentiate between these, because the places at which activity is situated are the result of institutions which themselves reflect structure (Thrift 1983, 31).

### 3.2.1 Architecture in society

In order to understand the way architecture structured society it is helpful to look at the patterns of relations between inhabitants and between inhabitants and strangers as they are reflected in the architecture itself. Interior space can be examined in terms of the patterns created by boundaries and entrances (access analysis is a useful tool for doing this: chapter 10). The control and segregation of space is an important method of structuring activity and physical encounter. Expressions of boundary and the control of space might reflect the relations of physical autonomy and dependence between different sectors of a community. In addition particular patterns of spatial organisation may relate to social factors, their repetitive occurrence the acknowledgement of a code whereby authority was sustained. This is particularly important when architecture forms the major context in which knowledge-experience about the world is gathered and common awareness is engendered. In addition these buildings are probably the major sites of the process of socialization, locales within which collective modes of behaviour are constantly being negotiated and renegotiated and where rules are learned and also created (Thrift 1983, 40). Thus the act of construction, the internal organisation as well as the day to day use of a structure can be investigated in order to understand the rôle which architecture *per se*, the resource of man-made space, played in structuring society.

Architecture is the best archaeological resource in the Atlantic Province and, as in most societies, it can be presumed to have been of prime importance. It is impossible to consider other discourse without reference to it; the ideas which are derived from its study thus provide a framework against which to compare the evidence from other cultural resources.

### 3.2.2 Activity in architecture

Other cultural resources provide evidence for the activities which take place in buildings, and it is equally important to consider the rôle which architecture played in structuring these. The main way to do this is by examining where recognisable activities occur on the basis of the distribution of artefacts and other scientific data. The residential unit can thus be defined not just



in terms of its settlement plan, but in terms of the activities which take place in it. On the whole this is only possible for a limited number of excavations; future work will amplify the picture. The significance of these locales is inextricably intermeshed with the structuring principles of society, which were responsible in the first place for the spatial organisation of the settlement. Thus it must be argued that the evidence for social practice which other cultural resources furnish is secondary in nature to that derived from architecture *per se*. However, should the activity in question be the primary structuring force of society, and not the architecture, this will hopefully be detectable in the close correspondence between its location and patterns in the spatial organisation. The access analysis of Hillier and Hanson (1984) can be successfully adapted for archaeological purposes in order to consider both of these at the same time (§10.2.3).

### 3.3 CULTURAL RESOURCES OF THE FIELDS OF DISCOURSE

The availability of cultural resources circumscribes the nature of the specified contexts which may be investigated. As described in §3.2, the main resource in the Atlantic Province is the architecture, which must be studied in part as an independent resource. In addition several other contexts suggest themselves, some of which are investigated to greater or lesser degrees in part III. Evidence of burial is notably absent. Otherwise the types of available resources are as follows: evidence for craft and industrial activities, particularly where they occur, their technology and the nature of the products (for pottery, composite comb-manufacture, weaving, but especially metalworking, for which most evidence is available); environmental data (faunal; micro- and macro-fossil); documentary records of traditional agrarian practice; archaeological landscapes and agricultural tools (in conjunction with folk-life studies) providing evidence for agricultural practice which may have some bearing on prehistoric experience; Roman artefacts possibly providing evidence for long-distance communications with a remote power; evidence for ritual practice coming from symbol stones, ogam inscriptions and objects inscribed with Pictish symbols; and evidence for the introduction of Christianity in the form of stone sculpture, ecclesiastical artefacts and structures and verbal sources. Recent

publications (Barrett 1981, 215-17; Mallory 1981; Nieke 1988; Nieke and Duncan 1988; Driscoll 1988a and b) have comprehensively dealt with the issue of literacy and documentary resources as they apply to the early historic/LIA period, and so this issue will not be dwelt on here. In part this is because no early sources derive from the study area of Orkney and Caithness, and there are few references to it in any of the other sources. However, verbal sources are the physical by-products of literacy, which should also be considered as a resource in its own right, beyond the confines of the extant historic sources. Its introduction with Christianity would obviously have had a wide impact upon modes of communication, permitting communication over both time and space, involving

*developments in the storing, analysis and  
creation of human knowledge, as well as the  
relationships between the individuals involved  
(Goody 1977, 37)*

As such it can be expected to have played a major role in structuring social relations in the Atlantic Province from the sixth century onwards.

\* \* \* \* \*

This chapter has described the nature of the resources available to the student of the Atlantic Iron Age and expounded further the manner in which these need to be analysed in order to construct a picture of past society. Architecture is described as the main archaeological resource, but the settlement record is not always well documented, particularly in the LIA. In the part II our knowledge of MIA and LIA settlement throughout the Atlantic Province is amplified by a study of the date and distribution of certain pins and combs.



## PART II: PINS, COMBS AND THE CHRONOLOGY OF ATLANTIC IRON AGE SETTLEMENT

### CHAPTER 4: BACKGROUND AND GENERAL CONSIDERATIONS



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### CHAPTER 4: BACKGROUND AND GENERAL CONSIDERATIONS

Prior to the construction of a model for Atlantic Iron Age settlement, a better defined data base is required. In part I it was indicated that the main gaps in the data base occur in the late broch/immediately post-broch period (the LIA 'I'). However, in 1955 RBK Stevenson published a paper entitled *Pins and the chronology of brochs* where he brought our attention to the fact that certain distinctive pins and combs would seem to have a post-Roman date, and are thus considerably later than the broch sites on which they were found. In effect he demonstrated that a LIA continued in Scotland until post-Roman times, and he sought to bridge a part of the gap between the third century AD, when the brochs fall into disrepair, and the ninth century evidence. Since 1955 the data base has expanded considerably and new absolute dating techniques have been developed. In this and the following chapters most of the Iron Age and many of the immediately post Iron Age pins and combs are examined to see what chronological horizons and stylistic trends emerge, and how these compare to Stevenson's original conclusions. Ultimately they are a means of reassessing LIA settlement throughout the AP, but more particularly in the study area of Orkney and Caithness where their distribution is pronounced.

#### 4.1 PINS, COMBS AND THE CHRONOLOGY OF BROCHS

##### 4.1.1 A Summary of Stevenson 1955a

Stevenson studied several artefact types which he recognised as being post-Roman. First amongst these was a group of

*carved bone pins with simple ball heads, indistinguishable from Romano-British pins in England, and a type not found in pre-Roman England, nor in the Roman Iron Age at SW Scottish sites [fig 6.1-26]. They have stems that are parallel-sided until they narrow to the point or have a swelling half-way up or higher, made by whittling inwards to the base of the ball. (ibid, 285)*

Having deemed there was sufficient new post-Roman material from



Ireland with which to review the sites of later Scottish prehistory, he highlighted the sites of Burrian and Buiston Crannog as worthy of assessment as they had both produced internal dating evidence. At Burrian the excavator of 1870, William Traill, had noted two distinct levels of occupation, to which he ascribed different artefact types (Traill 1890; see below for expansion of this argument). James Curle (1932, 380) had noted the association of three pieces of Roman bottle glass, a playing counter and a worn sherd of Samian with a late seventh century Anglo-Saxon coin at Buiston, and this led him to conclude that the life of the crannog must have been long. It was observed that a number of the Burrian bone pins had a swelling, sometimes quite sudden, nearly two thirds or more of the way down the stem, presumably to impede slipping. Examples from Ireland, and elsewhere in Scotland were quoted. Hipped pins also occur in England, and in 1955 the few stratified and dated Roman pins did not

*appear to include any with hips; perhaps it is in origin a late Roman or 5th century fashion (Stevenson 1955a, 285),*

but he did not quote any examples from pre-seventh century contexts. Some of the examples have ornamental bands on their shafts, which may or may not have pronounced hips.

Nail-headed pins (for example fig 6.1-2) are also considered to have originated from Romano-British pins; Stevenson cited the example of a

*blue glass inset in one of the Bulilston pins which may be compared with green glass insets, though in differently shaped heads, of late Roman pins at Lydney, Glos (ibid, 286)*

More elaborate inset heads from Scotland and Ireland were also noted (fig 6.21-22).

Carved bone pins from wheelhouse sites such as Foshigarra, Sithean a Phiobaire and Kilpheder were noted. These sites also produced iron ring-headed pins which belong to the main non-Roman series of pins ("Native" pins I). From this study of 'Roman' pins it is concluded that

*the dating of Lagore and Bulilston, supported by the less clear evidence of Mote of Mark and Dunadd, where there were earlier excavations, and by the stratification of Burrian, gives a date not much earlier than the 7th century for the Scottish pins so far considered, and the Anglo-*

*Saxon parallels are similarly dated, but related pins must have led directly back to Roman times (ibid, 286)*

The absence of these pins from sites such as Gurness and Midhowe, both of which had long periods of occupation, suggests a

*late post-broch period not so very far removed from the 7th century, and that early post-broch occupations ought not be expected to produce them, any more than the broch-builders themselves. The widespread distribution of the hipped pins indicates a cultural absorption that probably was only gradual (ibid, 287)*

Comment was also made on the changes in dress which these pins suggest.

Another artefact type Stevenson drew attention to, although only in summary fashion, because excavated examples were few, is the composite toilet comb, which seems to have been more common in late Roman and post-Roman Scotland.

Finally two types of native pins were examined. "Native" pins I (fig 7) comprise ring-headed pins, which come from a

*very long-lived family whose varying kinds cover nearly 1500 years in Britain (ibid, 288)*

"Native" pins II (fig 6.27) are a series of iron pins with bone and antler heads about 12-25 mm across of which only the heads usually survive. The development of both these forms was summarily described.

It is worthwhile reiterating and clarifying Stevenson's conclusions: namely that

*the so-called 'broch-culture' must be broken up into several periods covering at least eight centuries, and probably only part of it belonging to the broch-builders ... To the last two or three centuries preceding the Norse settlement can now be ascribed, at least tentatively, a large proportion of the 'Roman' pins from broch and wheelhouse sites (ibid, 293).*

The supposed absence of these finds from sites such as Gurness and Midhowe may signify that their recognised post-broch occupation was early. In Orkney and Shetland there is a little evidence that wire projecting ring-head pins are secondary to brochs; but a pot impressed with these pins is considered to be early in the west, belonging to the first century AD:



*it is simpler ... to suppose that the most elaborate pottery and the ring-head pins belong somewhere between the 3rd and 7th centuries ... the wheelhouses in the west coming earlier rather than later within that span (ibid, 293)*

Several of these western sites, such as Bac Mhic Connain, produced finds which support this later time-span. Thus Stevenson was querying Scott's (1947; 1948a) dating of the wheelhouses to the first century AD: by implication he was suggesting that wheelhouses commenced a couple of centuries later; and had a time span extending into the second half of the first millennium AD. In addition

*some pins which belong to the pre-Roman and earlier part of the Roman Iron Age are not known from main broch areas at all ... yet 1st-2nd century AD dates remain probable for the main broch-building period (ibid, 294).*

Stevenson ends his paper with the claim to have shifted the chasm of the third to ninth centuries AD [LIA] to the period of the brochs [MIA], with few small finds and little pottery at present being proved to belong to the earlier period.

#### 4.1.2 The Importance of Stevenson's Paper

Pins and combs continue to be recognised as important in Atlantic Province studies. Kilbride-Jones (1980b, 189) deems some metal pin types to be the 'chief expression of Atlantic Province [MIA] culture'; in the LIA pins and combs are still one of the few diagnostic 'Pictish' artefacts (at the Brough of Birsay they are the most typical 'Pictish' find: Curle 1982, 191); and in the LIA/NP Interface pins and combs are usually regarded as the main indicator of interaction/continuity between the natives and incoming Norse.

The significance of Stevenson's paper can be truly appreciated by placing it in its contemporary context of knowledge about later Atlantic Iron Age settlement. In the same year as its appearance the following statement was published:

*It is unfortunate that we cannot at present point to a single fortress or to a single dwelling for burial and say with certainty that it is Pictish ... Without doubt much Pictish material is still hidden from us, but without doubt, also, much has been discovered and not recognised for what it is. The problem lies in the recognition or identification of material as Pictish (Wainwright*

1955, 29-30).

This paper was in fact delivered at the 1952 Scottish Summer School and, in view of Stevenson's observations, scholars were now, in theory, one step along the path to remedying this state of affairs. As it was, this 'chasm' persisted and for at least the next two decades, in part because the implications of Stevenson's paper were not followed up. This applies to both structural and artefactual evidence. In 1962 the 'principal archaeological monuments attributable to the historical Picts' were the sculpted stones and the only structures cited as Pictish are those at Jarlshof (Radford 1962, 148, 150). Young (1962) recognised some Dark Age sites on the basis of the presence of 'Dalriadic pottey', but otherwise it was not until 1965 that anyone examined the Atlantic Iron Age material assemblages in any detail (MacKie 1965a; 1973). MacKie identifies five stages of material culture in the Atlantic Iron Age, which he terms Iron Stages I-V, of which stages II-V apply directly to broch studies. Stages II-III constitute the material culture of the broch age, although some of the brochs also share the culture of stage IV, the material culture prevalent on all wheelhouses. *Several centuries after stage IV his stage V is extant* (1965a, 122; *contra* 1973, 140 where the gap of several centuries appears between Iron Stage V and the Norse period, but no mention was made of the unclear transition from stage IV - V). This is the material assemblage which Stevenson identified on brochs. MacKie summarised his suggested sequence of development (fig 8), but in this he ignores the fact, as he himself admitted, that there appears to be a gap between stage IV, ending about 300 AD and the presence of Stevenson's combs and pins, mostly dating from about the fifth century onwards (NB Stevenson [1955a] had only committed himself to allowing the ring-headed pins, and the pottery stamped with them, to transgress the boundaries between the main bodies of 'dated' evidence; see above in §4.1.1). MacKie was the last person to attempt an overview of Atlantic Iron Age material culture; Alcock (1980a) reviewed the LIA material, and the recent work of Hedges (1987 III) is specific to the Orkneys. Hedges has defined a broch period artefactual assemblage on the basis of Bu, Gurness and the 37 other sites which have produced finds (excluding Howe and Warebeth). He also discusses the 'Pictish' finds, itemizes the occurrence of



diagnostic objects, lists the other find types from broch contexts, and finally draws out the evidence for continuity with the earlier Iron Age and succeeding Norse periods. Theoretical aspects of the assemblages have also been considered: Clarke (1971a) queried Mackie's approach to artefact types, specifically his use of exotic items such as spiral rings and projecting ring-headed pins to argue for an invasion hypothesis; Crawford (1967) and others composing modern finds reports have commented upon limited aspects of the cultural assemblages; and Barrett (1981) and Foxon (1982) have both written on approaches towards the artefacts of this period, but neither have as yet published any specific analyses.

Fundamental to the recognition of LIA settlement has been, and still continues to be, the date of activity in and around wheelhouses, but more specifically brochs. Stevenson's recognition of later settlement on broch and wheelhouse sites was not totally surprising. Despite the limitations of earlier excavations there has been a constant recognition of some form of 'secondary structures' and 'secondary occupation' on broch and wheelhouse sites. The classic, most often quoted example, indeed that employed by Stevenson, is the Broch of Burrian (North Ronaldsay). This has long been claimed to be the first broch site with stratigraphic evidence for secondary settlement. The original excavator, William Traill (1890), claimed to have distinguished two levels of occupation within the broch, each with distinct material assemblages, and this assertion has recently been reassessed by A MacGregor (1974). The 'secondary' level included such distinctive objects as decorated bone pins, fine cut and ornamented composite bone combs (single and double-sided), bones engraved with the so-called Pictish symbols, and a stone slab decorated with a cross and ogam inscription (*ibid*, 344-49).

Thus, for many years, Burrian was considered the first stratigraphic excavation of a broch, and certainly, the only excavation to be able to claim evidence for a division of its occupation into primary and 'secondary' phases. Two phases of occupation were noted, for example, at the Broch of Borthwick (Watt 1882) but the excavator's work was 'unsystematic and his publication incomprehensible' (Hedges 1985, 154). However, MacGregor, in his re-examination of the Burrian report, suggests that Traill's

separation of the finds is not altogether as clear as is sometimes assumed, not least because the 'secondary' paving indicated in the original plans covers less than half of the interior of the broch, and any break in occupation sequence would have been difficult to detect elsewhere. Moreover, he considers the division of the finds 'too clear cut not to have been partly instinctive' (MacGregor 1974, 70). None the less, he was able to show that some credence can now be given to Traill's original observations, and MacGregor certainly has 'no hesitation in classifying the inhabitants of the site in its secondary phase as "Picts"' (MacGregor 1974, 102), that is post-broch. Thus MacGregor (*ibid*, 101) sees the solid-based broch as probably having been constructed between the first century BC and first century AD, but after an initial period as a purely defensive structure its role changed to meet more domestic requirements. There is no evidence as to when this took place, but on the basis that comparable sites were undergoing a similar transition at a comparatively early date, around 200 AD (for example Keiss: MacKie 1972, 19; and Jarlshof: Hamilton 1956, 90), he suggests that the 'secondary' occupation at Burrian was either very prolonged, or else consisted of two phases at the very least. The latter theory is necessary because to MacGregor most of the finds suggest occupation from about the fifth century until the coming of the Norse. For only a few of the finds could parallels from well-defined broch contexts be found (MacGregor 1974, 100). The bulk of the *datable* finds, essentially the bone pins and composite bone combs, he dates from about the fifth century or later. It would thus appear, on present evidence, that there is a period of about two hundred years when nothing happened on this site (MacGregor will not commit himself to a significant period of abandonment), or if there was any activity it was not happening in the broch tower itself; certainly there are no finds which can be ascribed to the period. The absence of finds attributable to about 300 to 600 AD is a problem already discussed in §3.1.3.

The structural and chronological properties of the Broch of Burrian, which need emphasizing, are therefore:

1. there was secondary, post-broch occupation in the broch tower itself, to which a material assemblage and possibly some internal structures can be assigned;



2. Contemporary occupation seems to have taken place outside the broch tower;
3. the relationship of this secondary settlement, or phases of occupation, to the MIA 'broch period' is not known.

Over the last century similar observations have been made at several sites, often without justification by means of stratigraphical evidence. Hedges (1980; 1985; 1987 III, 130-51) has made a study of the work of various antiquaries on the brochs of Orkney, from which it is apparent that they 'recognised' two different elements to the 'secondary' settlement: a reoccupation of the broch tower itself, often with alterations to the broch structure, and the addition of outbuildings, that is shanty buildings erected inside and out during more peaceful times, or so they presumed. On the whole, the reasons for their judgements were very subjective, but as Hedges (1980) outlines, this school of thought was a self-perpetuating one. No sooner was this verdict enshrined in Dryden's colour-coded plans of Burrowstown in Shapinsay (Hedges 1987 III, 144; Petrie 1890, fig 10), than this version of events was more or less immortalised. Indeed, this was the stance which the Royal Commission adopted in 1946, although this, they appreciated,

*raised problems regarding the conditions prevailing in post-broch times which are as yet unsolved (RCAHMS 1946).*

Opinion on the date of broch outbuildings continues to vacillate, whilst arousing fierce debate. The issue is confused by the fact that two different types of evidence are often conflated under the single term 'secondary': settlement which may be as good as contemporary with the brochs, and settlement which is considerably later. A recent view successfully distinguishes these:

*it cannot be denied that the Picts built into the ruins of brochs and possibly other structures - but the long held belief that the regular, substantial buildings found around the towers themselves are secondary (in the sense of representing subsequent occupation) is not longer tenable (Hedges 1983, 117),*

but the antiquarian literature rarely does. So the date of the earliest broch outbuildings is an important issue, and opinions have alternated between two camps (although in the majority of 'broch' literature where outbuildings are not mentioned it can be taken as

implicit that the broch and outbuildings were not considered contemporary):

CONTEMPORARY	NOT CONTEMPORARY
	Anderson 1877; 1883
	Petrie 1890
	Anderson 1901
	Callander and Grant 1934
Childe 1946	RCAHMS 1946
Scott 1948a	
	Hamilton 1962; 1966
	Mackie 1973
Hedges and Bell 1980	
	Ritchie and Ritchie 1981
Hedges 1983	
Hedges 1987 II-III	Mackie 1987b
Ritchie 1988	

This debate will thus be further clarified by examination of the LIA artefacts from broch sites, a consideration of the nature of the activity for which they are the by-product and of the nature and date of any contemporary structural remains. Examination of these artefacts will also suggest how contemporary non-broch sites relate to the LIA settlement patterns.

## 4.2 THE DATA BASE

### 4.2.1 Examination, collection and management of the pin and comb data base

A data base has been compiled of most Scottish Iron Age pins and combs, including for comparison many later examples (appendix II-III). It is not definitive, but where possible all primary evidence was examined personally during study visits to the major Scottish museums and to recent collections not yet acquired by the museums. All observed details were recorded on pro forma and subsequently transferred to a computerised data base (dBase II).

Each artefact is assigned a record which is divided into a total of 25 'fields', or pockets of information, deemed to be of relevance to any subsequent analysis, and upon which the data can be sorted. The system is designed to incorporate as much flexibility as possible within an otherwise rigidly structured system, and thus to be applicable to all artefact forms, and to allow for all eventualities which might arise as work progresses. Take for example



fields 10-14 (Qualifiers 1-5); the data fed into each of these fields will vary according to the nature of the preceding combination of material, category and object, but will be standardised for fixed combinations of these three fields.

The fields upon which data is collected and by which it may be sorted are: museum catalogue number, site, county, national grid reference, material, category, object, qualifiers 1-5, class, comments, length, breadth/diameter, depth, weight, context, dating evidence for context, unpublished references, published references and illustrations, and finally a record number. These are arranged as follows:

FIELD	NAME	TYPE	WIDTH
001	mus:cat:no	C	015
002	site	C	025
003	county	C	005
004	ngr:sq	C	002
005	ngr: east	C	004
006	ngr:north	C	004
007	material	C	008
008	category	C	011
009	object	C	010
010	qual:1	C	010
011	qual:2	C	010
012	qual:3	C	010
013	qual:4	C	010
014	qual:5	C	010
015	class	C	010
016	comments	C	060
017	length	C	004
018	b: diam	C	004
019	depth	C	004
020	weight	C	005
021	context	C	050
022	date: cont	C	150
023	up: ref	C	020
024	pub: ref	C	080
025	recordno	C	004

A field is left blank where there is insufficient available information.

#### 4.2.2 Details of the Artefacts

Recorded details include a basic description of the object. Each object is recorded according to the material it is made of: either metal, glass, wood or skeletal material. The traditional divisions of animal, plant and mineral are too basic for present

purposes. Material can be further sub-divided by category, that is a more precise description of the material type. So, for example, skeletal material is divided into bone, antler, horn and cetacean bone (after MacGregor 1985). Cetacean bone is given its own category as it is deemed worthy of specific attention in the Atlantic Province, where its utilisation was a developed craft, and it played such an essential role in an area where other material for artefacts was limited. At the next stage the artefact is given an object name, which is a name borrowed from modern objects of similar form.

Qualifiers 1-5 constitute free fields in which the object can be more specifically described. The entry in these fields will vary according to the prior combination of material, category, and object, but as noted above, the range of permissible entries for each field will be of a constant nature for each combination of material, category and object (fig 9). Where relevant these fields may include descriptions of the evidence for both production and use of the artefact, such as the presence of distinctive tool marks, or wear patterns. In addition the qualifying fields will include more specific details of the form of the object, what might otherwise be described as the components of the more traditional classificatory systems.

Chang (1967, 71) recognised three reasons why archaeologists should wish to classify artefacts. Firstly one classifies in order to summarize data and to make it manageable, expressing observed facts both economically, effectively and meaningfully. Secondly, to delineate units of archaeological facts according to their mutual relations within a culturally meaningful system, and in order to reveal them. Thirdly, to locate cross-cultural boundaries of the attributes of archaeological facts in order to obtain categories that are comparable across cultural systems, which in turn are indispensable for the discovery and/or formulation of cross-cultural patterns and regularities. The second and third reasons are not what the present study has in mind at all. But the first reason is essential, and the reason why all archaeologists will always spend a portion of their time classifying, even if not the 80-90% of their working hours as estimated by Chang (*ibid*, 71).

A classificatory scheme has been devised for all the examined Scottish pins and combs, and is described below. Prior to examination



of the relevant artefacts the framework for these schemes was constructed from published examples and extant typologies. In the case of pins this was on the basis of head and shaft forms (for example MacGregor 1985, 113-22). In the case of combs this was on the basis of whether or not the comb was composite, how many sides with teeth it had, the overall form, and the shape of the connecting plates. As data were collected both these schema were amended *ad hoc* and subsequently became ill-organised. In order to avoid complications these were not revised until most of the data had been collected. Unfortunately there are still some ambiguities in form, but the final results are classifications with relatively distinct divisions, on the basis of which analysis has some relevance. Critics will perhaps observe that these classifications are over-detailed and of the traditional morphological fashion, units of analysis which bore no significance in the past. Yet it is only after the consideration of all observable dimensions that it has been possible to reduce these observations to a relatively few, yet significant, archaeological dimensions (on the basis of which the artefact is assigned to a class). A comments field includes extra details of artefacts where necessary.

The final fields employed in the description of the form of the artefact are its dimensions: length, breadth/diameter, depth and where applicable weight. These facts are only entered when and where they are meaningful in terms of describing the artefact, or of potential relevance in distinguishing<sup>h</sup> sub-groups within object groups, or in elucidating more specifically the use of the object. These may all be of relevance to the interpretation of the object and are certainly invaluable in distinguishing one artefact from another. The ultimate identificatory element is the present location of the artefact, its museum and associated registration number. The catalogue number is preceded by an abbreviation specific to the museum or collection in question. For the purposes of this study each artefact has its own record number, which has no particular significance other than that it is specific to that particular object, and is the means by which the main text is cross-referenced to the appendices.

In addition to fields recording the form of the artefact there

are those which describe where it comes from, and the evidence for its dating. Context refers to a specific horizon, related where known to both horizontal and vertical stratigraphy, each context being specific to a site, which is recorded by county and national grid reference (eight figures where possible). Where stratification exists standardised abbreviations for the different layers and/or areas specific to each site are quoted or have been devised. Context and/or date of context may include details of associated artefacts, that is those found in such a position as to suggest that in the systemic context they originally had some inter-relationship in one or more activities, or alternatively they are significant with regard to the date of the context/phase/site (see below). The dating evidence for the context is a means of analysing the data on broad chronological horizons. Any dating evidence cited in this field must not be taken at its face value. Often the dates quoted are simply those suggested by the relevant excavators. The C-14 evidence for a particular phase, or in some cases that immediately preceding or succeeding (*terminus post quem* and *terminus ante quem* respectively, henceforth *tpq* and *taq*) is cited, but such evidence only has any statistical reliability or significance when taken together with all dating evidence for a site. Full details of all relevant C-14 dates are to be found in appendix I.

The artefactual data base is divided into two sections. In appendix II each artefact is listed in order of its record number, and details can be found here of its form. In appendix III the data base is ordered by site, the object is defined, and details of its context, the dating evidence for that context, its museum accession number and a list of published references are to be found. Cross referencing between these two catalogues is easily achieved by using the record number and site names. The appendices are placed in separate volumes so as to facilitate cross-referencing, and so that the illustrations and descriptions can be simultaneously examined.

#### 4.3 DATING ARTEFACTS

In order to date artefacts the essential prerequisite is a reliable chronological sequence, preferably both relative and absolute. An ideal Iron Age site for these purposes would therefore



be one with a long stratigraphical sequence, from which are C-14 dates, preferably not less than three per phase, and/or thermoluminescence dates, and/or archaeomagnetic dates. In later levels coins, decorated metalwork, imported pottery and documentary references would tighten the chronology. Of course such a scenario is a rare one; many sites were dug prior to the advent of systematic recording, let alone scientific dating techniques, not all sites produce suitable material for sampling, and documentary references are rare. In the earlier parts of the Iron Age dating is reliant on a combination of perceived chronologies and scientific techniques. The most common method is C-14, the significance of which depends on the suitability of the material chosen for analysis and the relationship of the sample to the archaeology. (See Taylor 1987 105-46 on sample provenance, sample composition, experimental and systemic factors influencing accuracy and precision of dates). Preferably dates will be high precision measurements and there will be multiple samples. The combination of dates from the same context, using statistical methods (such as Gillespie 1986) is a means of reducing the effects of random errors on individual results, and averaging of the determinations for a phase often enables some idea of its true length. All relevant C-14 dates and weighted means are summarized in appendix I.

In the absence of dating evidence other than C-14, in the earlier part of the period dates are not reliable enough to allow genuine cross-referencing between sites except at a very general level. Thermoluminescence, dendrochronology (best for the historic periods where the reference curve is best: Clark 1987, 4) and archaeomagnetic dating are far more accurate, but their use is only now becoming more widespread.

In the historic period (LIA) C-14 dating is usually regarded as secondary in importance to other dating methods, including the presence of coins, Roman artefacts, fine metalwork, imported Mediterranean or Gaulish pottery, glass and documentary sources (Alcock 1971; 1981, 151-7; Alcock *et al* 1986, 259-61). Neither the Britons; the Picts nor the Scots minted money, but Roman coins did find their way into contexts as far north as Orkney (Robertson 1983). Some late Northumbrian coins found their way into southern Scotland, and later coins were brought by the Norse. Unfortunately these

sources are mainly absent in the Atlantic Iron Age.

Roman artefacts have a fairly wide distribution in Scotland, but little is known about their period in circulation before they came to be incorporated into archaeological contexts. Samian is particularly unreliable (see for example Stevenson 1955a, 283; Warner 1976). Fine metalwork, whilst more common, is beset with dating difficulties, scholars often disagreeing by at least a century on art historical grounds. Further dating is often limited by the range of comparable artefacts. Moulds are particularly valuable in this respect because of their short life span and specific origins, although independent dating evidence is necessary to date them. Imported pottery has a limited distribution in Scotland, stopping N of Ardnamurchan. The northernmost contender, a possible sherd of E-ware from Dun Ardtreck, is accepted as such by Alcock and Thomas (Alcock pers comm), although recent neutron activation analysis by Topping (1986b, 121) does suggest it is perhaps as likely to be part of a Scottish medieval vessel. No type of imported pottery has a particularly close date range. None the less, it is valuable in Scotland which was in some areas aceramic, and where chronological sequences such as exist, even at local level, are crude at best (for example Lane 1983). The application of the most modern scientific techniques, such as neutron activation analysis, is disappointing because the data base is shown to be incapable of supporting chronological and cultural models on the basis of composition, although some patterns could be identified within the data (Topping 1986b). Imported glass is potentially susceptible to close dating (Alcock 1981, 155), but with the exception of the Brough of Birsay (Curle 1982, 46-47) is rarely evidenced north of Dunadd and Dundurn, although there are several examples from the west coast (Alcock and Alcock 1987). The use of pins and combs for determining chronology has also on occasion been doubted (Alcock 1981, 156, 156).

The final main source of dating evidence is documentary sources, obviously only applicable in the LIA/Early Historic (henceforth EH) period. In reality such sources only pertain to prestige sites, such as EH fortifications (Alcock 1981; Alcock et al 1986, 259-60; Alcock and Alcock 1987), and problems beset both interpretation of the source and applicability to archaeologically recognised horizons.



Just as scientifically derived dates may relate badly to the phase of activity in question, so may 'datable' artefacts. Where possible the exact context needs to be analysed so that cultural transformation processes, for example redeposition, residuality, reuse, and long circulation can be recognised and taken in to account. This is only possible in recent and well-recorded excavations. As a result, taking into account the vagaries of all dating methods, heavy emphasis has been placed below on relative chronologies. No apology is made for the nebulous nature of most quoted 'dates'; they are none the less of some value when patterns start to emerge amongst the data, weighing in favour of probable, if only approximate, dating horizons. Initial discussion, below, of the data base mainly refers to those items for which a 'dated' context exists.

In chapters 5 and 6 LIA I and II are not distinguished; this is a matter which is fully discussed in chapter 7, when all available dating evidence for pins and combs is brought together.

#### 4.4 THE QUESTION OF DISTRIBUTION

Can any significance be applied to the distribution of pins and combs? A number of factors must be contrasted and compared before this question can be answered. In the absence of evidence to the contrary, it can be assumed that the present distribution is limited by the original distribution of the artefacts. Most of these are probably derived from a settlement or burial context (the latter, with one exception, is only applicable to the NP). Loss outside a domestic context cannot be discounted, but will be disregarded for present purposes.

As a test the evidence from two areas in the Atlantic Province is examined in detail here: Orkney and the NE section of Caithness because there is a relatively high distribution of relevant artefacts (in this case pins), and this is the area for subsequent detailed study (fig 10); and a part of the Western Isles for the purpose of comparison with the differing geography of the Orkneys (fig 11). The Uists, with a high concentration of finds, and adjacent areas of Harris and Skye were chosen as a good example of geographical diversity within one small area. A large number of factors can be compared simultaneously because of the use of coloured overlays. In

each case the base map shows the distribution of various modern land capabilities, that is limitations imposed on the land by the physical and biological factors which affect agriculture (derived from the 1982 Soil Survey of Scotland by the Macaulay Institute, Aberdeen). Classification is in terms of potential productivity, cropping flexibility and ease of management. To what extent the latter two criteria can be applied to earlier periods with different agricultural practices, technologies and overall economic emphases is unsure.

A second major factor dictating the current distribution of artefacts is the prevalent preservation conditions.<sup>1</sup> Taking into account the factors of probable pH, water content and grain size figures 10-11 also plot the distribution of soils which on the basis of the parent rock are unlikely to preserve skeletal and possibly also metal pins (on the basis of the Macaulay Institute Soil Survey they are acidic). In the absence of detailed ground survey it is impossible to gauge the accuracy of this generalisation, not least because the properties of the archaeological deposits which build up on a site need bear no relationship whatsoever to the conditions of the surrounding soil, and surrounding soils with different properties may affect an area (see for example Romans and Robertson 1983, 55). In addition land over 60m is mapped. Against these can now be compared the distribution of metal and skeletal pins, other metal and skeletal object-producing Iron Age sites, and Iron Age sites which have produced neither metal or bone (based on Bell 1982 for Orkney; for the Western Isles on the excavation reports of sites listed in MacKie forth).

As a result of these distribution maps several observations can be made. Firstly, on the basis of soil acidity, it is impossible to predict where bone, antler and metal artefacts are likely to survive. Either soil maps are not detailed enough, or more likely, they bear little relationship to the nature of the archaeological deposits in

Note:

1. I am grateful to Deborah Kennedy [Geology department, Glasgow University], Amanda Clydesdale [Archaeology Department, Glasgow University] and Jim Spriggs [York Archaeological Trust] for discussion of this problem.



which the artefacts are encapsulated. All find spots, with the notable exception of Clettraval, favour low land of relatively good agricultural capability (that is to say that no artefacts have been recovered from the poorest class land) and are usually near open water. As yet factors dictating recovery have been ignored. Firstly current agricultural activity on better land may have favoured the discovery of sites in these areas. Similarly, coastal erosion heightens the chance of discovery (in tandem, loss) of many sites. Often the better land has a coastal disposition, most marked in the Western Isles (in North Uist the 34 townships of the early eighteenth century are confined without exception to the machair: Crawford 1978, fig 2). A third inescapable fact is that the distribution reflects in very large measure the nature of archaeological activity, for example the notable concentration of artefacts around the Valley peninsula is an indication of E Beveridge's archaeological activity.

In conclusion, metal, antler and bone artefacts have tended to be found in areas of relatively good soil, which is also in theory the areas where prevalent soil conditions are more likely to be conducive to the preservation of the artefactual material. However, factors dictating recovery have also favoured these areas, and it is not improbable that fieldwork and investigation in areas where the land was of lesser agricultural value and 'not conducive to preservation' might start to balance the picture. As it is impossible to predict areas where the artefacts will definitely not be found (class 6 and 7 land being the only possible exception), and because of geographical diversity, especially in the N and W Isles, 'preservation conditions' need not be taken into account in general discussion of artefact distribution unless locally specific soil surveys have been done.

\* \* \* \* \*

This chapter has described the importance of pins and combs to LIA studies, and outlined some of the general details and issues concerning the current study. In the next two chapters the date of these pins and combs will be reviewed and up-dated.

## CHAPTER 5: PINS



## CHAPTER 5: PINS

### 5.0 CLASSIFICATION OF SCOTTISH PINS

The pin assemblage is divisible on the basis of three main criteria: material, head form (qual:1) and shaft form (qual:2): Stick pins occur in both metal and skeletal material (the latter may also be used to make the moulds for the former, see below). Stick pin forms which might be made in either material are treated as one group, classification being on the basis of head and shaft forms, certain combinations of which may happen to be limited to certain materials. The primary criterion for the classification of stick pins are therefore on the basis of the head forms, which usually provide more diagnostic features than the shafts (MacGregor 1985, 116). Metal-only stick pin forms, such as ring-headed pins, loose ring-head pins and Fowler type E pins, are treated separately.

Before classification, pins must be defined. In the case of metal examples this is usually obvious at first glance, the common factors being a slender point with shaped head. It is more complicated with skeletal material, where natural forms are cut to a prescribed shape, the final product being very much limited by the choice of raw material. However, subsequent wear patterns may reflect the uses to which the artefact was put. As in the case of metal pins, a bone pin has one end which is pointed; the opposite end invariably has a distinctive head, varying from a natural articulation to a finely ornamented version. The shaft and/or head may be decorated, and will in all probability be highly polished, either as a part of the manufacturing process, or certainly by protracted wear. It is sometimes difficult to distinguish a bone 'pin' from a bone 'point' or 'awl', confusion arising from both ambiguous head and/or shaft forms. Ultimately some judgements may be subjective, but in general the points and awls are usually only polished at the working end of the tool, and tend to be much wider, and to have on the whole flatter, and sometimes more irregular sections. Whilst some thin irregular polished slivers of bone may have functioned as dress pins, this can rarely be positively ascertained.

The classification upon which this study is based distinguishes

between stick pins and other metal-only forms. All metal-only pin forms are assigned verbal names, abbreviated for entry in the data base. Head forms found in both metal and skeletal materials are assigned an arabic number (in addition to a verbal description).

With regard to stick pins, subdivisions of head forms are denoted by upper case letters. Thirty-six head forms exist, one of which may be sub-divided into a maximum of ten divisions. No significance can be attached to the order of the numbering. Shaft types, denoted by letters in the lower case, are limited to four broad categories, and tend to pertain only to simple stick pin forms, being irrelevant to loose ring-heads (or ringed pins, not to be confused with the ring-headed pin, which is the generic term for pins with the ring-head either cast or bent out of the pin itself: Fanning 1983a), projecting ring-heads and Fowler type E pins. An asterisk after either the head or shaft form denotes additional decoration on the area of the pin concerned, other than that standard to the head type. Features such as insets are listed verbally.

The scheme covers all known Scottish Iron Age pin forms, some Norse forms which are similar, or need to be brought in to the discussion, and other medieval pin types which have been the subject of relevant discussion, especially Laing 1973.

## 5.1 SUMMARY OF PIN FORMS

### 5.1.1. Summary of Stick Pin Head Types found in Metal and Skeletal Material (figs 12-13)

Description below is kept to a minimum, except where accompanying illustrations are unlikely to provide sufficient information. Further details of form may be provided in the subsequent section on analysis of pin form.

#### GROUP 1: Simple heads

- A plain tapering shaft with flat top
- B plain tapering shaft with rounded top
- C plain tapering shaft with conical top

#### GROUP 2: 1-4 transverse grooves beneath a conical head

The segments produced by the grooves are not appreciably wider than the shaft.



**GROUP 3: 1-5 reels beneath head**

- A conical or ovoid head
- B more-or-less spherical head
- C polygonal head
- D ornate head, eg melon
- E vase-headed
- F flame-shaped head

**GROUP 4: reel heads**

**GROUP 5: reel and bead head**

**Group 6: variations on spherical heads**

- A ball (spherical)
- B ball with flat top
- C half ball
- D globular
- E globule with flat top

**GROUP 7: facettted cuboids, i.e. polygonal heads**

**GROUP 8: nail heads**

- A expanded heads
- B marked expanded head

In type A the head evolves out of a smoothly expanding shaft with no fixed demarcation between head and shaft. In the case of type B the head may expand out of the shaft or sit perpendicular to the shaft, but in both cases the regular top of the head has some depth.

**GROUP 9: transversely flattened heads**

- A disc
- B axe
- C fan
- D crescent
- E rectangle
- F triangle
- G rounded end
- H quatrefoil
- I sub-triangular
- K miscellaneous

**GROUP 10: small transversely flattened disc heads**

This group is a distinct smaller version of type 9A.

**GROUP 11: thistle heads**

- A small
- B long

**GROUP 12: natural articulations**

- A pig fibulae
- B slightly modified pig fibulae
- C perforated pig fibulae
- D bird bone

- E cattle/deer metatarsal
- F sheep/goat ulna

GROUP 13: segmented heads

This group is similar to group 2, but in this case the segments are wider than the shaft.

GROUP 14: zoomorphic

- A animal head extends at right angles to the shaft
- B animal head in line with shaft
- C miscellaneous

GROUP 15: globular heads

- A solid variety, usually antler
- B hollow, cut from shaft of a long bone
- C animal teeth
- D metapodial

GROUP 16: perforated expanding ends

- A Sub-triangular
- B rectangular
- C trapezoidal
- D discoid
- E miscellaneous

GROUP 17: unperforated expanding ends  
A-E as for group 16

GROUP 18: macehead

GROUP 19: flat profile pins

- A circular
- B globular
- C rectangular
- D half ball

This group is distinguished from group 9 (transversely flattened) in that in profile the head of this pin is the same width as the shaft, (as opposed to being slimmer).

GROUP 20: crutch heads

GROUP 21: cross heads

GROUP 22: anthropomorphic<sup>P</sup><sub>Λ</sub> heads

GROUP 23: open ring heads

GROUP 24: collared variations on spherical heads

- A ball
- B ball with flat top
- C half ball

GROUP 25: dome heads

GROUP 26: collared elliptical heads



- GROUP 27: knob heads
- GROUP 28: bucket heads
- GROUP 29: bun heads
- GROUP 30: frustrum heads
- GROUP 31: pierced heads
- GROUP 32: splinters
- GROUP 33: unfinished pins
- GROUP 34: miscellaneous
- GROUP 35: needles
- GROUP 36: acorn heads

table 1: Ambiguities in stick pin forms

	:	1A	2	3E	4	6A	6B	6D	8A	9A	9C	12B	15A	25	a	c
.....	:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1B	:	x														
6	:	x														
6B	:				x											
6D	:						x									
6E	:							x								
7	:								x							
8A	:	x														
8B	:				x		x				x					
12A	:											x				
13	:		x	x												
15C	:												x			
17A	:											x				
19A	:									x	x					
25	:					x										
26	:					x										
28	:			x												
b	:														x	
e	:															x
sm dome:														x		

x = similarity

### 5.1.2 Summary of Metal-Only Pin Forms (with abbreviations) (fig 13)

Astragaloid (astrag)

Butterfly

Crook-head (crook-hd)

Disc with fillets (discfillet)

Fowler E (fig 14)  
    proto-zoomorphic  
    zoomorphic

Horizontal disc head

In-turned spiral head (spiral-in)

Kidney ring skeumorph (kid r skeu)

Lens head (lens hd)

Lobed head (lobed)

Loose ring-head (loose r-hd) (fig 15)  
    kidney-ringed, polyhedral-headed  
    knob-ringed, loop-headed  
    plain-ringed, loop-headed  
    plain-ringed, polyhedral-headed  
    spiral-ringed, baluster-headed  
    spiral ringed, loop-headed  
    stirrup-ringed, crutch-headed

    This group is equivalent to Fanning's (1983a) *ringed pins*.  
Loose ring-head is used in preference to this because it is less  
easily confused with the *ring-headed* pin group.

Lozenge with fillets (lozfillet)

Miscellaneous (misc)  
    bent headed

Mushroom head (mush)

Open disc head (open disc)

Out-turned spiral head (spiral out)

Projecting disc (proj disc)

Rectangle with fillets

Ring-head (r-hd) (figs 16-19)  
    cast  
    wire  
    corrugated  
    degenerated ibex  
    hand-pin  
    ibex  
    rosette  
    semi-beaded  
    semi-corrugated  
    small beads



This group is a sub-set of Fanning's (1983a) *ring-headed* pin group, which would also comprise the ring-head group, below.

Ring-head, decorated (r-hd dec)

Rolled spiral-head (spiral roll)

Small dome (sm dome)

Spiral head (spiral)

Square plate with projections (sq pl proj)

Swan's neck

Triangle with fillets (tri fill)

Wheel-headed enamel (wheel-hd)

### 5.1.3 Summary of Shaft Types

Four main shaft types exist, and these are distinguished on the basis of their longitudinal form (as opposed to section):

- a: the shaft tapers smoothly along its entire length
- b: the shaft has straight parallel sides, tapered only at the tip
- c: the shaft has a pronounced swelling at about its mid-length
- e: the shaft has a distinctive hip, approximately two-thirds of the way down.

MacGregor (1985) includes a fifth category (d) which have decorated shanks, but this is omitted here as all types can in theory display decoration.

The distinction between shafts c and e is not always obvious, and a degree of subjectivity has naturally been brought into play. For example whilst the swelling may not have a pronounced hip, decoration, such as transversely incised lines around this area emphasises an apparent hip, and acts to impede the slipping of the pin, just as the 'true' hip does; in these cases the shaft has been described as form e.

## 5.2 ANALYSIS OF THE DATA BASE

In this primary analysis, which is initially looking for chronological trends, and the distribution of fashions, there are three prime factors to be taken into account, in the following order: the category of material from which the artefact is made (§5.3); the form of the shaft (§5.4); and the form of the head (§5.5), all of which may have chronological or distributional significance. A lesser factor, pin length, is also considered. Ultimately stick pin groups 1-30, 34, 36 are discussed individually, primarily on the basis of the Scottish evidence (up to and including data base record number 1933; subsequent entries up to 2148 are not included in any of the statistical analyses). Groups 31-33 and 35 (non-pin groups) are omitted from all discussion because, although recorded in appendix 1, they are irrelevant. Both miscellaneous groups (34 and metal miscellaneous) are excluded from all primary analysis for the obvious reason that these groups are too amorphous to be treated as a whole. The metal-only stick pin groups are discussed individually, but loose ring-heads, Fowler E and ring-headed pins are each discussed *en masse*. Stick pin groups are treated as homogeneous units although analysis shows that, in some cases, morphologically similar head forms mask chronologically disparate forms. The evidence for dating and to a lesser extent distribution of each type is considered. All numbers in brackets are record numbers.

As a result of the above considerations a number of propositions are made at the end of each sub-section, whereby chronological characteristics can be distinguished. Ultimately all these propositions are weighed against each other and summarised. The nature of 'dated' contexts is such that the groups so defined can be ascribed to broad chronological and cultural horizons (Class A-E; §7.1) although these are unfortunately neither sequential nor very well defined. The problem of recognising residuality will be discussed at a later stage. Exceptions to each proposition will be primarily assessed on the basis of contextual evidence. All tabulated data summaries contain only examples for which a 'dated' context exists, although details of all other artefacts can be found in appendices II-III.

### 5.3 CATEGORY OF MATERIAL

#### 5.3.1 Skeletal

Skeletal raw products are the materials most commonly utilised for pin manufacture, bone being prevalent over the whole of the IA and NP where it is usually the most significant material in all phases. Antler, on the contrary, where its exact context is known, is confined to Norse levels (tables 2-3) with possible exceptions from phase 5 levels at à Cheardach Mhor (363) and the Pictish/Norse Interface at Pool (1491). Of the possible antler examples all are Norse with the exception of 1510 from phase 4a and several examples from the Interface at Pool (1478, 1503, 1515). In the Norse levels at Jarlshof antler and possible antler pins are almost as common as bone examples.

table 2 Summary of dating evidence for antler pins

Date of context	Context	Site	Record No
LIA	Phase V	à Cheardach Mhor	363
Interface	Phase 5d	Pool	1491
late 9/early 10C	occupation layer	Drimore	138-40 1780
1st ½ 9C	USM	Jarlshof	926, 933, 976
1st ½ 9C	Midden	Jarlshof	967, 996
late 9/early 10C	V ph III	Jarlshof	934, 946, 949, 951, 968, 990 1017
late 9C	Phase IIc	Saevar Howe	199
late 9-2nd ½10C	Lower Norse	Brough of Birsay	1895, 1905
late 9-2nd ½10C	Middle Norse	Brough of Birsay	1911-12, 1917- 18, 1920
11C	Midden 1	Skaill	216, 218, 220
?11-12C		Whithorn	1934, 1937
13-14C	V ph VII	Jarlshof	936



table 3 Summary of dating evidence for possible antler pins

Date of Context	Context	Site	Record No
LIA	Phase 4a	Pool	1510
late 7C	Phase 5c	Pool	1478, 1486
Interface	Phase 5d	Pool	1503, 1512
1st ½ 9C AD	USM	Jarlshof	909, 915, 943-44
1st ½ 9C AD	Yard paving SW of house	Jarlshof	906, 910, 917, 919
1st ½ 9C AD	Midden scatter on yard paving	Jarlshof	920
1st ½ 9C AD	LSM	Jarlshof	923, 966
late 9/early 10C	Midden 1	Jarlshof	1032
late 9/early 10C	Lower level	Jarlshof	935
late 9/early 10C	Middle level	Jarlshof	958, 978, 988
late 9/early 10C	occupation layer	Drimore	1778
11-13C	Phase 6b1	Pool	1526
early 11-13C	Phase V	Jarlshof	940, 952

Bone is a resource available anywhere that either domesticated or wild animals are to be found. In comparison, the availability of antler is always much more limited, and requires forethought. Over our period antler was available (theoretically) from the indigenous species of red and roe deer (J Ritchie 1920, figure opposite 334), and possibly reindeer. (Fallow deer became extinct after the Ice Age, and was probably not reintroduced into Scotland until the NP at the earliest [Whitehead 1964, 345]). Red deer were certainly found in Orkney when the brochs were being occupied but became extinct at an unknown time thereafter (J Ritchie 1920, 333). Presumably they had a similar survival range on Shetland. At this period there is no evidence for the size of population or the intense exploitation seen earlier at a site on the Point of Buckquoy (Morris 1983, 125-27). Harvie-Brown and Buckley (1892, quoted in Whitehead 1964, 181) take the absence of mention of red deer on Orkney in the *Orkneyinga Saga* as proof of extinction by this period, especially as it is mentioned in Caithness. Roe deer are known to have had a wide distribution in Scotland, even as far north as Shetland, although there is as yet no physical evidence they were ever present in Orkney (J Ritchie 1920, 331). Decline of both the above species is generally interpreted as

being directly related to the contemporary decline in tree cover, a decline in the climate, and perhaps over-exploitation by man (Lowe 1961).

Reindeer antler has reputedly been found on several MIA sites (Ritchie, J, 1920, 341), which is taken as evidence for the existence of indigenous species in Scotland up until at least the ninth century, and possibly NP on the basis of the *Orkneyinga Saga* (Chapter 102), which describes its seasonal summer hunting in Caithness (*ibid*, 341; Whitehead 1964, 448). More recently MacGregor (1985, 37-38) has convincingly questioned the archaeological, literary and representational evidence for such longevity of the indigenous species in Scotland, preferring other evidence which points to its extinction in early post-Pleistocene times.

On examination it is easy to distinguish the smallest fragment of reindeer from red deer antler because of its well-defined and elongated cancellous pores (*ibid*, 14). The present writer was unprepared for noting such a distinction during examination of the material in appendices II-III, but certainly no other authors claim to have noted the distinction (where in the NP it might indicate importation from Scandinavia).

Where evidence is given, it appears that most utilised antler had been shed, and to avoid rapid decay must have been collected quickly (Grant 1981, 210), a difficult activity at the best of times. There is no evidence that red deer were domesticated (roe deer are not suitable) although it has been suggested that techniques of palaeozoology and palaeobotany can potentially enable such management activities as were available to prehistoric man to be recognised (Chaplin 1975).

Antler was utilised throughout the IA and NP. In the MIA it was used for a variety of implements such as long-handled combs, handles and perforated mounts. At Warebeth there was deer bone from the well deposits (Bell forth); the numbers approach those of cattle and exceed pig, and thus deer probably was an important part of the diet. During the LIA its use seems to decline, being confined to fine composite combs and the occasional tool. This is most likely a reflection of dwindling supplies, because the physical properties of antler would have made it a more suitable commodity than bone in many of the uses which it served. This may emphasise the intrinsic value



of all combs. In the NP there is an obvious increase in usage; there are still some tools, elaborate composite combs become increasingly common, and for the first time it is used for the ubiquitous pin. Such preference can only have been accommodated by greater availability of raw material. Most current evidence comes from the Northern Isles and north mainland. It is feasible that the Norse with their knowledge of utilising reindeer as a resource back in their homeland were managing or efficiently hunting mainland herds of Scottish deer. This would have resulted in the greater availability of antler supplies, which were specifically imported (with the easier mobility of Norse ships) to the centre of the Earldom in Orkney. Here manufacture and/or distribution could have taken place from focal sites, such as the Brough of Birsay. There is a marked absence of deer bone from the Brough of Birsay in all levels (none is mentioned in Curle 1982, and later excavations did not produce enough bone to suggest organised hunting: Hunter 1986), suggests that antler was being brought in as an independent commodity. If the antler is not from the mainland then it suggests that supplies are being brought in from Norway.

Thus in the NP antler was used for the first time in pins, the form of which had changed (see below); they increased in length and commonly functioned with a length of cord to secure clothing. As this was the fashion back in the Scandinavian homeland, and bone is not so suitable for such forms, it may be that fashion helped in part to create a greater demand for antler.

### 5.3.2 Metal: Iron

Evidence for the use of pins made solely of iron is limited to the sites of Bonchester Fort (893), Kaimes Hill (895), Berneray (1127), Bruthach a Sithean (1144), Dunadd (1267, 1274), Moredun (1442), Sithean a Phiobaire (1455), Keil Cave (1791-92), Laws of Monifieth (554), Dundurn (1961-62, 2003), Boysack Mills (2000), Traprain Law (675-76; NB not all of the Traprain Law collection was examined), and Howe (168, 170-71). Only one of the examined Traprain examples has a context but at least five of the other examples come from hillforts which may be MIA (Bonchester, Kaimes, Laws of Monifieth and Traprain Law), and one of the Howe examples (168) is from the MIA levels there. The unusual example of form 6B from



Dunadd (1274) is possibly later, in addition to the example from Dundurn which comes from a stratified context dated to post 800 AD (1961; 1962 and 2003, whilst unstratified, are possibly also contemporary). Where the type of shaft is known, iron is the material most commonly used in the globular pins of group 15 (S5.5.15), for example from Buiston (707, 709), Broch of Burray (1092) and Gurness (129), which are MIA and later in date.

table 4 Summary of dating evidence for iron pins

<i>Date of context</i>	<i>Context</i>	<i>Site</i>	<i>Record no</i>
late 2C AD	level 3	Traprain Law	675
MIA	early ph 7	Howe	168
post 800 AD	DN 106	Dundurn	1961
LIA	ph 8	Howe	170-71

### 5.3.3. Metal: Copper Alloy (Cu alloy)

The occurrence of copper alloy pins on sites with stratified sequences is unfortunately rather rare, although there are slight suggestions at Pool, Howe and Buckquoy that it becomes more common towards the end of the LIA and especially in the NP. Taking a look at all stratified examples (table 5) it can be seen that a large number of these occur in MIA contexts, and with few exceptions these are all projecting ring-heads or Fowler class E type pins, virtually the only pin types to exist in this period (see below). In later levels bone and antler pins are by far the most common, if not the preferred material, until the Norse period, when the number of copper alloy versions increases (numerous variations of stick pins and the ubiquitous loose ring-headed pins). Numerous unstratified, but typologically datable examples confirm this view. LIA metal pins of any form are not at all common, although contemporary moulds point to their existence. Evidence for LIA moulds is as yet confined to the sites of Brough of Birsay (for example 64-65, 1965-73; forms 14A, 24A, 24A and 26), Mote of Mark (874-91, 1463; forms 4, 6B, 8Bc, 9A, 11A?, ?decorated disc-head and ring-head), Dunadd (1278-93; forms 1A, 6Ac, 6B, 8A, 8B, 9A, 11A and 25), Dunollie (1311-14), Dundurn (1798; miscellaneous form), Clatchard Craig (1814-17; form 6B), Skail (2147: form 3D), Eilean Olabhat (1587-89; forms include a hand-pin) and Gurness (1736-43; forms include a hand-pin).

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In the MIA moulds are few: Jarlshof (1065), Lingro (735), Reay (804), Traprain Law (858-61, 863), Gurness (1736). All these are examples of various projecting ring-heads.

table 5 Summary of dating evidence for copper alloy pins (excluding moulds)

Date of context	Context	Site	Record no
7C BC-?	dun floor	Dun Lagaidh	1692
mid 3C BC	Phase IVb	Dun Mor Vaul	1686-87
late 3C BC-?	Phase V	Dun Mor Vaul	1684
2-1C BC	Phase IIIa	Dun Mor Vaul	1683, 1688
2C BC	Phase IIIb	Dun Mor Vaul	1685
1C BC	Phase IIc	Dun Mor Vaul	1682
IA village	midden scatter	Jarlshof	1051
EIA	Phase 5/6	Howe	172
late BC/early AD	broch	Crosskirk	1624, 1626
late BC/early AD	enclosure 1	Crosskirk	1627
late BC/early AD	broch, ph 2	Crosskirk	1628
late BC/early AD	period 3, encl 1	Crosskirk	1629-30
late BC/early AD	period 3, encl IVb	Crosskirk	1631
late BC/early AD	?period 3	Crosskirk	1632
early C AD	broch	Clickhimin	1724-25
early C AD	period 4	Crosskirk	1633
1-2 C AD	level 4	Traprain Law	831-32, 834
?1-3C AD	broch floor	Hurley Hawkin	1438
?early 2-3C AD	broch filling	Hurley Hawkin	1439, 1806
2-4C AD	Layer 1	Covesea	351, 354, 646-49, 653
2-4C AD	unknown	Traprain Law	660-71, 673-74,
late 2C-?	Phase 3	Leckie	1649-50
late 2C	level 3	Traprain Law	672, 679, 682
mid-late 4C AD	level 1	Traprain Law	683
early 4C	level 2	Traprain Law	826, 828, 830
mid-late 4C AD	level 1	Traprain Law	829
	broch levels	Gurness	156-57
	broch/post-broch	Gurness	155, 158
	post-broch	Gurness	614
c3-8C AD	wheelhouse	Clickhimin	1727-28, 1730, 1732
late 7C AD	Phase 5c	Pool	2002
LIA	-	Bac Mhic Connain	1120
LIA	Phase IV	& Cheardach Mhor	368
LIA	Phase 7	Howe	143-44, 173-75, 177-78
LIA	Phase 8	Howe	167, 169, 1810-11
8C or later	long cist burial	Machrins	1570
8/9C on stylistic grounds		Golspie	727
Norse	Phase 9	Howe	1812-13
1st ½ 9C	V phase I	Jarlshof	1056-59, 1064



late 9-2nd #10C	LN	Brough of Birsay	1923, 1926, 1929
late 9-2nd #10C	MN	Brough of Birsay	1931
10C	V phase III	Jarlshof	1055
3rd # 10C AD	Norse grave	Buckquoy	117
Norse	Area III	Brough of Birsay	1927-28
Norse	Area VII	Brough of Birsay	1785
Norse	N grave	Kirkcudbright	1573
Norse	House 1	Jarlshof	1575
Norse	N grave	Carn-nan-Bharraich	1581
Norse	N Grave	Kiloran Bay	1583
11-13C	Phase 6c	Pool	1807

#### 5.3.4 Comparison of pin length and material

Such a comparison is informative. It can be seen that the most common length for a pin varies between materials (bone 40-49 mm; metal 70-89mm; antler 90-99mm; fig 20), and that the longer a pin is the more likely it is to have been made from metal (fig 21). Each material is used over slightly different ranges (bone 20-189mm; antler 30-169mm metal 20-249mm), but in all cases the range is wide. The implication is that it was not the material, or necessarily the available technology which dictated the length of the pin, but fashion, and fashion changed over time. For example, in the MIA and LIA metal pins were usually cast, but in the earlier period these products, mainly projecting ring heads, are longer than LIA metal stick pins, although the ability to make longer pins must have been there in the LIA. In this case, alternative explanations must be sought and two spring to mind, namely that shorter pins were more fashionable, and/or the use of metal was preferred for larger, more visually demonstrative ornaments such as brooches.

The length range of antler (distinctively Norse) pins reveals that shorter pins (<69mm) were made in the NP, but the tendency was for the pins to be longer (fig 20). The plotted length of metal pins has a normal distribution, indicating that the preferred length here is between 60-109mm, which compares with bone pins, where the tendency is for them to be shorter (30-89mm, but rather in the lower part of this bracket; fig 20). Known metal LIA pins are both few, but by preference not long (<69mm) and it is thus possible that all metal-only stick pin forms which are longer than this are later, and short metal-only type pins are probably early, that is disc head and rolled spiral groups. The exception to this rule are the spiral

heads which are all known to be post-medieval. The only example of a rolled spiral (421) comes from an unstratified context on the Western Isles, and the two examples of a projecting disc head come from Buiston Crannog (716) and Hurley Hawkin (1805).

The following propositions can be made:

- most antler pins are Norse, therefore all pin groups which include antler pins were made during this period
- most iron pins, with rare exceptions predate the late seventh century AD

### 5.3.5 Conclusions from the Evidence on Category of Material

Antler is a useful chronological indicator, its use in the manufacture of pins being confined to the NP (with a few dubious exceptions, for example 934 which possibly has a hipped shaft), and this implies special management of resources by the Norse. Bone was available for manufacture everywhere and in all periods, although it came to the fore in the LIA. Iron was rarely used for pins, and then mainly in the MIA (but note also how iron pins may not have survived and/or been discovered and/or recognised). Copper alloy on the contrary had a continual presence, being particularly prominent in the MIA and NP; the occasional LIA example exists, although if the evidence of LIA moulds is anything to go by, it was often used during this period for short pins (its use for other dress ornaments in this period is marked). Long metal pins are later than short ones (<69mm), and this is a reflection of the preference for short pins in the LIA. Shaft types a, b, and c are manufactured from all materials, but with one exception hipped shafts are never manufactured in antler, suggesting they were totally a pre-Norse fashion, despite context evidence to the contrary.

The absence of wooden pins is not suprising in view of the absence of suitable preservation conditions. Dowel- and skewer- like pins have been recovered from sites such as Clickhimin (1711-13) and several of the crannogs in SW Scotland, but no short pin forms comparable to the hipped pins from Lagore (Hencken 1951, fig 81.W77).

## 5.4 FORMS OF PIN SHAFT

#### 5.4.1 Type a: the shaft tapers smoothly along its entire length

No real chronological significance can be attached to this shaft form (table 6). The majority of examples are Norse, but this is because this type is the natural form for pins which have been made by cutting antler tines longitudinally (Groups 12, 16 and 17; see below). It is also common with Groups 1 and 8. There are three versions with decorated shafts (282, Udal; 945, Jarlshof; 892, Meikleour), none of which comes from a dated context.

table 6a: Summary of dating evidence for metal shaft type a

Date of Context	Context	Site	Record no
?Norse	Phase 9	Howe	1812

table 6b: Summary of dating evidence for bone and antler shaft type a

Date of Context	Context	Site	Record no
'BA'	Phase 4	Howe	21
EIA	Phase 5/6	Howe	20
EIA	Phase 6	Howe	29
EIA	Phase IIIb	Bu	1623
MIA	early ph 7	Howe	14, 30
early C AD	'broch'	Clickhimin	1710, 1716-17, 1719
?LIA	Phase I	A Cheardach Mhor	348
LIA	Late phase 7	Howe	12
LIA	Phase 7/8	Howe	4
LIA	Phase 8	Howe	10
early 7C AD	Phase I	Buckquoy	66
LIA	Phase 4c	Pool	1544-45
Interface	Phase 5d	Pool	1504, 1507, 1511,
Interface	Site 2	Skaill	230
?Norse	Phase 9	Howe	27
1st ½ 9C	V phase I	Jarlshof	908-9, 932-33, 956-57, 964, 976
early 9C AD	Phase III	Buckquoy	69
9C AD	Phase IIb	Saevar Howe	194-96
?9/10C AD	Phase IV	Buckquoy	74
late 9/early 10C	V phase III	Jarlshof	948-49, 981, 987
late 9/early 10C	Norse house	Drimore	141
late 9-2nd ½ 10C	Lower Norse	Brough of Birsay	52
probably 11C AD	Site 2, midden 1	Skaill	217-18, 221-23
11-12C AD		Whithorn	1936
11-13C	Phase 6c	Pool	1551
			1547-48, 1550
13-14C AD	V phase VII	Jarlshof	936, 1025



#### 5.4.2 Type b: the Shaft has Straight Parallel Sides, Tapered only at the Tip

No chronological significance can be placed on this shaft type as it occurs in all levels (table 7a-b), as even the few metal examples show.

table 7a: Summary of dating evidence for metal shaft type b

Date of context	Context	Site	Record no
MIA	Phase 3	Crosskirk	1624
LIA	Phase 8	Howe	167
late 9-2nd ½ 10C	Lower Norse	Brough of Birsay	1929
late 9-2nd ½ 10	Middle Norse	Brough of Birsay	1931
11-12C AD		Whithorn	1943, 1954
2nd ½ 10-12C	Upper Norse	Brough of Birsay	1930, 1932

table 7b: Summary of dating evidence for bone and antler shaft type b

Date of context	Context	Site	Record no
c6-5C BC	'IA farmstead'	Clickhimin	1706
LIA	Phase 4a	Pool	1524
LIA	Phase 4d/e	Pool	1477, 1540
LIA	Phase 4g	Pool	1500, 1559
LIA	Phase 7	Howe	7-8, 16-17, 23, 28
LIA	Phase 8	Howe	3, 5-6, 11, 22, 24
LIA	Phase III	à Cheardach Mhor	352-53, 357-58
6 -7C AD	Phase 1A	Dundurn	1795-96
late 7C	Phase 5c	Pool	1478, 1533
early 7C AD	Phase I	Buckquoy	67-68
?8C AD	Phase 1a	Saevar Howe	189
early 8C AD	Phase II	Buckquoy	72
late 8C AD -?	Pictish	Brough of Birsay	36, 45-46, 1842, 1848
Interface	Phase 5d	Pool	1505-6, 1509, 1515, 1522, 1525, 1528, 1531-32, 1538, 1558, 1561-62, 1564
Interface	Site 2	Skaill	231
1st ½ 9C AD	V Phase I	Jarlshof	907, 913, 916, 922, 924, 929-30, 942, 965
?early 9C AD	Phase III	Buckquoy	82
late 9-2nd ½ 10C	Lower Norse	Brough of Birsay	1826, 1847, 1887-88
late 9-2nd ½ 10C	Middle Norse	Brough of Birsay	47, 62, 1915
late 9/early 10C	V phase III	Jarlshof	979, 984, 993,

			1033
late 9/early 10C	Norse house	Drimore	142, 1778-79
late 9C AD	Phase IIc	Saevar Howe	192-93
?early 10C AD	Phase V	Buckquoy	90
11-13C	Phase 6b1	Pool	1554
11-13C	Phase 6b11	Pool	1535, 1537, 1560
11-13C	Phase 7	Pool	1527, 1536
11C AD	Site 4	Skaill	235-6
?13C AD	V phase VI	Jarlshof	955, 961
13-14C AD	V phase VII	Jarlshof	939
Norse	Site 2, midden 2	Skaill	228-29, 234

#### 5.4.3 Type c: Shaft has a Pronounced Swelling (Entasis) Around its Middle

Expanded shafts are fairly common on metal, antler and bone pins. Unfortunately dated metal versions are rare, but such dated examples as exist, are all Norse (table 8a). However, there are moulds for pins from Mote of Mark (880) and Dunadd (1283) which had swollen shafts, and there is the possibility that some unstratified examples are LIA, for example 1315 from the Broch of Burrian. Examples made of bone and antler material are specific to both late LIA ('Pictish') and Norse levels (table 8b). An example from the wheelhouse at Clickhimin (1731) is on stratigraphic grounds possibly earlier, but the form of the head suggests a later date within the overall dating bracket for the wheelhouse phase.

table 8a: Summary of dating evidence for metal shaft type c

Date of context	Context	Site	Record no
LIA	Phase 8	Howe	1811
1st ½ 9C AD	V phase I	Jarlshof	1056, 1058-59
late 9-2nd ½ 10C	Lower Norse	Brough of Birsay	1923
11-12C AD		Whithorn	1939-40, 1942, 1945-53, 1955-60
Norse	Area III	Brough of Birsay	1928

table 8b: Summary of dating evidence for bone and antler shaft type c

Date of context	Context	Site	Record no
MIA	Early phase 7	Howe	15
c3-8C AD	'wheelhouse'	Clickhimin	1731
early 7C AD	Phase 1	Buckquoy	92
late 7C	Phase 5b	Pool	1497

7-?8C AD	Phase 1	Dunollie	1309
late 8C AD-?	Pictish	Brough of Birsay	1820, 1835-37, 1841, 1865, 1868
Interface	Phase 5d	Pool	1479, 1482, 1487, 1502, 1514, 1523
1st ½ 9C AD	V phase I	Jarlshof	914, 926, 944, 995
?early 9 C AD	Phase III	Buckquoy	78
?9/10C AD	Phase IV	Buckquoy	73, 81, 86, 94
late 9C AD	Phase IIc	Saevar Howe	190-91
late 9-2nd ½ 10C	Lower Norse	Brough of Birsay	1844, 1846, 1864, 1866
late 9-2nd ½ 10C	Middle Norse	Brough of Birsay	41, 47, 1917, 1919-20
late 9/early 10	Norse house	Drimore	1780
late 9/early 10C	V phase III	Jarlshof	989, 1015, 1027
11-12C AD		Whithorn	1935, 1937
Norse	Site D	Brough of Birsay	1840

Whilst swollen shafts are a common Roman feature (for example Cool 1983) there is certainly no suggestion that the Scottish examples are related in any manner but function (except where the pin can be shown to be a Roman import). Fig 22 reveals that on the basis of pin length metal, bone and antler swollen shaft pins form two discrete groups; bone and antler examples are usually around 40-49mm long, whilst metal versions are 70-109mm long. It has been shown above, and will be expanded upon below, that later pins are invariably longer than LIA pins and more likely to be metal; this is confirmed, with few exceptions, by reference to the context of dated examples. It is to be expected that longer pins are likely to have a swelling rather than a hip; the shorter the pin the greater the need for a means of firm securing, for which hips are obviously better than swellings. As a result of the above several propositions can be made and tested:

- all metal pins with c shafts > 70mm long are Norse (excluding the few groups recognised formerly to be distinctively MIA)
- all metal pins with c shafts 30-70mm long are pre-Norse
- all bone pins with c shafts < 70mm long are pre-Norse

Taking the evidence of examples with known contexts there is no evidence to contradict the first proposition. There is one exception to the second proposition, a 30mm long pin from Norse levels at the Brough of Birsay (1923), but this may be residual. There are several exceptions to the third proposition (41, 47, 191,



1593, 1840, 1844, 1864, 1935, 1937), but it may be no coincidence that these are all forms (6A, 6B\*, 6D, 7, 8B, 9C, 19A\*) with very considerable other evidence for a *floruit* in the LIA, that is to say, the problems of residuality or continuity of fashion arise again. None the less, the length of bone swollen shafts is not such a good indicator of date as might be hoped. Nor were all antler pins with similar shafts necessarily long (335, 702, 1320, 1491, 1917).

There is evidence from excavations in Dublin that expanded shafts tend to be rare on early metal stick pins which span the eleventh to thirteenth centuries, and in the later twelfth/thirteenth century pins the swollen shaft frequently changes from round to square below the mid-portion (Ó Rahilly 1973, 94).

#### 5.4.4 Type e: Hipped Shafts

Hipped shanks occur in both LIA and NP levels; certainly there are only three possible Scottish examples which may pre-date the late seventh century AD (1476, 1485 and 1501 from phase 4g, Pool; table 9a). Whilst there are a large number of bone examples, there is a marked absence of definite antler examples (exception 934) and only four possible antler examples (336, 472, 1084, 1486), only one of which has a dated context (table 9b). As we have seen above, the use of antler is very much a Norse practice, and it cannot be discounted that the majority of the bone examples recovered from Norse levels are in fact residual, or alternatively they reflect the native ethnicity of the manufacturer if, for example, the Norse were controlling access to antler supplies (§7.3.3). There is certainly no evidence of hips being made on pins which are distinctively Norse (Groups 1C, 9D, 13, 14B, 16, 17, 20, 21, 29 and most metal-only stick pin forms). If hipped shanks are a peculiarly native fashion, which was not adopted by the Norse, then this information serves to illuminate the nature of the subsequent native interaction with the incoming Norse population. Decoration often goes in tandem with hipped shanks, an added means of impeding slipping. All dated hipped shanks are pre-Norse with the exception of a couple of late examples from Pool (1480) and Skaill (227), which may be residual (table 9c). The fact that there are no hipped pins at Howe where the latest phases may only extend as far as the sixth to mid seventh century is

significant.

Metal hipped pins occur in some numbers. However, it is possible on the basis of head form (see below) and overall proportions (see above) that a decorated nail-headed pin (form 8B\*e\*; 715) from Buiston Crannog (where other material suggests LIA activity) and a transversely flattened rectangular head from Freswick Links (9e?\*; 778) are pre-Norse (in addition to c/e short pin shafts from Kildonan: 394, 8B\*; Bernera Sands: 332, 8B\* and Jarlshof: 1060, 9A). The Buiston pin (715) is, on the basis of its length and form of head, a rare example of a LIA hipped pin where the lower section of the shaft has a polygonal section; this is a trend often noted on eleventh to thirteenth century longer metal pins.

table 9a: Summary of dating evidence for bone shaft type e

<i>Date of Context</i>	<i>Context</i>	<i>Site</i>	<i>Record no</i>
-----	-----	-----	-----
?LIA	late wheelhouse/ passage house	Jarlshof	1047
LIA	Phase 4g	Pool	1476, 1485, 1501
LIA	Phase 5c	Pool	1484, 1490, 1492, 1496, 1499
LIA	Phase 7/8	Howe	19, 25
early 8C AD	Phase II	Buckquoy	85, 88-89
late 8C AD -?	Pictish	Brough of Birsay	37, 40, 43, 1818-19, 1822-23, 1830, 1834, 1839, 1843, 1851, 1852, 1854-55, 1858-61, 1863, 1867, 1869-70, 1873-75, 1878, 1880, 1882
Interface	Phase 5d	Pool	1481, 1483, 1494, 1498
1st ½ 9C AD	V phase I	Jarlshof	928, 1048
late 9-2nd ½ 10C	Lower Norse	Brough of Birsay	38-39, 42, 1853, 1856-57, 1872, 1881
late 9-2nd ½ 10C	Middle Norse	Brough of Birsay	1831
late 9/early 10C		V phase III	Jarlshof 934
?9/10C AD	Phase IV	Buckquoy	71, 75-76, 79, 83-84
?early 10C AD	Phase V	Buckquoy	96-97
late 10-12C AD	Site VII	Brough of Birsay	1782
probably 11C	-	Skaill	227
11-13C	Phase 6c	Pool	1480
Norse	Area III	Brough of Birsay	1877, 1879



table 9b: Summary of dating evidence for possible antler shaft type e

Date of context	Context	Site	Record no
late 7C	Phase 5c	Pool	1486

table 9c: Summary of dating evidence for decorated bone and antler shaft type e

Date of context	Context	Site	Record no
LIA	Phase 4g	Pool	1476, 1485
late 7C	Phase 5c	Pool	1484
Interface	Phase 5d	Pool	1494
probably 11C	-	Skaill	227

As a result of the above survey it can now be noted that the last thirty years have produced data to show that hipped pins in Scotland do appear in about the seventh century AD (pace Stevenson 1955a, 287). There is a large body of evidence for their popularity in the late seventh century onwards, but only at Pool is there a dated sequence with evidence for a possibly earlier circulation. These pins were still being manufactured until the Norse arrived and potentially afterwards.

As Stevenson had observed in 1955, hipped shanks are not a feature which is confined to Scotland, but they occur throughout the British Isles in Anglo-Saxon, Early Christian and Norse and post-Conquest contexts (for the latter see MacGregor 1985, 121, fig 64.40). The following brief discussion is based on a literature search, inevitably not exhaustive, and on personal communications with Seamus Ross.

In England there are a few late Roman pins which are hipped, although not necessarily short. Examples from York, fine zoomorphic examples of a ram and dove, may belong to this category. Hipped pins were never very popular in Anglo-Saxon England until about the end of the seventh century, although other forms of short pin had made an appearance in the archaeological record in about AD 625, and had a *floruit* in the eighth and ninth centuries. Prior to this, in the post-Roman period, Germanic pins forms are current. Thus hipped pins occur in a number of Anglo-Saxon burials dating to the latter



part of the seventh century (Matthews and Hawkes 1985, 99). In domestic contexts they appear at the earliest in Middle Saxon levels, such as at Northampton (J H Williams 1979, fig 136.46) and Southampton (which does not antedate the end of the seventh century; Addyman and Hill 1969, fig 26.2-6, 9 and 10). The form of pin varies from the mundane bone or metal pin (for example Cheddar Palace, Somerset; Rahtz 1979, fig 94.18) to the elaborate eighth century set of three linked pins from Witham (Wilson 1964, 132-34, pl 18) or the silver and copper alloy zoomorphic examples from Waltham Abbey (Huggins 1976, fig 41). The latter are possibly Norse, although their short length might favour a pre-Norse date, in comparison with the longer metal versions from York (Waterman 1959, fig 11) with their typical square section shafts, which are assumed to be Norse.

In Ireland the hipped variety of pins occurs in contexts with a broadly similar date range to Anglo-Saxon England. Examples occur at Ballindery II, a crannog reoccupied in the sixth to eighth centuries AD (Hencken 1942, fig 22.489) and at the classic site of Lagore (Hencken 1951, fig 104-5; in addition note the unusual 'toilet implements' in fig 103 which have unique, sometimes multi-hipped shafts). There have been recent attempts to backdate this site, but Warner (1986) has convincingly argued that Hencken's original 1951 suggestion of a start in the earlier part of the seventh century, 600 AD at the earliest, still stands good. The site was destroyed by the Norse several times in the tenth century and is presumed abandoned by about the turn of the millennium.

The writer knows of no Manx nor Welsh examples of hipped pins (they are notably absent from Dinas Powys: Alcock 1987b).

#### 5.4.5 Comparison of Pin Length and Shaft Type

Fig 22 illustrates that on the basis of pin length metal and bone hipped pins form two distinct groups. Although the metal pins are rare in Scotland they are fairly common in the Anglo-Scandinavian levels at York (Waterman 1959) and in the Norse and medieval levels at Dublin (Ó Rahilly 1973). These are long pins, and the hip is not a compensation for lack of length; either we have here a fashion which requires more security than a simple swelling can provide for a long pin, or else the hip is a form of added decoration.

Bone hipped pins nearly all fall between 20-69mm, definitely favouring the 40-49mm range. There is no question but that this constitutes a very distinct LIA group of short pins where secure fastening was essential (pins < 50mm do not appear in the Anglo-Saxon record until circa 625 AD: pers comm S Ross). As a result of the above observations a number of propositions can be proffered and tested:

- bone hipped shafts are a distinctively LIA form, exceptions to which are either residual into the NP or can be accounted for in another manner, therefore all groups with hipped shafts were present in the LIA

- this is such a strong trend that there is a good argument that groups without any hipped examples did not exist in the LIA

- swollen shafts are used in LIA and NP contexts. If a group includes c shafts but no examples of e the form must be a post LIA development (unless the group represented is very miscellaneous)

- pin groups without examples of either c or e shafts can be pre-seventh century AD in date

The first proposition is virtually irrefutable: thus, the following groups were definitely current in the LIA: 3A, 3B, 3E, 4, 5, 6A, 6B, 6C, 6D, 6E, 7, 8A, 8B, 9A, 9B, 9C, 9E, 10, 11A, 11B, 14A, 19, 23, 24A, 24B, 24C, 25, 27, 28, 30, 34, 36.

The second proposition is not so secure. On the basis of it the following stick pin groups would not have been current in the LIA, and are therefore, with a few exceptions, distinctively Norse: 1A, 1B, 1C, 2, 12, 13, 14B, 16, 17, 20, 21, 22, 29, 31, 32, 33, astragaloid, butterfly, disc fillet, kidney ring, lobed, mushroom, open disc, small dome, inturned spiral, lozenge with fillet, rectangle with fillet and triangle with fillet. For some groups, however, there is evidence from their contexts to refute this: 1C occurs in ph 4c at Pool, which is probably LIA, although pre-dating the seventh century AD (1544); 12 occurs in many LIA levels, for example Dunollie (1307) and Howe (8, 31); 16A occurs in possible LIA levels at Howe (30) and Pool (1547); 17A occurs in LIA levels at Buckquoy (67) and Pool (1545; Interface: 1525, 1530, 1531, 1538, 1548); and 22 is a very miscellaneous group, but there is an unusual LIA pin from Golspie.

The third proposition overlaps considerably with the last one,



but only includes those groups which have swollen shafts but no hips, and must therefore be distinctively Norse. Groups possibly falling into this category are 1A, 1B, 12, 13, 16, 17, 20, 21, 22, 29, astragaloid, disc head with fillet, lobed, mushroom, small dome, inturned spiral, rectangle with fillet and triangle with fillet. The following groups have chronological associations which contradict this (sometimes in addition to the evidence cited above); 1A from EIA levels at Bu (1623) and the Interface at Pool (1511); 1B from the BA levels at Howe (21), IA levels at Clickhimin and the wheelhouse levels at a Cheardach Mhor; 1C from LIA levels at Pool (1544); 12 occurs in all levels; 16 occurs at the Interface at Pool and MIA levels at Howe; 17 occurs in LIA and Interface levels at Pool and at Birsay (1848); and 22.

The fourth proposition is the least sustainable. The suggestion is that pin groups with neither c or e shafts, that is groups 1C, 2, 3D, 14B, butterfly and kidney ring skeuomorphs, can be, and indeed are likely to be, MIA. In theory this is not such an ill-conceived idea; when the evidence of context is sought there is only contradictory evidence from group 14B and kidney ring skeuomorphs. But, several of the other groups have been shown by means other than context to be LIA or NP, and this misrepresentation is further exacerbated by the small number of examples in each group. Taken by itself, this proposition is not sufficient to reliably ascribe pin forms to the MIA, although it seems to be an additional means of confirming that groups 1 and 2 were extant then.

#### 5.4.6 Conclusions on the Evidence of Shaft Types

Shaft types a and b bear little chronological significance. Types c and e, however, both tend to be LIA at the earliest, and the main function of both was to impede slipping of the fabric being secured. Swollen metal shafts in Scotland are nearly all Norse, but bone and antler examples are with one exception either LIA or NP. The majority of evidence points to swollen shafts being a late LIA fashion, which would suggest they bear no relationship to Roman examples, the only common element being function. All metal c shafts which are >70mm long are Norse, all shorter versions tending to be LIA (a rule which is not so steadfast for bone swollen shafts).



Hipped shanks have a fixed chronological horizon, not commencing before the early seventh century at the earliest, more commonly in the late seventh century. They occur in contexts which may be as late as the thirteenth century AD, but here they are likely to be residual. None the less there is still a slight probability that they were being manufactured as late as the early ninth century AD, although never in antler. Decorated hipped shanks are probably all pre-Norse. Bone hipped pins, which will nearly all be <70mm long, preferably 40-49mm, can therefore be used as a reliable indicator of pin groups which were fashionable in the LIA. Metal hipped pins will all be >70mm and later. Less securely, the absence from a group of short hipped pins may suggest that it was distinctively Norse (especially if this group included swollen shafts), or less likely MIA (particularly if this group had no swollen hips). A probable high element of residuality makes the firm assignation of some groups purely to the LIA rather difficult.

A fifth type of shaft form (f) has not received treatment above because it is very rare, and examples are not necessarily pins; these are worked slivers of bone which are flat in section occasionally decorated with bold linear designs (for example Broch of Burrian; 1373, 1374). There is only one example from a dated context (1493, from phase 4b at Pool), but the examples from à Cheardach Mhor and Dun Cuier are associated with wheelhouses (351, 365), and the examples from the Broch of Burrian were supposedly from a secondary context.

## 5.5 FORMS OF STICK PIN OCCURRING IN ANTLER OR BONE (AND METAL) (figs 23-27)

### 5.5.1 Group 1: simple heads

This, the simplest of all pin forms, has a widespread chronological distribution, and occurs in contexts spanning the MIA to the NP where it occurs in numerous contexts. A single EIA example of a plain shaft with flat top (1A) comes from Bu (1623), and there are dated examples from the Interface at Pool (1511) and the Norse levels at Whithorn (1944). Form 1B is common; the earliest example

is from the 'BA' phase IV at Howe (21), there are several from the 'Iron Age' fort at Clickhimin, the broch contexts at Keiss (797) and the wheelhouse at À Cheardach Mhor (346-47). The latest 'dated' examples comes from phase 7 at Howe (15). There are fewer examples of 1C, the earliest being from Covesea where second to fourth century AD finds dominate the assemblage (744) and the latest from Viking phase III at Jarlshof (981).

Such a simple form needs no outside inspiration, although form 1C is a distinct Roman form in bone and metal, noted by Crummy (1979, 160; 1981, 20) during her study of the pins from Colchester and ten other Roman sites, to have a date range of circa 50-200 AD. Some of the early Roman examples were apparently stained green, very probably in an attempt to emulate copper alloy examples, but there is no evidence of this in Scotland.

On the whole shafts either taper gradually over the whole length or towards the end. There are a few rare examples of 1A and 1B with swelling shafts (for example the wheelhouse phase at À Cheardach Mhor: 345; phase 7 at Howe: 15), a feature which is unknown in Roman versions (MacGregor 1985, 116).

Several metal versions of 1A and 1B exist, including a mould from Dunadd (1290), presumably of LIA date, and from the Broch of Burrian an example which can be presumed to derive from a secondary context (1317).

Decoration is always simple and confined to incised lines around the top of the shaft (for example 744 from Covesea, and 767, Freswick Links).

#### 5.5.2 Group 2: 1-4 transverse grooves beneath a conical head

There are only three examples of this form, one from an unspecified context at Ness broch (799), a metal example from post-IA phase 9 at Howe, and an unstratified example from S Uist (1209). No comment can be made on the basis of these limited examples. The group shares similarities with group 13, the distinction being purely technical, related to the width of the reels. But again, 13 is only a small group (seven examples) and only a single example comes from a specific context (1888; LN at the Brough of Birsay).

A Roman form typologically similar to group 2 exists in the south of Britain and on the continent. Made in both metal and bone,



it spans the late first century to the mid fourth century AD, but with a *floruit* in the late part of the second century AD (Cool 1983, type Vc, 'simple horizontally grooved head'). A Roman bone example from Colchester was stained green (Crummy 1979, 21).

### 5.5.3 Group 3: 1-5 reels beneath head

This is a small group of 13 examples where the heads vary but all have a reel underneath (which is distinguished by its width, depth and profile from the collars of group 24; the single reel should also be distinguished from a fillet, which is a sub-triangular projection, flat in profile - for example the metal group 'disc heads with fillets').

A single example with a round head (42) occurs in a context dating from the second half of the tenth to the twelfth century AD. Two Norse examples, with more or less spherical heads, are the only decorated examples (38, 80); both are covered with overall dots. The one example with a melon head comes from an unstratified context at Birsay (35). The only other pin with a melon head comes under the miscellaneous group 34 (504) and likewise has no context, but its hip suggests a LIA date. Group 3E, vase heads with reels under, overlaps with group 28, 'bucket heads'. There is one example from a dated context in the early eighth century (88), and group 28 does not supplement this.

This form has Roman antecedents. Examples of 3A tend to have swollen shafts (Crummy 1983, 24). Crummy's equivalent of 3A (type 5) is sub-divided into two types, those where the reels are formed by cutting grooves into a stilted conical head (1983, fig 21.400, 404) and a second group where the resulting conical head appears to have been trimmed after the grooves have been cut (*ibid* fig 21.397). This distinction is not applicable to the present study. Crummy (1983, 24) shows that half of the 22 examples from Colchester derive from a series of late fourth century occupation layers, which included a probable dispersed coin hoard with a closing date of *circa* 360 AD. Examples from this and other sites suggest a fourth century *floruit*. MacGregor (1985, 116) points to further corroboration for this date range, and does not consider that this form survives the Roman period.



#### 5.5.4 Group 4: Reel heads

This is a simple group where a single reel lies perpendicular to the shaft and is distinguished from nail heads (group 8) by the angle at which the head emerges from the shaft. They are found in both bone and antler and metal (12 examples in antler and bone, nine in metal). Only the bone examples come from dated contexts; from the Pictish [LIA] horizon at Birsay (1834) and Buckquoy (85) and from the Interface at Pool (1481). Of the metal examples a couple come from unspecified contexts at Traprain Law, but probably belong between the second and fourth century AD. This form has Roman antecedents which are dated to the late third and fourth century levels at Colchester (Crummy 1983, type 6). That this form was being made in metal in the late sixth to eighth century is witnessed at the Mote of Mark (879). As with all material from this site, its exact context is not known, but is presumed to have been in the vicinity of the clay floor area which also produced diagnostic E-ware. There is also an example from a Norse context at Freswick Links (2006).

A possibly related Roman form is Cool's type IV (1983) which has nail-like heads in metal or bone set perpendicular to the shaft, the heads generally being circular in outline, and often decorated with a simple radiating groove pattern (dating to the first quarter of the second to the mid fourth century AD)

#### 5.5.5 Group 5: reel and bead head

This rare form has produced only eight Scottish examples, all either bone or antler. Members of this group consist of at least one bead which is enclosed top and bottom, in contrast to group 3 where the reels are only found underneath the bead. Of the seven bone examples, two date to the late eighth to ninth or tenth century AD (37, 86), and three belong to the Pictish [LIA] horizon at the Brough of Birsay (1868-70). The single antler example comes from Covesea, and on the basis of material alone must date to the Norse period, although second to fourth century AD finds dominate the assemblage from the cave. Decorated versions (37, 502) are covered with overall dots.

A similar form occurs in Roman contexts where there may be more than one bead, and the lowest bead is sometimes baluster-shaped. The date range is the same as for reel heads (Crummy 1983, 24).

#### 5.5.6 Group 6: variations in spherical heads

This group comprises a large class of pins which have a single element head. The sub-divisions are the same as for group 24 where there is an additional collar beneath the head.

##### Group 6A: ball heads

This form varies from the perfectly spherical to the crude. There are 43 examples of which 8 are metal or moulds, and three are antler and must be Norse. The earliest securely dated bone examples come from phases 4a and 4g at Pool (1485, 1524), seventh to eighth century AD on the basis of C-14 dates. There is an example from the Interface at the same site (1482) and seven examples from the Pictish [LIA] horizon at the Brough of Birsay (1841, 1860-65). However, there are also Norse examples from Buckquoy, the Brough of Birsay and Jarlshof. An example from Dùn an Fheurain does not contradict this range (1301). It is interesting to compare the date range of form 24A, which tend to have hips and come from LIA contexts

None of the metal examples come from useful contexts, although the Burrian example (1315) is supposedly secondary to the broch, and the Dunadd example should be Early Historic (but note the second to fourth century AD examples from Traprain). The mould evidence from Dunadd (1133) suggests that this form must be contemporary with group 8 and there is a Norse example from Whithorn (1947).

Worthy of special comment is a particularly ornate example inset with amber from Caird's Cave, near Rosemarkie (750; fig 6.21).

There are Roman antecedents for this form in south Britain from the early second to the end of the fourth century AD (Cool 1983), although at Colchester metal versions of this form were only found in the fourth century levels, and bone examples cannot be conclusively dated pre-200 AD (Crummy 1983). This form is also found in jet, and its overall distribution includes the continent. However there is a break between the end of the Roman period until the Middle Saxon period when this form appears again (Caple 1986, 26)

MacGregor (1985) discusses this form in Anglo-Saxon contexts and believes that some continuity can be demonstrated up to the Norman period.



Group 6B: ball heads with flat tops

This is a common form of which 57 examples survive in bone and metal. Antler versions are rare, but when they occur are obviously Norse. Bone versions are the most common, appearing in dated post seventh century and Norse contexts. Shaft types are most commonly c or e, and where the length is <70mm (the norm) one can assume that a LIA date is likely whether the material is metal or bone. Metal examples >70mm long are likely to be Norse, but short, hipped metal examples indicate that this form was also made in metal prior to the Norse, as witnessed by the evidence of contexts (which also show that this form was contemporary with group 8; mould 1286 from Dunadd). Further moulds for this form come from the Mote of Mark (880, 884), Clatchard Craig (1814-15) and Dunadd (1274) confirming a seventh to eighth, possibly late sixth, century horizon, and it was these metal pins which were often much elaborated, some with insets in their flat tops (the contents of which do not survive, but glass and amber - cf Rosemarkie 750 and Dundurn 1797 - are the most likely materials), and/or incised decoration on shaft and head. Unusually this pin form seems also to have been manufactured in iron at Dunadd (1274).

Obviously group 6B is related to group 24B, which consists of more elaborate versions of the same form, having not only a collar, but a greater tendency to be decorated. Unfortunately none of these examples come from useful contexts, although the length of bone and metal examples, as well as the existence of hips, all point to a LIA date, and there is no evidence to contradict this. Example 758 from Freswick Links is unusual as it is a pre-Norse representation of a thistle and any form of naturalistic image is rare.

Crude metal versions of this form bear some similarities with Caple's form GT5 (1986), Roman and Saxon metals pins with flattened or slightly squashed spheres.

Group 6C: Half Ball heads

Most evidence points to this being a LIA form, but hipped examples have been found in Norse contexts at Saevar Howe (190) and the Brough of Birsay (39). There is only a single possible antler version (334) from an unknown context on Uist. The majority of shafts are hipped and all examples are <70mm long, both factors heavily suggesting a LIA context.



Group 24C, ball heads with collars, are found at Birsay in LIA and Norse contexts, but the hips again favour a pre-Norse origin.

A similar metal form (Caple 1986 type HH1) has a ninth to tenth century date range.

#### Group 6D: Globular heads

This is a fairly common form (31 examples) hailing from the late seventh onwards to the NP, although possibly early seventh century at Pool (1500). The majority of examples have c shafts (some e), and where these are <70mm in length a pre-Norse date is favoured, but longer versions do exist, and although there is more evidence for a LIA date, continued longevity cannot be excluded. There is as yet no evidence that this was a particularly favoured form, and no decorated examples exist.

A similar bone form occurs in Roman contexts and as metal in mid-late Saxon contexts (Caple 1986, GT6)

#### Group 6E: Globules with flat heads -

Only four examples of this form, a variation on 6D, exist, all with either c or e shafts. However, half of these examples are antler, so they were being manufactured in the NP, although the hipped example points to additional earlier circulation.

#### 5.5.7 Group 7: Facetted cuboids

Of the 15 examples listed, seven are metal with a distribution confined to the Western Isles, although none of these has any direct dating evidence. The metal versions may be decorated with ring and dot (for example 1129) or linear (for example 765) ornament, and in some of the examples (1670, 1761) the shaft is facetted and milled, both a decorative and functional feature, to further impede slipping of the pin. These metal pins are long, and a post LIA date is obvious (the milling is also peculiarly late). Examples decorated with brambling ornament, such as 577 from Freswick Links, are related to the terminals of loose ring-headed polyhedral heads, which in Scotland are tenth century at the earliest (Fanning 1983a). Metal facetted pins are both a Roman (Crummy 1979 type 4; 1983, 22-23, fig 20, nos 356-94; Cool 1983 type XVII) and Anglo-Scandinavian fashion (Laing 1973 type V; Caple 1986 type G1), but there is no suggestion

of continuity between a *floruit* in the fourth century and the eighth to thirteenth century (for example York: Waterman 1959, fig 11.7, 12). The heads of the later examples are smaller (MacGregor 1985, 117) and the lower surface of the head is generally more sharply angled than on Roman pins, while the face is often decorated with ring and dot (Mann 1982, 8).

The Scottish bone examples are not decorated, and appear in both LIA and NP contexts in Orkney and undated contexts in the Western Isles. The evidence of pin length suggests two distinct groups (20-59mm and 90-129mm), the shorter versions of which are more likely to be bone. This in combination with the presence of hips on some of these bone examples suggests the bone examples may represent a distinct, earlier trend. MacGregor (1985, 117) does not believe that there are any firmly dated post-Roman bone examples which occur before the NP (he appears to have missed the Birsay example), although they are not represented from major Scandinavian settlements.

On the Continent this form is known in metal (moulds for manufacture at Hedeby: Waller 1972), bone, and unusually for decorative pins, in wood (Hedeby: Jankuhn 1943, Abb 72)

#### 5.5.8 Group 8: Nail heads

Both forms of nail head are common throughout the whole of the Atlantic Province.

##### Group 8A: Expanded nail heads

This common form has 92 examples and is made in antler, bone and copper alloy. Naturally enough the antler pins appear in the Norse contexts. Bone examples also appear in the LIA levels where they are more likely to be short. The group as a whole divides into two groups on the basis of length (< and > 70mm long), and the shorter pins are more likely to be bone. Antler pins are rarely shorter than this, and metal pins tend also to fall into the longer range. Hipped pins are rare, which may indicate that this was more usually a Norse fashion, although also extant in the LIA.

Eight metal examples and two moulds are known. There are five examples from unspecified contexts at Traprain Law, presumably from somewhere between the second to first half of the fifth century AD.

The only 'context' as such is for an example from the wheelhouse at Clickhimin (1732). Moulds from Dunadd (1279, 1292) very probably belong to a period around the seventh to ninth century AD, and suggest that this form is contemporary with forms 8B, 6A and 6B.

There are nine decorated examples of this form, four of which are metal. They include the example from Clickhimin, two examples from the Interface at Pool (1509, 1513) and an early ninth century example from Jarlshof (964). An undecorated example from early Norse levels at Jarlshof has a hipped shank (1048).

Group 8B: marked expanded head

This group shares many similarities with group 8A. Of the 79 examples a small proportion are of antler and hail from Norse contexts. Bone versions were also prevalent in earlier levels; there are rare examples with hips and dated LIA examples tend to be shorter than dated Norse ones. However, dated examples for the LIA are rare, and the majority of dated bone examples come from Norse contexts, where variants occur, for example with a long collar (985-6). A particularly unusual example comes from Whithorn (1935) where there are four projecting knobs below the head.

Metal versions are relatively numerous (17 examples), as is the evidence for manufacture from moulds (10 examples). Both the Dunadd and Mote of Mark mould fragments are associated with E-ware, providing a general horizon in the late sixth to eighth century AD. Metal examples are rarely from dated contexts. The earliest examples come from Traprain Law (666, 668, 838) and have unusually large diameter heads. The same applies to examples 1809 from phase 7 at Howe. These examples seem to be distinct from the rest of the group. There are no later dated versions as such, but most other examples have finer heads. A possible exception to this may be the Crosskirk example (1624) from phase 3 of the broch. This nicely decorated example seems to have more in common with later decorated forms and its exact context is worth further investigation. It bears little comparison with Roman forms (for example Cool 1983 type IV) where the diameter of the head is large; the Traprain Law pins are presumably related to this latter fashion. Whilst the Crosskirk pin is the only decorated metal example from a 'dated' context, several of the decorated bone pins have come from late ninth or early tenth



century levels at Jarlshof (984-86, 1779), and there is a single example from LIA levels at Pool (1484), but unfortunately the decoration bears little comparison. The motifs on the Crosskirk piece have much in common with pins such as 332, 398 and 715 and its length is compatible with a LIA date (Laing 1973 type B?). Compare also the decoration on metal pins of group 9A. MacGregor (1974, 70) draws comparisons between a copper alloy pin from a secondary context at the Broch of Burrian (1316) and a pin from wheelhouse levels at Clickhimin (1732). I have not examined the Clickhimin pin, which is not fully illustrated or described by Hamilton, but on available evidence there is little reason to assume they are related. On the basis of MacGregor's comments, Fairhurst (1984, 116-17) compares the Crosskirk pin with the Clickhimin example, although his discussion is a little confused:

*it undoubtedly came from the horizon of a samian sherd and a fragment of Roman glass ... Although the pin ... may have been lost during casual use of the site in Early Christian times, and become incorporated in the stratification subsequently, the context itself seemed secure and would suggest a chronological horizon close to that of the Clickhimin example. Certainly the Crosskirk pin is the only portable object from the site as a whole to which a date as late as the eighth century AD could possibly be ascribed*

Several of the nail heads had insets, most of these being metal with the exception of a bone example from Pool (1484). The concave surface of the large Howe pin suggests that it too may have originally held an inset and was filled with the yellow paste.

Mould evidence suggests that form 8B was also contemporary with 8A, 6B and 9A (1287-88)

#### 5.5.9 Group 9: Transversely flattened heads

This group is probably related to group 19 where similar shape head forms may exist, but the depth of these is no narrower than the shaft on which they stand. An unusual miscellaneous mould from Birsay (1965) probably belongs to this group, its profile evoking bird heads as used in other decorative attachments made at the site, for example Curle 1982, illus 17.

Group 9A: transversely flattened disc heads

This form occurs in antler, bone and copper alloy, but undoubtedly the most striking examples are the small group of ornate metal examples (621, 1060, 1095). The Jarlshof example, 1060, comes from the 'floor level of the building in front of room 1' (A O Curle 1936a, 264) and therefore has a Norse depositional context, and there is an example from later levels at Whithorn (1939).

This group has obvious similarities with 169 from Howe (phase 8), although not transversely flattened. The form is related, they have similar shafts with a gentle swelling at the mid-part and they share a similar repertoire of design motifs. Likewise 1695, an open disc form from Skaill (Sandwick) may be related.

The length of all these metal pins ranges from 67-78mm, which is slightly longer than the norm for LIA pins, and for the majority of the bone pins which are between 50-60mm in length, but there is no evidence to contradict a LIA or Norse date. The real question is how far back this form can be pushed, and here context cannot be informative. However, there is evidence for the manufacture of this form at the seventh to ninth century site of Dunadd (1287-88, 1292) and late sixth to eighth century site of Mote of Mark (882)

The disc is not always decorated on its wide faces but decoration around the edge, usually some form of milling or billeting, is normal (for example 1095, 621). The Orkney example (621) has some similarities in its central design with similar Anglo-Saxon pins from a NP hoard, circa 875 AD at Talnotrie, Kirkcudbright (Maxwell 1913). There are also similarities to a brooch terminal from Luce Sands which Wilson (1973) dates to only just before the late eighth century AD St Ninian's Isle hoard (*contra* Rynne 1965). The Talnotrie pins originally formed a pair, linked by a chain. At 79mm in length they compare favourably with this group.

Hipped shanks are rare, swollen shafts being more normal. There is no evidence to contradict the hypothesis that shorter versions are LIA, longer versions later.

Contrary to Stevenson (1955a) and Laing (1973), this was not a common Roman form, and it may even have derived from the better known disc-headed bronze pins of seventh to ninth century date (MacGregor 1985, 119) such as at Whitby (Peers and Radford 1943, fig 13.1 and 7) and York (Waterman 1959, fig 11.1-3). Laing (1973) sees this group



as forming a part of his type E which he assigns in Scotland to the fifth to eighth century AD on very weak grounds, which are that the occupation of the brochs was probably not later than the eighth century, and that the decoration on 621 (fig 12) has parallels with Fowler brooches H2-3 to which a fifth or sixth century date is assigned, therefore this group must fall somewhere between the fifth to eighth century AD.

Group 10 is a collection of particularly small versions of this same form, 20-30mm long and with swollen or hipped shanks; a LIA date is suggested.

#### Group 9B: transversely flattened axe heads

A short example which could possibly be interpreted as an axe-derived form comes from the Pictish levels at the Brough of Birsay (1819), but otherwise all dated examples of this bold form are Norse (913-15, 1017) and tend to be long, for example 110-19 mm long.

Whilst there are varying forms of Roman axe head pins (although not necessarily transversely flattened, for example Cool 1983 type XXc), this form fell from favour in the immediately post-Roman period (MacGregor 1985, 118). In later times bone examples are only known from Frisia, although there are parallels in bronze from Dublin, Aggersborg and Norway, and other types of NP miniature axe are known (Graham-Campbell 1980, 60). Bronze axe-headed pins from Norway have been ascribed a function in textile production, such as cutting off the 'tongues' on the edges of cloth (Petersen 1951, 338). But otherwise the possible symbolism of the axe is unsure, although it has been suggested that the occurrence of this form on Anglo-Saxon amulets, particularly in the seventh century, is a reflection of supposed insecurity in the early days of Christianity (Matthews and Hawkes 1985, 99).

A decorated variation on the theme of the axe heads comes from an unstratified context on the Western Isles (Close-Brooks and Maxwell 1974, fig 3).

#### Group 9C: transversely flattened pelta/fan

Of 19 examples, four are metal and one possibly antler (Dun Cuier 379). None of the metal examples (1620, 1749, 1923-24) are from precise contexts, but an example occurs in the Lower Norse



levels at Birsay (1923; Laing 1973 type F). Bone versions appear in the LIA (1489), Interface (1487-88) and NP (73) levels. There are no definite antler versions, shafts, including metal versions, are mainly <70mm and are usually swollen; a LIA date is suggested.

This form had a predominantly Scottish distribution (with exceptions, for example in York and Swindon) and is absent in the Roman period (MacGregor 1985, 119).

Group 9D: transversely flattened crescent

This small class has only 5 examples, two of which are metal, and none of which has a useful context. The form approximates to Laing 1973 type H which he relates in general terms to his disc headed pins. However, on the basis of pin length there seem to be two groups, shorter pins such as the hipped Broch of Burrian example (1396) and the shorter metal pins (for example Dunadd 1268); and the longer metal examples (for example 904 from Rossal, Sutherland).

Group 9E: transversely flattened rectangle

This fairly amorphous group of six examples, all bone, produces only a single Norse date in the ninth or early tenth century AD from Jarlshof (1027). But there are examples with swollen and hipped shafts <70mm long which are earlier.

Group 9F: transversely flattened triangles

On the basis of pin length the metal examples (779-80; 1960) are a distinct class from the bone and antler examples. Neither of the examples from Freswick Links have precise contexts, but the Whithorn example comes from Norse levels, while the possible iron version at Dundurn (1961) may be seventh to ninth century AD. Of the bone examples the only possible pre-Norse example comes from the interior of the wheelhouse at Dun Cuier, in the ash spread of hearth 2 (375), four other examples being Norse at the earliest (Buckquoy: 71; Jarlshof: 993, 939; Whithorn: 1960)

Group 9G: transversely flattened rounded ends

This very small group consists of two bone examples from the Western Isles (464, 1174) neither of which comes from a specific context.

Group 9H: transversely flattened quatrefoil

Another small group of two examples from North Uist (335) and Pool (1496), neither of which are very similar. The Uist antler example is Norse, but the Pool example comes from a LIA context.

Group 9I: transversely flattened sub-triangular forms

This is a small group of four amorphous examples from the Western Isles, particularly North Uist, but none comes from a useful context. Example 1232 is decorated with a multiple chevron design on each face.

5.5.10 Group 10: small transversely flattened disc heads

See discussion under group 9A.

5.5.11 Group 11: thistle heads

A thistle head consists of a sphere with an expansion or disc above, possibly being supplemented by brambling ornament. MacGregor (1985, 120) divides the Scottish examples of this type into short pre-Norse and more robust Norse ones. Regardless of dating evidence, all examples below have been divided on a similar basis.

Group 11A: small thistle heads

Contrary to MacGregor (*ibid*) it appears that not all short thistle heads are pre-Norse. There are two antler versions from Buiston Crannog (695) and Jarlshof (1032), and bone examples from Norse contexts at Buckquoy (76, 81; but with a hip) and Whithorn (1934). The latter is particularly interesting as the bulb of the thistle consists of eight projections. There is also an example from Jonathon's Cave, We\_mys from levels producing a C-14 date of AD 1010-1164 (960-1230) (GU-1369; MacKie and Glaister 1981). Some, but not all of the examples have cross-hatching or brambling.

Group 11B: long thistle heads

All examples of this class are bone and antler, three of them possibly antler (all of which appear in Norse horizons). Bone examples from the Interface at Pool (1514, 1516) and Jarlshof (916, 918) do nothing to contradict the theory that this is a peculiarly

Norse form. Some examples are particularly elaborate (for example 919).

In some respects this form is similar to an Anglo-Scandinavian metal form (Caple 1986 group VI, 'baluster head').

#### 5.5.12 Group 12: Natural articulations

This group as a whole is widespread throughout the Atlantic Province. All possess the feature of minimal modification of the natural bone, usually only to a type a or b shaft, but occasionally c. Groups 12A and B will be discussed together.

Groups 12A and B: unmodified and slightly modified pig fibulae.

The degree of modification in both these cases refers to the distal end of the bone. The shape of this particular bone naturally recommends itself as a pin, a very mundane version (MacGregor 1985, 21). Dated examples of both forms are found in all levels throughout the whole of the Atlantic Province, and is the chronologically least sensitive of all pin groups. On the continent it has its origins in the pre-Roman Iron Age, and was subsequently very common in Ireland in the Early Christian period (MacGregor 1985, 121). It is also found in early to late Anglo-Saxon contexts in England. Roes (1963, 66) describes it as a Scandinavian type of pin common on Frisian terps and at Dorestad. Schwarz-Mackensen (1976, 41-42; quoted in Graham-Campbell 1980, 59) estimates that about one tenth of all the bone pins at Hedeby and Birka were made from pigs' fibulae. It is a patent indication of the presence of pig in these respective economies.

#### Group 12C: perforated pig fibulae

To a very large extent this overlaps with group 16A; see discussion below.

#### Group 12D: bird bone

Probably the least inspiring of all pin groups, this form consists of very long lengths of thin, light bone, one end of which is polished. There are nine examples, nearly all from Jarlshof, but none from informative contexts.



Group 12E: cattle/deer metatarsals

There are a very few examples of the rare use of these bones as crude pins in the LIA levels at Howe (14) and Norse levels at Jarlshof (1011).

Group 12F: sheep/goat ulnae

There are five examples of the use of this clumsy and unattractive form in the LIA at Howe (13) and the early Norse period at Jarlshof (996)

5.5.13 Group 13: segmented heads

This form, which recalls Anglo-Saxon segmented beads (MacGregor 1985, 119) has been discussed above under group 2

5.5.14 Group 14: zoomorphic heads

This group is divided into A and B on the basis of Hamilton's (1956, 115) observation that on normal 'native' pins the heads tend to be arranged perpendicular to the shaft, whereas Norse examples tend to be aligned with the axis. Furthermore, Norse pins are larger and heavier and the carving displays an essentially Norse style (A Ritchie 1974, 29). A wide range of animals are represented: horses, dogs, birds, cats, pigs, and totally imaginary beasts as well as more abstract forms.

Zoomorphic pins were a fourth century Roman fashion (Cool 1983 group XX) scattered thinly throughout the Roman province of North-West Europe. Later Irish bronze examples are rare, and where they exist more than one head may be indicated. Armstrong (1922, 81) suggests the ninth century as a general date for these. However, zoomorphic bone pins and toilet implements are a distinctive feature at Lagore Crannog (Hencken 1951, fig 103, fig 105.1306), where they therefore may be as early as 600 or as late as 1000 AD.

Group 14A: animal head extends perpendicular to the shaft

The most dynamic example of this form comes from Kerrera, Lorn, but unfortunately its precise context is unknown. All are made from either bone or antler with the exception of metal at Jarlshof (1062) from the interior of a house or its adjacent wallheads (it has not been possible to find any more details of this context). Hamilton's

dictum about the angle of the head to the shaft being indicative of date is not necessarily correct as many examples have appeared from Norse contexts, although they could be residual. But hips and pin length are factors pointing to a definite LIA presence. I have not examined a mould from Birsay (1968; Curle 1982, illus 57).

#### Group 14B: animal head aligned with shaft

There are five examples of this form, all from Norse contexts at Jarlshof and Saevar Howe. Their long length is in contrast to the shorter pins of group 14A. Hamilton (1956, 129) suggested a ninth century date for the Jarlshof pins, but Graham-Campbell (1980, 60) prefers an eleventh century date because of an associated crutch-headed stirrup ringed pin (1057) and points to more recent parallels in eleventh century Dublin.

#### Group 14C: miscellaneous zoomorphic forms

There is a strange example from Dundurn (1795) which is little more than an abstract representation of an animal made from a coarsely modified bone. The context for this find has a *tpq* of 608  $\pm$  15, - 30 AD from a high precision wiggle-matched date, and between cal AD 420-769 on the basis of two standard C-14 dates (HAR-2519, GU-1042).

#### 5.5.15 Group 15: globular heads

This distinctive form occurs in Scotland in jet or shale, antler, bone and possibly whalebone. With the possible exception of the examples from the Mote of Mark (869) all the jet/shale examples would not be incompatible with a second to fourth century context. Most examples have evidence for having retained an iron shank, although bone is not unknown (130: Gurness). With the exception of an example from Garry Iodrach, the jet or shale examples are not found in the Atlantic Province, which may suggest that they are unrelated to bone and antler examples of groups 15A-D which are found mainly in Orkney, with the occasional example in the Western and Shetland Isles and a few scattered throughout mainland Scotland (the decorated examples at Buiston Crannog and Mote of Mark, Clatchard Craig and Leckie).

Otherwise the majority of bone and antler examples are found on

broch sites, and the examples which are not tend to be unusual, that is they are in jet or decorated, for example the Mote of Mark example which has copper alloy studs impressed into its fine surface (870), and another from Buiston which has lathe incised horizontal encircling lines (708).

Whilst they are generally accepted as pins (for example Stevenson 1955a, 292-93, "native" type II) this function has recently been questioned (Close-Brooks 1986). She suggests that they may have been used as pegged playing pieces with perforated boards, or just stuck in the ground. In support of this argument it is noted that this form often occurs in large assemblages: 11 from Ballinderry (Hencken 1942, 53, fig 22.26 - with wooden peg); at least 14 from Traprain Law (for example 865-66) and 13 knobs from the Hill of Crichtie (1462; Ralston and Inglis 1984, 57; Close-Brooks *in litt* believes there to be more). At Dorestad 26 similar objects have been found together with a die (Van Es and Verwers 1980, pl 23), and similar sets have come from Swedish graves. A similarly large collection of 26 glass decorated spheres, dimensions varying from 4-16mm, averaging 9mm, was found at Newgrange, concentrated at the front of the monument (Carson and O'Kelly 1977, 46-47). Two of these held substantial iron shanks, but the majority could not have had such substantial shafts, so O'Kelly suggests that they may have been pendants. Although recovered in an area where a wide range of Roman coins was also discovered, there is no reason why these need be contextually related, as finds from most periods have been recovered in similar layers at Newgrange. More relevant may be the fact that similar glass artefacts have come from contexts dated to the early centuries of the first millennium AD at Tara and Loughcrew (*ibid*, 47). Returning to Scotland, distinctions in the playing pieces may be represented by decoration, or perhaps the use of other materials. Alcock (1980b, 347) suggests among other possible explanations that the glass boss from Dundurn [1797] may be such a piece.

Thus, it is perhaps unlikely that these 'native pins' are indeed pins. They may have been manufactured in bulk, although there is no corroborative evidence that these assemblages were found at their place of manufacture. Another function must be sought, and the numbers found together at Hill of Crichtie and Traprain Law suggest some form of playing pieces, or perhaps a tallying system.



The use of iron in the shafts (as in some of the Irish examples from Newgrange) is not unknown, but is perhaps another factor weighing against their use as decorative items of clothing. There was not necessarily one function for this form (which may not be homogeneous), and its apparent longevity may be masking changes in rôle.

Group 15A: solid globular heads

Thirteen examples of this form have been examined, usually from unstratified contexts at brochs: Burrian, Freswick Sands. Burray, Lamaness and Kettleburn. There are no reliable dating associations to indicate whether they are primary or later, but their general absence from later sites may be relevant. There are no examples outside Orkney apart from the atypical decorated examples at Buiston Crannog (708) and the Mote of Mark (870). The only date suggested is somewhere in the sixth to eighth century for the example from Mote of Mark which may be associated with the E-ware producing levels there, but in view of the atypical nature of this artefact the application of this date to the Orkney examples is dubious. A sawn off bone from Ayre is considered to represent the first stage of manufacture (605: Graeme 1914, 44). It seems that this form is found in MIA and LIA levels.

Group 15B: hollow globular heads

This form is made from a length of hollowed out long bone, and 18 examples were examined, several of which are from contexts with associated dating evidence. The earliest examples are from the Iron Age fort at Clickhimin (1714-15), phase 5/6 at Howe (33), and levels from Leckie with a *tpq* of 140-160 AD on the basis of pottery, (but which on the basis of C-14 date GX-2779 may be as late as 400 cal AD) (1648). Howe (32) belongs to somewhere around the mid-millennium, and there are Pictish (1922) and Norse or residual examples from Birsay (54-55). An eighth century example from Clatchard Craig is unusual in having evidence for a bone shaft. All these examples come from Orkney and Shetland, apart from the Clatchard Craig and Leckie examples. This form is also found in Ireland in the Early Christian period (MacGregor 1985, 121).

At Leckie there is evidence for manufacture (1648). Here the

hole is not complete and the core has been packed with bone wedges. MacKie suggests (*pers comm*) that this is a means of reinforcing the head whilst perforating and inserting the shaft.

Group 15C: globular heads made from animal teeth

There are three examples of this form, all from broch sites in Orkney, none from datable contexts (630, 1380, 1390).

Group 15D: metapodial 'globular' form

The single example of this form from phase 9 (?Norse) at Howe (34) has been classified with the globular heads not because of its shape, but because it has been perforated in the centre, presumably to receive a shaft of some form.

5.5.16 Group 16: perforated expanding heads

The shape of this and group 17 is probably inspired by the natural form of the pig fibula (MacGregor 1985, 120), but the shape is also that derived from cutting an antler tine longitudinally, and this may have contributed to making it a popular and convenient form. The flat expansion at the top of the head invited decoration. Examples of the form may have had a dual rôle as needles in tapestry and table weaving, or even as styli (Waterman 1959, 83). Confusion with netting needles is another problem (Curle 1982, 55). Certainly, if they were used in clothes, the garments concerned must have been very coarse. As early as 1923 Leeds suggested that this form functioned as a primitive brooch with a cord, a suggestion recently illustrated and discussed by Wilson (1983)

Group 16A: sub-triangular perforated head

Although bone examples of this form existed in the LIA, the majority of evidence (material, length, and context) point to a *floruit* in the NP where numerous examples are found. In England the form was only known in the NP, and there are good tenth and eleventh century Scandinavian and North German parallels (MacGregor 1985, 120).

Group 16B: rectangular perforated head

Of the seven examples of this form, the two dated ones are from Norse horizons.

Group 16C: trapezoidal perforated head

There are two possible examples of this form, one from the eroded sands at Freswick Links (282), the other from the Lower Norse horizon at Brough of Birsay (1905).

Group 16D: discoid perforated head

There are 13 examples of this form, and where their context is known, they are all Norse.

Group 16E: miscellaneous perforated heads

There are eight examples including star and thistle variations, all with a Norse context where known. The star/scalloped head from Covesea is closely paralleled at British and Scandinavian Norse sites (Mann 1982, 11)

5.5.17 Group 17: unperforated expanding heads

The divisions of this form are the same as for group 16, with which the form is obviously related, the majority of available evidence (length and context) favouring a NP date, although there are the occasional rare LIA examples, for example from Buckquoy (67). At Pool this form is exclusively Interface and later.

5.5.18 Group 18: maceheads

The example from Jarlshof consists of a ball with numerous projections (1047), from passage house II (the latest pre-Norse levels), excavated by Bruce (Hamilton 1956, fig 39) but further details of this have not been found by the present writer. A further example comes from the Pictish levels at the Brough of Birsay (2148).

5.5.19 Group 19: flat profile pins

This is a small group of 11 examples, very similar in all but head profile to group 9, transversely flattened heads. The form was manufactured in the NP because there is an antler example from an eleventh century context at Skaill (230) and bone examples also occur



in Norse horizons. But it was also prevalent in the LIA (for example 169) where there are hipped examples. Moreover swollen shafted examples tend also to be short.

A similar metal form with a plain vertical disc atop a short shaft is found in Saxon contexts (Caple 1986 group SP1), but a direct relationship is highly unlikely considering that this type is confined to the heartland of Saxon influence (*ibid*, 35).

#### 5.5.20 Group 20: Crutch heads

This form exists on both bone and antler and metal material, but there is no reason to believe that the two are related. There are four dated metal examples, two of which are eleventh or twelfth century at Whithorn (1952, 1957) and one is Norse from house site C at Birsay (1928). An example from Jarlshof is also eleventh century (1056; *contra* Hamilton 1956). A Norse date is not unexpected, as the form obviously relates to the stirrup-ringed class of loose ring-head with distinctive crutch head. In a number of cases the crutch head was not pierced for a ring, but has ring and dot ornament in the place of the small sockets which held the ring. In Ireland the form dates to the eleventh or twelfth century (Fanning 1983a, 329). None of the Scottish examples of the full stirrup-ringed crutch-headed pin has a date. Metal pins of this group correspond to Laing type T (1973)

The other 'dated' example of a crutch head is from Crosskirk (1629) and the similarity is in shape as opposed to exact form. With the exception of the latter example all evidence confirms a Norse date for crutch heads (context, length of swollen shafts and possible use of antler).

#### 5.5.21 Group 21: Cross heads

There are eight examples of this form, all from Norse contexts (as supported by the possible use of antler and the total absence of hipped pins). MacGregor (1985) considers a tenth or eleventh century date most likely for all these examples. The Christian connotations are worthy of speculation.

#### 5.5.22 Group 22: anthropomorphic

This is an exceedingly amorphous group which includes the

unique Pictish metal pin from Golspie (727) discussed in detail by Close-Brooks (1975), a very late Norse 'Janus' type pin from Millya Skera (1468) and an unstratified example from Pool, the head of which evokes the image of a medieval knave! (1518). None of the above bear the slightest resemblance to Roman examples, which are generally of the head and shoulders type (Cool 1983, type XXa). After the Roman period the type was otherwise little favoured.

#### 5.5.23 Group 23: open rings

There are four examples of this form. The Birsay example comes from the Pictish levels (1821) and the Saevar Howe example from a late ninth century context (199). A similar form has come from unknown levels at Clifford Street, York (Waterman 1959, 84, fig 14.15; quoted in Hedges 1983).

#### 5.5.24 Group 24: collared variations on spherical heads

To a very large extent this group has been discussed under group 6. There is no evidence whatsoever to suggest anything but a LIA date for these forms, which constitute some of the more fancy, short, hipped pins of the LIA, and there are numerous moulds from Birsay (for example 1964, 1970). From a context dated to 651-766 cal AD at Dunollie, pin 1308 probably acted as the die for mould 1311. Only a single example was recovered from a Norse context, which is probably residual.

#### 5.5.25 Group 25: dome heads

This is a metal and bone and antler form occurring in LIA and Norse levels. It was manufactured in antler, and metal (long examples) in the NP, and with hipped shafts in the LIA. Unfortunately this is one of those groups which seems to encompass several similar but chronologically distinct types. Corresponding to Caple's group GT4 (1986), metal pins from Roman or immediately post-Roman sites and possibly limited to the Romano-British culture, there are several examples from Traprain Law (848, 850). These tend to have larger diameter heads than LIA versions (Curle 1982, 19, illus 7.30, 'mushroom' type) which have come from later levels at Birsay. Head size alone is not sufficient to decide the date of a form. There is evidence for manufacture at Dunadd (1281). A similar, but longer

form also appears in the Norse levels at Whithorn (1941, 1945; Laing 1973, type D).

#### 5.5.26 Group 26: collared elliptical heads

This occurs in metal from the Western Isles (1769) and bone at Freswick Links (1606), unfortunately neither being from informative contexts. But there is a mould from Pictish levels at Birsay (1969), also for form 24A.

#### 5.5.27 Group 27: knob heads

Of the five examples of this form none is from a dated context, but the majority have hipped or swollen shafts, although the latter tend to be long, so a LIA and NP date is suggested.

#### 5.5.28 Group 28: bucket heads

Although definitely NP on the basis of the use of antler, and long metal swollen shafts, there are also bone hipped and swollen shaft examples of this form which are probably LIA on the basis of their short length, including an example from the latest LIA levels at Eilean Olabhat (1987).

#### 5.5.29 Group 29: bun heads

This is a small group of two examples from the Western Isles (479-80), neither of which is from a known context. The presence of swollen shanks and absence of hips is not enough to exclude a LIA date because the number of examples of this group is few (and pin lengths are all <70mm)

#### 5.5.30 Group 30: frustrum heads

This is a relatively common form, of which examples all come from the Western Isles, with the dubious exception of one from Jarlshof (929). Ironically the Jarlshof example is the only dated example, ninth century, but how relevant this is to the other examples is unsure. There is no reason to suppose that the short, especially bone and hipped versions are not LIA (for example 358 from a Cheardach Mhor), but the longer pins, which are nearly all metal with swollen hips, are more likely to be NP. Metal versions of this form correspond to Laing type M (1973).



#### 5.5.31 Groups 31-33: Pierced heads, splinters, unfinished pins

Although these forms were recorded they have been ignored in all subsequent analysis.

#### 5.5.32 Group 34: miscellaneous

This small group includes all unusual forms or types which did not quite conform to the above classification, although obviously related. A classic example of this is the segmented melon head with a small collar above and below from the Lower Norse levels at the Brough of Birsay (1829); there is no doubt on the basis of length and hipped shank that this is a LIA form, related to examples of 3D (reel beneath an ornate head); there is also a mould from Skaill (2147). The peculiar item from the Old Cattlefold, Vallay (295) has no parallels, and is probably not a pin. But the outstanding example is the wide flat pin from Pool (1493) decorated with a Pictish symbol, a rare example of a symbol on a portable artefact, and only the third known representation on bone (the others being ox phalanges from the Broch of Burrian; MacGregor 1974, cat no 210-11, fig 16). The form of this pin, whilst probably unique in Scotland, is very similar to a form of hair pin found in Norwegian female graves from the Roman period through to the Merovingian period (for example Sjøvold 1962, pl 28f), which could also be decorated. These were part of coiffure sets consisting of two long flat triangular pins and a perforated round pin, sometimes placed with a comb directly under the skull (Nicolaissen 1903, 160, pl ix). Alternatively it might be some sort of awl. The Pool example possibly also has ogam on it.

#### 5.5.33 Group 35: needles

Whilst recorded in appendix 1, this group is omitted from analysis and discussion.

#### 5.5.34 Group 36: acorn heads

There are three examples of this form, all bone and with either hipped or swollen shafts. This, their short lengths and contexts only suggest a LIA circulation.

## 5.6 FORMS OF STICK PIN OCCURRING IN METAL (fig 28)

### 5.6.1 Astragaloid

This form was so-designated by Laing (1973, 71), presumably because of its resemblance to the astragalus bone. He assumed a relation to the frustrum-headed pins (group 30) of which the only dated example came from the early Norse levels, although there is a bone example from the possible LIA levels of phase III at A Cheardach Mhor (358). Neither of the two examples from the shell midden at Knap, Lewis (327-28) are dated. The length of these metal pins, combined with their swollen hips supports a Norse date.

### 5.6.2 Butterfly

The single example of this form (1215) comes from an undated context at Illeray, North Uist. Its length and material are enough to favour a post LIA-date.

### 5.6.3 Crook head

None of the three iron and copper alloy examples (371, 555, 1654) comes from a dated context, nor are they known in the Atlantic Province. See discussion under ring-headed pins.

### 5.6.4 Disc heads with fillets

This form is obviously closely related to rectangular, triangular and lozenge heads with fillets. For these groups, all the evidence points to a NP date on the basis of swollen shafts and long length, the total absence of hipped shafts and the presence in Norse contexts at Whithorn (1954). The nine examples of this group constitute a part of Laing type G (1973) which he dates to the ninth century on very tenuous grounds (*ibid*, 57). There are, however, similarities with Ó Rahilly's (1973) rounded spatulate class from Dublin which she dates to the late twelfth to thirteenth century, although an eleventh or twelfth century date would probably be favoured for the Whithorn example (*pers comm* P Hill). This form bears a striking resemblance to a very small pin/toilet implement from late Roman levels at Chew Valley Lake (Rahtz and Greenfield 1977, fig 112.19), but this is presumably just fortuitous.

#### 5.6.5 Fowler type E (proto- and zoomorphic pins)

This class of pin has received comment by Fowler (Type E; 1963, 101-3, 121-22) and over many decades by Kilbride-Jones (1936; 1937). During his recent discussions of zoomorphic penannular brooches (1980a) and of Celtic metalwork (1980b), Kilbride-Jones updated and summarized his original thesis. This category of pins includes what Kilbride-Jones terms proto-zoomorphic and zoomorphic pins, the former being the precursor of zoomorphic brooches and the occasional zoomorphic pin.

The proto-zoomorphic form (fig 14.1-7) is characterized by a rounded head and snout, without either eyes or ears. Its distribution is mainly limited to Traprain Law (654, 679-81, 834, 844, 851), Newstead and Covesea, with new additions from Vallaquie (1599), Pool (1804, 2002) and Crosskirk (1633), and begins in the late second or early third century (Fowler 1963, 122). Its antecedents may possibly have been the upright head of the swan's neck pin (Dunning 1934, fig 2.4) to provide the basic form, whilst Fowler D4 and D5 penannular brooches inspired the decoration (Fowler 1963, 121). Kilbride-Jones's thesis is that the bored Votadinian craftsmen, who were making this form in the Romano-British period, (cf the Traprain evidence in Burley 1956), were inspired to create the fully zoomorphic form of brooch by a Brigantian type of snake-armlet, at some time in the late second century AD. Intermediate forms had circular planes on the front, some of which had a sunken hole in the middle to receive enamel. Fowler (1963), despite the evidence from Traprain, which shows that the proto-zoomorphic form came from the lowest, earliest levels (Burley 1956, 138, 169), insists that no chronological or typological validity can be applied to the two types, as the simple type continues on into the late third to fourth century (for example Cassington), and the enamelled examples (for example Vallaquie) are fourth or fifth century. There are recent finds of this type from dated contexts: at Crosskirk, an example comes from the external face of the rampart, W of the gateway, belonging to period 4, and is associated with a C-14 date of AD 57-221 at 1 $\sigma$ , 40 BC-AD 322 at 2 $\sigma$  levels (SRR-267). Only the Pool example is contrary to the previously suggested chronology, and is most probably residual.

The zoomorphic terminal depicts an abstract animal with squared



back and its face to the inside. Only a few fully zoomorphic pins exist: four from Traprain; an unprovenanced example from Ireland (Kilbride-Jones 1980a, fig 4.4); three metal examples from Chesters; three new unstratified examples from the Iron Age site 6 at Skail (2104-06); and a new example from the Norse levels at Howe (1813), which is presumably residual, occurring as it does so much later than the accepted sequence. The Traprain examples belong to the upper levels or 'native' period (Burley 1956).

There are two examples of thin twisted shaft from Clickhimin (1727-28). Their length and overall form suggest they are of the same type as Fowler E pins; in fact an example at Howe (1813) has a similar twisted shaft.

#### 5.6.6 In-turned spiral head

There is a single variant of this form from Viking phase I at Jarlshof (1058). This form used to be considered seventh century, but recently excavations at the Redfearn site in York have shown it to survive into the Anglo-Scandinavian levels (*pers comm* D Tweddle; Caple 1986, 45, type SD6). A similar form appears in the Norse levels at Dublin (for example B Ó Riórdáin 1971, fig 23.b, far right).

#### 5.6.7 Kidney ring skeuomorph

This form is obviously a derivative of the kidney-ringed loose ring-head. It occurs in Ireland on Dublin sites where it has a long life span, starting in the late tenth or eleventh century and lasting to the twelfth or thirteenth century (Ó Rahilly 1973, 26, 'non-functional kidney-ringed pins'). There is an example from Norse levels at the Brough of Birsay (1927) and three examples from uninformative contexts in the Western Isles (331, 418, 1953).

#### 5.6.8 Lens head

There is only one noted occurrence of this medieval form from the Sands of Bracon, Yell (1079; Caple 1986, type CL1, 62 ff), where the head is composed of two metal dishes secured edge to edge and filled with lead or solder. The shaft consists of a wire pushed through the lower sheet metal dish. The earliest date is to the

eleventh or twelfth century, but there was a *floruit* in the sixteenth century (*ibid*).

#### 5.6.9 Lobed head

This polymorphous Scottish group incorporates various forms described by Ó Rahilly (1973) in her study of the pins from Dublin, and includes her undifferentiated, club-headed, round-headed and barely-differentiated groups. Her distinction between these groups is at best confused, because her typology is on the basis of form and decoration types, but the decoration belongs to a large repertory of designs which are common to many groups. In Dublin these groups all cover broadly the same time span from the late eleventh to the mid thirteenth century at the latest.

In Scotland the Jarlshof example (1061) comes from an alleyway between two Norse buildings, but all the other examples come from undated or unknown contexts in the Western Isles. Most recently a group of seven examples has been recovered from the Norse levels at Whithorn (1938, 1940, 1949-51, 1956, 1958) for which Hill (*pers comm*) prefers the earlier part of a late eleventh to mid thirteenth century dating bracket.

#### 5.6.10 Loose ring-heads or ringed pins

These pins, usually bronze or silver, consist of a pin with a loose swivel ring inserted in a loop or perforated head, or merely a head with deeply bored depressions at either side. Both ring and pin are separate components individually cast and brought together to form a simple dress-fastener (Fanning 1983a, 324).

This pin form has been studied by Fanning (1969; 1975; 1983a; 1983b) for Ireland, the Isle of Man and Scotland (but see also Armstrong 1922 and Hencken 1951 for Ireland). Fanning (1983a, 324-5) groups the Scottish pins, of which there are about sixty examples, under the main Irish types, which are arrived at by means of the combination of ring-forms sub-divided on the basis of pin-head forms. Thus, the main types are: spiral-ring, baluster- and loop-headed; plain ringed, loop- and polyhedral-headed; knob-ringed loop-headed; and stirrup ringed, crutch-headed (fig 15). The commonest class in Scotland and Ireland is the plain ring with the loop or polyhedral head. However, of all these classes of ringed pin, only the spiral

rings, either with loop or baluster shafts, occur in pre-Norse contexts (Fanning 1983a, 325). Several examples exist in Scotland, of which a seventh or eighth century AD date has been argued for the spiral-ringed baluster-headed pin from À Cheardach Mhor (368; Young 1958, 92), and a seventh century date is possible for the loop head from the wheelhouse phase at Clickhimin (1460; from a hut floor opposite the broch entrance). Irish evidence suggests a contemporary *floruit* for both of these forms, but evidence from several sites suggests that the origin of this form may have been in the fifth or sixth century AD (Fanning 1983a, 330). Fanning (*ibid*, 325) does not consider it too speculative to link the few Scottish examples of spiral ring forms with the supposed Dalriatic colonisation of about 500 AD and the Columban mission of the late sixth century AD, but the other forms of ringed pin spread to Scotland as part of a general diffusion in Viking fashions in dress arising out of movements in trade and settlement, and remained almost exclusively a Viking fashion.

This form was not confined to metal, and there is a bone shaft from Balevullin (1640), with an incised step pattern on the shaft. This is paralleled at York on metal and bone (Waterman 1959, fig 11.13-14, fig 12.1). The bone example shows copper alloy staining around the head which must have held the split ends of a bronze ring (*ibid*, 80).

#### 5.6.11 Lozenge with fillets

. There are two examples of this form from the lower and upper Norse levels at the Brough of Birsay (1929, 1932), corresponding to Laing type P (1973). There are parallels from the old excavations at York (Waterman 1959, fig 11.15) and from the recent excavations at Redfearn, where they are shown to be distinctively Anglo-Scandinavian (an example was found in the grave of bishop Wulfric, dated 1030s; *pers comm* D Tweddle), although Caple considers them basically Hiberno-Viking (1986, 54, type V2)

#### 5.6.12 Miscellaneous

This is a relatively large amorphous group ranging from the mundane and indistinct, for example 177, and a group of miscellaneous bent ends of no fixed chronological horizon (for



example 832, 1271, 1675, 1792) to the unique, for example 1694 from Quoybanks, Orkney. This unusual piece was recovered during ploughing of a field (Cursiter 1887), when at this time the only parallels were to be seen in hairpins from a Migration/Viking period cemetery at Lillevang on Bornholm (Vedel 1886, 183, fig 377). A more recent literature search has not yielded any more parallels, and it can only be assumed that this pin is a by-product of the Norse presence on the islands. A similar pin is reported to have been found in Burray (Grieg 1940, 169)

Both Freswick Links (781) and Howe (178) have produced long metal shafts tapering to a point, the opposite end of which is notched, presumably to take terminals (Smith *et al* forth), perhaps of glass, now lost. Obviously these bear no relation whatsoever to known LIA forms, and their proportions, similar to Fowler type E pins, suggest a MIA date, which the phase 7 context for the Howe piece would not contradict.

Traprain Law produced a pin with a wide transversely flattened end rolled over into a spiral (830), a form which Burley (1956, 170) believes might be related to continental variants of the swan's neck (see Dunning 1934, fig 1.5), but it belongs to early fourth century AD levels.

Little can be said about a racquet-shaped head from Keil Cave (1791) or the golf-club-shaped head from the Western Isles (422). But there are two pieces which are very distinctive, and worthy of comment. Firstly there is the fine disc-headed pin from phase 7 levels at Howe. Although the swirling repoussé design is unique its overall form is presumably related to Late Bronze Age disc headed pins with similar bent stems, familiarly known as sunflower pins (see Eogan 1974, 82). But these tend to have conical central projections, much more pronounced than in this example, and all have concentric designs, not swirling triskeles. A MIA date is most probable, the triskele itself being a motif common throughout the Celtic fringes over the whole IA (Kilbride-Jones, 1980b, 57).

An unusual mould from Dundurn (1798) has an oval head with concentric lines and four equidistant bosses. It is similar in design to an eighth to ninth century example from tenth century levels at the Udal. This also has a central boss and four equidistant smaller bosses and cable moulding (Crawford and Switsur 1977, pl

xiva). The stratification suggests a date in the seventh century AD for this mould (Alcock *et al* forth). Small bosses around the main motif area are common on Celtic penannular brooches, either as projections or as element in the design. Although unparalleled as a dress pin this design would not look out of place in an assemblage of late LIA metalwork.

An unusual pin from phase 7 levels at Howe (168) has an iron shank with a globular paste head. Smith (*pers comm*) compares the glass to Kilbride-Jones (1938) type 3a, which is potentially later first century AD. In terms of its form it is not unlike Cool (1983) group XVIII, which is fourth century in date. Here the head of the pin was formed by winding a trail of molten glass around the top of a wire shank and then marvering the glass smooth. Heads of this type tend to be mushroom-shaped, cubic or faceted.

The final example for discussion is a long pin from the Middle Norse horizon at the Brough of Birsay (1931) which consists of a bronze perforated disc with a fixed ring-head above a baluster moulding with sunken dots. Although this form has very similar Roman antecedents (for example Cool 1983, type XI) there are also Scandinavian Viking parallels (see Sjøvold 1974, pl 47b; J Petersen 1928, fig 238), where there are sometimes metal links in the perforations.

#### 5.6.13 Mushroom head

There are seven examples of this distinctive form, mainly from the Western Isles, but dated examples only come from Jarlshof (1059) and Whithorn (1959) where a Norse horizon is favoured. All examples have a slightly domed head with radiating grooves, sometimes with additional ornament (see especially 1669 which has ring and dots on the head and loose cross-hatching at the top of the shaft). Most are long with swollen shafts, although there is one example with a very pronounced hip (868).

In some respects this form is similar to a larger Roman form which had a prominent dome and radiating grooves (Caple 1986, form GT4 and RG1), but there is no chronological relationship. Instead this group is related to Ó Rahilly's (1973) class of stud-headed pins. (The form, and ornamental motifs are similar, but here the class has a round section shaft changing to a square or rectangular

section below the mid-portion). This form probably appeared in Dublin towards the end of the eleventh century and lasted well into the thirteenth.

#### 5.6.14 Open disc head

A single example of this form from Skaill, Sandwick (1695) comes from an unknown context, but the simple decorative motif of concentric rings and circles of billets is an element seen in other fine Pictish jewellery, such as the Aldclune brooch (Stevenson 1985; here there is a glass stud where we have a perforation) and other contemporary brooches (for example Curle 1982, illus 7, and cat no 314, mould for identical design). A mould from Mote of Mark (876) is possibly for an open disc head with a collar below. A similar form of pierced disc on top of a shaft is also found in roughly contemporary Anglo-Saxon contexts (Caple 1986, 36, SP4)

#### 5.6.15 Out-turned spiral

There are three examples of this form (1757-58, 1764) all from undated contexts. On all these the top of the shaft is divided into two, each half of which is rolled into an out-turned spiral or S-shape. Opinion as to the date of this form is divided; Armstrong (1922, 82) considered them characteristic of the seventh to eighth century Carolingian period, and Laing dated them on Irish analogy to a similar period. However, the most recent study by Caple (1986, 61, type MM3) would see them as falling in the thirteenth to sixteenth century. Yet this simple form apparently has much earlier origins; Alcock (1967, 74, pl xiv.1) cites an example from South Cadbury, Somerset, which represents the Late Bronze Age:

*the type is ultimately of oriental origin, but  
it appears in Central Europe in Hallstatt D*

It is found imitated in bent iron wire at Lough Faughan crannog, Co Down (Collins 1955, fig 9.37).

#### 5.6.16 Projecting disc head

This is a very early pin form, most probably late Bronze Age. At Hurley Hawkin our example was associated with pre-broch structures (1805: Taylor 1982, 229) and similar pins at Traprain Law (for example 856) appear to belong to a late Bronze Age occupation. There



are contemporary parallels at Heathery Burn Cave in Northumberland (Greenwell 1894).

#### 5.6.17 Ring-headed pins (see Fowler 1963, fig 4)

This pin group form has been much discussed elsewhere. Its precursor may have been the swan's neck pin (Dunning 1934, 270-272, fig 1-2), which was brought to this country at the close of the Hallstatt period, probably in the fifth century BC. The swan's neck pin has an acute bend in its shaft so that the head, which may be beaded, plain, notched, rolled into a tight spiral or disc-headed, is at right angles to the shaft. They are scarce compared to the ensuing ring-headed pins, and this suggests that they only remained in use for a short period.

The true ring-head pin (Dunning 1934, 272-82, fig 2) possibly develops from the swan's neck pins. In Britain by about the fourth century BC, it has developed into a simple loop or ring, although it may be doubted why such a simple form need derive from anything (Kilbride-Jones 1980b, 190). These first pins were simply twisted out of wire, but a development from this was their casting in one piece, with the end of the ring joined to the shoulder. Most were copper alloy, and some were very ornately decorated (see discussion under ring-head, decorated). In the third century two variant pins were evolved; in one the stem had a double bend, and in the other the head was turned at right angles to the stem, which also has a double bend in it (the involuted pin). The latter is a small group confined to the Somerset-Oxfordshire region, the latest type of which was probably not earlier than the second century BC, and is closely related to contemporary involuted brooches (Dunning 1934, 280; Fowler 1963, 157). A variant on the standard ring-head occurs in glass in the Roman period at Colchester, where the twisted shaft on a pin from a grave (G537) at Butt Road separates to form a ring-shaped head (Crummy 1983, 28).

Ring-headed pins in Scotland (Dunning 1934, 282-87) are concentrated on the east coast, in the region of the Firths of Forth and Tay (Kilbride-Jones 1980b, fig 57). There is evidence for their manufacture at Traprain Law, but owing to their scanty number, scattered distribution and uninformative associations, an origin is sought outside Scotland (Simpson and Simpson 1968). A peculiarly

Scottish version of the standard ring-head was the crook head, where the ring-head itself was bent forwards, for example the Laws, Monifieth (555: fig 16). Like the plain wire ring-head, the crook head variant may have continued into the first century AD. Eleven decorative cast ring-heads exist in Scotland, and ten have been discussed by Simpson and Simpson (1968).

Another peculiarly North British development is the projecting ring-head pin, which Stevenson (1955a, 288) suggests was made under the inspiration of the involuted pin, although the sunflower pin (Coles 1959) may have played its part too. D V Clarke (1971a) believes, however, that this is inherently unlikely as the two forms only overlap in distribution on Angelsey. Whilst the simplest versions are plain cast or bent wire, more elaborate forms were prevalent in the second century to mid first millennium AD, particularly the earlier part of this bracket (see below). The group as a whole has an essentially coastal distribution, or is within easy reach of the sea (Kilbride-Jones 1980b, fig 57). The plain form is probably the most chronologically insensitive of all metal Iron Age pins, as an extremely wide date range is suspected, within which attempted chronological developments can only be ambiguous. For example MacKie (1974, 128-30) makes a distinction on the basis of size of head; Kilbride-Jones (1980b, 191) on the basis of bevelled ring sections; and Stevenson (1955a) on technique of manufacture. The earliest suggested dates are at Dun Mor Vaul, where they are at least a couple of centuries earlier than elsewhere. However there are considerable problems with the Dun Mor Vaul dates, such that Lane (1987, 58) does not accept that the earliest levels are much earlier in date than the first century BC. Pin-impressed pottery appeared in pre-broch levels and the pins themselves in the earliest broch levels, which MacKie dates to the first century BC, but possibly as early as the fifth century (1974, 128-30). Calibrations using the new Trondheim curve show that at the  $2\sigma$ , 95 % confidence level, the dates for the pre-broch levels can be stretched as far as the very beginning of the first millennium BC, and the broch levels could equally belong to the first centuries AD. This is the more generally accepted date, mainly on the long-standing evidence of Traprain Law (Burley 1956) and Covesea (Benton 1931), where second to fourth century AD horizons are suggested. Similar pins are a common find on

other broch sites such as Midhowe, Ness, Crosskirk, Leckie, Hurley Hawkin and Howe, many of which have also produced Roman finds. The dating association of the Crosskirk example (Fairhurst 1984, cat no 664) is not totally clear, but at Leckie the levels have been assigned a *tpq* of AD 125-150 on the basis of pottery and complementary C-14 dates (GX-2779 AD 40-240 at 1σ, 190 BC-AD 400 at 2σ; MacKie 1982). At Howe (Smith forth) examples occur in phases 5/6 and 7/8, for example the early broch levels of the early centuries AD to the post-broch levels, which may be as late as the mid first millenium AD. At Hurley Hawkin they were found on the broch floor and in the broch filling (1438-39)

Pottery which has been impressed with plain projecting ring-heads is common in the N and W Isles: from pre-broch and broch-levels at Clickhimin (1963-64) (Hamilton 1968a, fig 44.9, fig 51.1); the brochs at Ayre (1447; Young 1953, pl IX.3) and Lingro (1449; *ibid*, pl IX.2-3); broch and immediately post-broch levels at Howe (Smith *et al* forth, for example cat no 7542); and numerous wheelhouse sites in the W Isles, for example Tigh Talamhanta, a Cheardach Mhor, Dun Cnoc a Comhdhalach, and the possible wheelhouse sites at Bruthach a Sithean and Sithean a Phiobaire. The latter two sites also produced corresponding pins. There is an example from Eye, Lewis of pottery impressed with a pin type not present in Scotland until the Norse period (Fanning 1983a, 331), thus demonstrating the continuity of the tradition of decorating pottery with pin-impressions. Unfortunately most of the impressions are too indistinct or too badly eroded to discern which type of pin was used (Topping 1987, 72). In Orkney apparently *de novo* seventh century and later sites, for example Buckquoy, Brough of Birsay and Saear Howe have not produced any such pins or pottery sherds impressed with them. Elsewhere on the mainland evidence is confined to a closer bracket of the early centuries AD, until the fourth century. Stevenson (1955a, 288) suggests that Hebridean conservatism may in part explain why this form had such a great longevity in that particular region. Alternatively, this apparent longevity can be queried on the basis that stratigraphy has been conflated.

Cast projecting ring-head pins developed from the wire versions, and were produced at Traprain in the third and fourth century (for example 674). Three varieties were produced: the rosette with six



large beads all around the rim, always without separating fillets (for example 646); the pin with 3-6 beads on the upper part only, the lower half being in the form of a semi-circular plate (647, 826) (the 'proto-hand-pin': Kilbride-Jones 1980b, 193); and the version with small beads all around (821). The rosette and semi-rosette were made in the second and third century (*ibid*, 193). The semi-rosette was manufactured during both the second and third century at Traprain, but after the reoccupation in the third century the number of beads was reduced to five, then four and finally to three beads. Once the number was reduced to three, the stage was set for the three-fingered hand pin (*ibid*). The version with small beads all around may be typologically the earliest, because some of the true wire ring-heads had nicks all around (Stevenson 1955a, 290). A fourth variety, known from Covesea, has beads, usually three, on the lower part of the ring, whilst the upper part is corrugated. A second to fourth century date is suggested for this type. One of the Covesea examples (652) (Stevenson 1955a, fig B.11) has partly concave side beads. They are dated by R A Smith (1905, 350) to the first century BC, but Jope (1950, 54-56) suggests a date in the first century AD because of the association of an example from Dunfanaghy with a first century AD brooch. Stevenson suggests a date for this type in the fourth century, on the basis of the examples from Traprain, Covesea and Lydney, and there is no evidence to contradict a sub-Roman date for the *floruit* of the ibex-head (Fowler 1963, 123). The ultimate degeneration of the ibex-head is seen at Bruthach a Tuath, a pin with three beads on separate stalks without a ring at all (372) (Stevenson 1955a, 291). The period of this and similar pins is a matter of conjecture (*ibid*).

From Dunadd there is a much corroded large trefoil-headed pin (1266) which is most probably also a version of the 'degenerate ibex head'. Kilbride-Jones (1980b, 194) points to a group of similar pins in Ireland which have three pellets or beads (see *British Museum Guide to Early Iron Age Antiquities* 97, fig 106) to which the Dunadd pin is obviously related. This is a further testimony to the relationship between Ireland and the Atlantic Province of Britain, more specifically Dalriada.

The Covesea pins are difficult to sort typologically, and despite Miss Benton's (1931) attempts at a chronological division,

Stevenson (1955a, 290) would prefer to treat them as showing the range of variation in use at any one time. Three of the Covesea pins have fillets between the beads, a detail found on Irish proto-hand-pins (*ibid*).

The proto-hand-pin, consisting of a lower semi-circular plate and beads continuing the curve of the ring was, on the basis of Traprain and other evidence, probably in existence between the second and fourth or fifth centuries; the Oldcroft hoard provided a *terminus ante quem* of 359 AD and further evidence that the hand-pin is perhaps not as distinctively northern as has been supposed (Johns 1974, 295). From this emerged the hand-pin where the curved row of beads approximated to a straight row of 'fingers', and early examples of this are probably late fourth century (for example 1999), although the majority are late fifth or sixth century, and continue into the eighth or ninth, albeit in a degenerate form (Fowler 1963, 126; for detailed discussion see *ibid*, 129-9; Kilbride-Jones 1980b, 212-8; see Duignan 1973 for classification scheme). Moulds for the manufacture of these pins have been found at Clatchard Craig (1459), the post-broch levels at Gurness (1739), the LIA levels at Eilean Olabhat (1589) and possibly a late type at Clatchard Craig (1459). Both the Clatchard Craig and Gurness examples are probably seventh to eighth century (Close-Brooks 1986), but the Eilean Olabhat example is associated with a C-14 date of cal AD 90-340 at the 2- $\sigma$  (GU-2327), which is the earliest known dating bracket for the manufacture of a hand-pin. As the hand pin evolved away from the true ring-pin the desire for the ring was not lost, and loose ring-pins developed in Ireland, some forms of which appeared in Scotland in the LIA and NP (see below). The Scottish versions of hand-pins have not received detailed comment here, but see passing mention in Kilbride-Jones (1980b, 204-225) and more specifically in Stevenson and Emery (1964, 206-9); Stevenson (1976) and Fowler (1963, 125-29).

#### 5.6.18 Rectangle with fillets

See discussion under disc with fillets

#### 5.6.19 Ring-head

Plain versions of this form have been discussed under projecting ring-heads above.

#### 5.6.20 Decorated ring-heads

Ten Scottish decorated versions of this form have been discussed by Simpson and Simpson (1968) and M MacGregor (1976, 138-39), so mention will only be made here of an addition to the corpus of decorated examples (153) which comes from phase 7 levels at Howe. Its irregularly moulded circular disc has a cross-hatched circular stud below, which is scored to take enamel. The head projects as a whole from the shaft. The setting on the shoulder below the ring is a constant feature of Irish ring-headed pins which according to Dunning (1934, 282, fig 8) belong to the late La Tène I. Seaby (1964) dates them to the first to second century AD, but Simpson and Simpson (1968, 144) consider this 'one, perhaps two, centuries short of the mark', a rather ambiguous statement. M MacGregor explains that the use of enamel bosses is known to have survived as late as the first century AD. But really, for the group as a whole, it is not possible to impose a close time range, the Howe example being the first dated example known to the writer. The distribution, in the northern half of Ireland, favours a Scottish origin, although there are analogous forms from York and London (Dunning 1934, 282).

#### 5.6.21 Rolled spiral head

This unusual form consists of a metal shaft which has been flattened at the top and rolled over to form a loop. There is only a single example (421) from an unknown context. Dunning (1934, 270) draws attention to pins of a similar form on the continent, which may be related to the ring-headed pin.

#### 5.6.22 Small dome

There are three examples of this form from Traprain Law (827), Boreray (1128) and Balevullin (1667), the contexts of none of which are known. The Traprain example at least may be related to Caple form GT4 (1986; see under Group 25), mushroom or domed metal pins from Roman and immediately post-Roman sites.

#### 5.6.23 Spiral head

This medieval and later form has been the subject of recent study (Caple 1986, especially 131-172; Tylecote 1972). It is a common form found countrywide between the thirteenth to nineteenth



century. They were made either by twisting the shaft or some additional wire around the top of the shaft, which may or may not have been subsequently moulded into a spherical shape. In Scotland their manufacture was a home industry (Mitchell 1889).

#### 5.6.24 Square plate with projections

There is a unique example of this distinctive form from Galson (1188) on Lewis. The square plate with its projections or finials bears a most striking resemblance to the upper element of Roman metal pins with multiple block heads (Cool 1983, group XII Ib), a fashion which centered in the E Midlands and was probably manufactured by 150 AD at the latest. This similarity is probably just fortuitous.

#### 5.6.25 Swan's Neck

See discussion under ring-headed pins

#### 5.6.26 Triangle with fillets

See discussion under disc with fillets.

#### 5.6.27 Wheel-head

There is a single version of this ornate, Irish, enamel-decorated form from Birsay (1925), but it is not known whether the context was Pictish or Lower Norse. The ring is fixed and filled with rectangles of yellow, white and blue enamel. A close parallel was found in a crannog in Ireland (Armstrong 1922, pl 16; quoted in Curle 1982, 62; = Laing 1973 type V).

#### 5.6.28 Glass pins

Whilst wholly glass pins were known in the Roman period, no examples have been discovered in Scotland, but glass or paste was used to ornament pins as both insets (for example 715), to form the whole head (168), and possibly as bosses; there is a single exquisitely beautiful example from Dundurn (1797), from a context dating to post 800 AD (Alcock et al forth), which is very similar to a glass boss on an undated Irish pin from Drummiller Rocks (Armstrong 1922, 80, fig 2.8) and a pin with an iron shaft from Early Christian levels at Movilla Abbey, County Down (Ivens 1984, 101-102). Alcock does not favour this interpretation, preferring its use in a

more elaborate object because the form of the wide flat base is dissimilar to the Irish pin (Alcock 1980b, 347).

## 5.7 MANUFACTURE OF LIA PINS

Techniques of manufacture were not considered in any great detail during the compilation of the data base. None the less some useful observations can be made about metal, bone and antler pins.

Unfinished bone pins (group 33) are fairly numerous, consisting of a roughly shaped bone with the indication of a head; usually finishing the head would have been left until the end. Most have been cut with a sharp blade, most often from a long bone which has either been sliced longitudinally or had splinters removed by the 'groove and splinter' technique. Modern experiment shows that the manufacture of a single pin may have been as rapid as 20 minutes (*pers comm* A Foxon; manufacture also discussed by Crummy 1981, 283). Subsequently many pins were polished, most probably with pumice. Pumice with linear grooves, is found on Scottish Iron Age sites. Grooved/tracked stones may possibly have fulfilled a similar function, or were perhaps only for sharpening the points. A couple of pins are notable because the regularity of their head and fine lateral lines suggest they were either lathe turned, or at least produced by turning the pin against a hand-held blade (564-65 have a dimple on the head which may be the result of turning). Particularly notable is the globular pin head from Buiston (708) which has concentric encircling lines

Bone pins were a home industry in contrast to metal pins which required special craftsmanship. Evidence for their manufacture has been found at Buckquoy (A Ritchie 1977, cat no 28), the Udal (Crawford 1973); and Brough of Birsay (Hunter 1986, cat no 1344, 111 77). All LIA metal pins were cast. Numerous clay moulds survive at the Brough of Birsay, Mote of Mark, Dundurn, Dunadd, Dunollie, Clatchard Craig, Eilean Olabhat and Gurness. As in earlier periods these are two piece moulds, but often for more than one pin, and extant bone pins can be shown to have been used for the dies (Curle 1982, 111 57). There is also a stone mould, possibly for a projecting ring-head from Howe (Smith forth, cat no 4302, fig 3). A Dunollie mould (1311) has an interesting juxtaposition of a dress pin and small ring. It has been suggested that from the Roman period

until as recently as the nineteenth century in Ireland similar rings and pins were used together, cloth being pulled through the small ring and secured by the pin, along the same principle as a penannular brooch (Lovett 1904). This usage cannot be proved, but the juxtaposition is highly suggestive.

LIA pin manufacture can be starkly compared with the NP when a large number of pins were simply beaten into shape; certainly there is as yet no evidence for manufacture from moulds in Scotland, although some of the forms were obviously cast. The cast examples may be imports from the Scandinavian homeland, although the writer knows of no Norse evidence for their manufacture in this manner.

\* \* \* \* \*

Each pin type has been discussed and reviewed in this chapter. This evidence will be drawn together in Chapter 7, where Stevenson's conclusions will be up-dated. Before this, however, the evidence of the combs will be discussed.



## CHAPTER 6: COMBS



## CHAPTER 6: COMBS

### 6.1 CLASSIFICATION OF SCOTTISH COMBS

The subject of this chapter is combs, toothed implements which may be used to disentangle, arrange, confine or position hair (Dunlevy 1969, 5). The long-handled variety of comb has been excluded from discussion because they are known to be mainly a MIA form whose relevance is thus of minimal value in a reassessment of Stevenson 1955a. The majority of the combs examined are composite, for from the late Roman period onwards until the Middle Ages combs were almost exclusively of this form (the general evolution of the composite comb is discussed by MacGregor 1985, 82-94).

Combs do not receive here the same degree of reanalysis or undergo the same treatment as the pins because, despite their more complicated form the number of actual variations is more limited. Thus the system used here is openly based on the general classifications of previous scholars (Curle 1982; Dunlevy 1969; 1988; Ambrosiani 1981; MacGregor 1985). It is a traditional typological classification strictly on the basis of form, and has, in most cases, well-established chronological evidence to accompany it. Its application to the examples in the data base took place after most of the data had been assembled and an overview was feasible. In many cases attribution is ambiguous or uncertain; a subsequent re-examination of much of the material would certainly allow a finer sorting, but in terms of broad chronological phasing the divisions are adequate as they stand.

Descriptive terms are largely based on those advocated by Galloway (1976) and Dunlevy (1969; 1988). The teeth may be fine, averaging 9 per cm, or coarse, averaging 5 per cm (Galloway 1976). When there is a difference between teeth thickness on each side, even if it does not conform to these guidelines, then it has still been recorded as coarse/fine. The group to which the comb is assigned is recorded in data base field 'class'. In addition to combs, comb-cases and comb-blanks are also recorded.

This chapter therefore covers all known Scottish IA toilet comb forms as well as some Norse/later Medieval varieties which are relevant to aspects of discussion.

## 6.2 SUMMARY OF COMB CLASSIFICATION (fig 29)

### 6.2.1 Group 0: Late Bronze Age type

This is a group of small single-piece combs, usually rectangular, with short teeth. The top is commonly decorated with boldly cut linear designs.

### 6.2.2 Group 1: 'Roman'

Roman type combs may be either single-piece or composite, but they are all double-sided with one set of teeth markedly coarser than the other set. This distinction is a feature of some later Norse and medieval combs, but the Roman variety tend to be short in comparison to depth when compared to these later types, and early medieval examples of this form are rare in Scotland (MacGregor 1985, 81). Composite combs were entirely a north European 'native' development, but by the third and fourth century they were widely distributed throughout Romanised regions (*ibid*, 74). Decorative profiling of the end-plates is common on these combs, which may also incorporate a second pair of connecting-plates (*ibid*, 92).

### 6.2.3 Group 2: 'Germanic' single-sided

Germanic single-sided combs (MacGregor 1985, 77) are invariably single-piece and developed in bone, antler and iron forms in north Germany and Scandinavia from pre-Roman times (Dunlevy 1988, Irish class A1-2). Round backs are common and the sides may diverge slightly or be markedly flared. The back is thick and heavy in cross-section, tapering towards the teeth. The large back creates an open field for decoration, which may be highly ornate.

### 6.2.4 Group 3: 'Celtic' miniature

'Celtic' miniature single-piece, single-sided combs often have a grip or an open back acting as a handle (Dunlevy 1988, class A3). They can be distinguished culturally and functionally from 'Germanic' miniature combs (MacGregor 1985, 78).

### 6.2.5 Group 4: High-backed 'Celtic'

This is a group of single-sided composite combs with high backs which may extend well above the connecting-plate. The backs are



either simple or sinuous, consist of an open arcade, or incorporate zoomorphic motifs (MacGregor 1985; Dunlevy 1988 Irish class C). The connecting-plates are frequently short and flat, often bowed outwards along their long edges, and in some instances they terminate well short of the margins of the end-plates.

#### 6.2.6 Group 5: Double-sided Dark Age type A

This is a group of double sided combs which are distinguished from Anglo-Saxon double-sided combs in their form and geographical distribution. In form they are closer to Roman originals, that is short in comparison to height (MacGregor 1985, 94; Curle 1982 type A; similarities with Dunlevy 1988 Irish class B). The connecting-plate is usually deep and flat in cross-section and sometimes a narrow area is left in reserve at the extremities of the end-plate. The end-plate may have a sinuous or even ogival outline, and some incorporate a perforated central convexity. The teeth graduate, becoming progressively shorter over the last 30mm or so of each end-plate, resulting in triangular or D-shaped solid zones which are generally decorated. There is usually no differentiation in the fineness of the teeth, unlike Roman combs of group 1 (Alcock 1987, 130).

#### 6.2.7 Group 6: Double-sided Dark Age type B

Curle distinguishes two Dark Age comb types in Scotland (1982, 156). Her second type (type B, which shares some similarities with Dunlevy 1988 Irish classes D1-2), when compared to group 5 is longer, the teeth are not graduated (or are only very slightly graduated), and the connecting-plates do not usually extend to the end of the comb where there is a narrow vertical band for an end-space. The connecting plates are usually not bevelled, but shallow and semi-elliptical in form, and overall decoration is less ornate.

#### 6.2.8 Group 7: Norse single-sided with deep thin connecting-plates

This group corresponds to Ambrosiani Group A (1981) of which there are three decorative variants:

- A1 no decoration and no border lines, but there may be bands of vertically orientated incisions
- A2 ring and dot motifs
- A3 interlaced ornament, often in the form of a central band flanked

by elongated fields echoing the shape of the connecting plate.

All these combs share the characteristic of elongated connecting-plates with straight lower edges and a gently curving upper edge. In section the side plates have a low plano-convex profile and a ratio of depth to thickness  $>3.5:1$ .

#### 6.2.9 Group 8: Norse single-sided with thick connecting-plates

This group corresponds to Ambrosiani Group B (1981) of which there are four decorative varieties:

- B1 single or multiple lozenges
- B2 vertical lines
- B3 ring and dot ornament
- B4 no ornament.

The connecting-plates are generally shallow and thicker than group 7 and the ratio of depth to thickness is  $<3.5:1$ .

#### 6.2.10 Group 9: Norse single-sided combs with rectangular section connecting-plates

MacGregor (1985, 90-91) distinguishes this group from groups 7 and 8. The connecting-plates are approximately rectangular in cross-section, although the edges are normally rounded and the principal face is profiled with longitudiunal grooves. The back is invariably straight. Examples vary from 100-300mm in length. Copper alloy rivets are increasingly popular on later examples.

#### 6.2.11 Group 10: Double-sided 'butterfly'

This is a group of Scandinavian double-sided combs with 'winged'/double convex ends, one side of which may be offset from the other.

#### 6.2.12 Group 11: Miscellaneous Norse and medieval

### 6.3 ANALYSIS OF THE DATA BASE

This study does not necessitate the same type of 'multivariate' analysis as needed to be applied to the pins. The Scottish IA comb forms will thus be examined group by group, reviewing the Scottish and wider evidence for their circulation. Subsequent Norse and

medieval groups will only be discussed in the most general and briefest of terms.

#### 6.4 DISCUSSION OF COMB GROUPS (figs 30-32)

##### 6.4.1 Group 0: Late Bronze Age type

Three examples of this form come from LBA/EIA contexts at Balevullin (1634-36). The only parallels known to MacKie (1963, 164) are from LBA levels at Lough Gara, Ireland. On this basis the comb from Covesea (747), which is very similar to the Balevullin examples, is probably to be associated with LBA activity on that site which has long been recognised from the bronze ring-money, a swan's neck pin and an armlet fragment (Benton 1931; Shepherd 1983, 333)

##### 6.4.2 Group 1: 'Roman'

Specifically Roman type combs in Scotland are rare and recognition is mainly on the basis of form rather than context, for example the wooden combs from Ledaig Crannog with their differing thickness teeth (641-42; fig 32). Most notable are the two examples from Keil Cave (551-52; fig 29) where there was intermittent activity from the third century onwards. These are associated with a triangular weaving tablet of a distinctively Roman form (Henshall 1950, 150), and a fragment of Roman pottery which is probably fourth century in date (Fairhurst 1984, 115). All the examples are from the south of Scotland. The decorative profiling of the end-plate, as seen on 552, is particularly common from the second half of the fourth century (Keller 1971, quoted in G Clarke 1979). English examples include a series from Lankhills, where 12 out of 13 of such examples are from contexts which post-date *circa* 365 AD (Galloway in Clarke, G, 1979, 246-48). The Keil example is particularly similar to Lankhill examples 323 and 473 (*ibid*, fig 84, fig 93).

##### 6.4.3 Group 2: 'Germanic' single-sided

There are two, possibly three examples of this form in Scotland, all from the south. Of these the Langbank (659; Dunlevy 1988 Irish class A1) and Ghegan Rock (215, fig 29; *ibid* Irish class A2) examples are the most well-known because of their ornately



decorated backs. Their arched outlines have perforations for suspension and they are decorated with linear versions of Warner's 'Earlier Iron-age 2' style motifs (Warner 1983, 168-69). Both probably belong to the early centuries of the first millennium AD, a date range suggested on the basis of their decoration, associated artefacts and by a single undecorated comb from a Manx promontory fort at Close-ny-Chollagh, whose occupation ceased around AD 75 (Gelling 1958). There are also Irish examples, no less than 13 from Loughcrew (H S Crawford 1925) to which the Scottish examples must be closely tied (Warner 1983, 168), and early Roman parallels on the continent (Dunlevy 1988, 351). The Borness example (685) comes from a cave where associated finds include human skulls, second century copper alloy brooches with traces of enamel, and late first or second century AD samian (W B Clarke 1876; Robertson 1970, table V). However, Irish examples similar to Ghegan Rock span about the fifth to tenth centuries. They show the influence of late Roman composite bone combs and a general movement towards more debased art styles (Dunlevy 1988, 252-53).

#### 6.4.4 Group 3: 'Celtic' miniature combs

This is a group of combs which are mainly associated with brochs in Orkney and Caithness (2, 256, 600, 619, 1458, 1625, 2007). There are two examples from 'dated' contexts:

Table 10: Summary of dating evidence for group 3 combs

Date of context	Context	Site	Record no
2-1 C BC	Period 3	Crosskirk	1625
1C BC-2C AD	Phase 7	Howe	2007

None of these dates contradict the overwhelming evidence which suggests that this was strictly a MIA form. Continental and Irish examples are, however, dated to late and post-Roman times (Dunlevy 1988, 353). Assuming these small combs to be functional and not merely symbolic, one interpretation is that they were beard combs (MacGregor 1985, 78).

#### 6.4.5 Group 4: High-backed 'Celtic' (fig 29-30)

This numerous group constitutes the most visually distinctive

native comb form. Most examples are associated with AP sites for which a LIA date is suggested on grounds other than artefact types, such as the Broch of Burrian, Saevar Howe, Skaill and St Boniface's Churchyard. 'Dated' contexts are few, and the date at which these comb forms appear has not been clearly resolved. Dunlevy (1988, 356-57) and Laing (1975a, 300) argue that comparisons can be made between the zoomorphic ornament on some of these combs and late Roman/early Anglo-Saxon metalwork, specifically belt buckles (such as Hawkes and Dunning 1961). In this case a derivation in the fifth century is called for (MacGregor 1985, 88), although there are no scientific dates to back this up. Perhaps suprisingly if this is the case, no examples have been found in early Anglo-Saxon contexts. 'Dated' Scottish examples are:

Table 11: Summary of dating evidence for group 4 combs

Date of context	Context	Site	Record no
LIA	Ph 1b	Saevar Howe	201
LIA	Zone 4	Brough of Birsay	2009, 2013
Interface	Site 2, midden 3	Skaill	247-48
late 9-2nd 1/2 10C	Lower Norse	Brough of Birsay	2010-12, 2014-15
late Norse	phase V	Buckquoy	100, 101, 111

Further evidence for a LIA date exists in representations of group 4 combs on class I Pictish stones (Curle 1982, 95-96; see discussion in §7.2.1).

It is postulated that the silver comb reported from early nineteenth century excavations at Burgar (2008) may have been related to this class (Graham-Campbell 1985, 252-53).

#### 6.4.6 Group 5: Double-sided Dark Age type A (fig 29-30, fig 32a-c)

This is a common group found throughout the AP as far north as Orkney, but also on the southern mainland, such as at Buiston. The many ambiguous examples which may belong to either group 5 or 6 serve to reinforce this distribution. The examples from 'dated' contexts are:

Table 12: Summary of dating evidence for group 5 combs

Date of context	Context	Site	Record no
LIA	Ph 8	Howe	160
7-8C	Pre-rampart A	Dunollie	1305
?7/8C	-	Buiston	710-12
?8C	Phase Ib	Saevar Howe	202
'Pictish'	Zone 1 & 4	Brough of Birsay	56, 2029-30, 2041
'Pictish'	Site 6, latest LIA level	Skaill	2056
LIA	last LIA phase	Loch na Berie	1997
9C	Phase IIb	Saevar Howe	203
early 9C	Phase III	Buckquoy	104
?9/10C	Phase IV	Buckquoy	106
early 10C	Phase V	Buckquoy	108-110

None of these combs are associated with MIA levels, and it is only the example from Howe (160, but possibly also 161) for which a pre-seventh century date can be suggested. C-14 dates for phase 8 levels at Howe are cal AD 399-600 (GU-1749), cal AD 530-648 (GU-1757), and cal AD 714-980 (GU-2347). As combs of this form appear in the same levels as group 4 combs it may be that they too extend as far back as the fifth century. They also appear on class I symbol stones (Curle 1982, 95-6); as with group 4 combs, most examples also occur on sites for which a LIA horizon has long been suspected or known, even if the stratigraphy is insecure (for example Dunadd: 1262). Prior to the Howe example there was no evidence that their life could possibly be extended any further back than the fifth century AD, although Dunlevy (1988, 354-55) dates similar Irish forms, from which one of the Dun Cuier examples (1154) is almost indistinguishable, to the third to tenth century. There is no evidence that they are directly related to potential Roman prototypes.

#### 6.4.7 Group 6: Double-sided Dark Age type B (fig 29, 31)

In comparison to groups 4 and 5 this is a small group, although many examples may fall into the range of ambiguous group 5/6. In terms of distribution this form is mainly found in Orkney, Caithness and on a few occasions in the Western Isles. A recent example from medieval levels at Edinburgh Castle (sandwiched inbetween levels producing Roman and later medieval pottery: pers comm P Yeoman)



(2139) is a distinct outlier; it also confirms that LIA combs, as well as Roman combs, might have differentiated teeth. The possibility that this is actually Anglo-Saxon cannot be discounted, in which case it forms part of <sup>A</sup>small assemblage of Anglo-Saxon artefacts found in southern Scotland and related to the seventh century Anglian takeover of this area. 'Dated' examples are as follows:

Table 13: Summary of evidence for group 6 combs

Date of context	Context	Site	Record no
-----			
'Pictish'	Zone 1	Brough of Birsay	2035
LIA	late ph 8	Howe	163-64
post mid 8C	Site 2, E wall house	1 Skaill	249-51, 2050-53
early 10C	Phase V	Buckquoy	107
9/10C	Phase IV	Buckquoy	105
late 9-2nd 1/2 10C	Lower Norse	Brough of Birsay	57-58, 2032- 34, 2036-39, 2026

Curle (1982, 57) points out that this form bears a resemblance to Anglo-Saxon combs, but does not believe that they were imported. On the basis of the Brough of Birsay examples she therefore suggests that they are of Norse date, but native manufacture. All but one (2035) of the Birsay examples are from Norse levels, that is to say that only this and the Howe examples come from an undisputed pre-Norse context. But on the basis of the representation of this form on class II Pictish stones (*ibid*) and the existence of fifth to tenth century Irish (Dunlevy 1988, 359) and Anglo-Saxon parallels, a LIA date may also be suggested.

#### 6.4.8 Group 7: Norse single-sided with deep thin connecting-plates (fig 31)

The earliest examples of this form of Scandinavian manufactured comb are found not only in the Scandinavian homeland, but also in northern England, the Scottish islands and Ireland (Ambrosiani 1981, 22, fig 11.1), see for example Brough of Birsay (60, 2018) and Drimore (1750). In Scotland they are found in contexts ranging between the late ninth and eleventh, if not twelfth, centuries.

**6.4.9 Group 8: Norse single-sided with thick connecting-plate (fig 31)**

This form was widely distributed in the Norse period on the Continent. Ambrosiani suggests an origin in the S Baltic, but with rare occurrences in Scotland (1981, 22, fig 11.2). Ambrosiani type B1 ranges from about 900 to the later tenth century, type B2-4 survives into the eleventh century (Danielsson 1973). The Scottish evidence suggests that they may survive into thirteenth century contexts at Jarlshof.

**6.4.10 Group 9: Norse single-sided comb with rectangular section connecting-plate**

This form was widespread in early medieval Scandinavian settlement, ranging from the tenth to the thirteenth century (MacGregor 1985, 91). In Dublin all examples pre-date the arrival of the Normans (Dunlevy 1969, 62-3). Examples at Jarlshof belong between the early eleventh and thirteenth centuries (2126, 2128-29).

**6.4.11 Group 10: Double-sided butterfly (fig 32d)**

This is a form found widely in Scandinavia, and generally of twelfth to thirteenth, sometimes fourteenth century date (Batey 1982, 51; Schia 1979, 63). There are examples from Jarlshof (2135-6), and Hamilton quotes similar combs found in the broch at Carn Liath, on the Sands of Bracon, Yell, and at Freswick.

**6.4.12 Group 11: Miscellaneous Norse and Medieval**

A single example will be discussed here, and that is an unusual piece from Keil Cave (550) which is possibly Norse. There is another unexamined piece of a group 7/8 comb from this same cave, which suggests that activity associated with combs in this cave can be divided into two chronologically distinct phases, late Roman and Norse.

**6.5 SOME COMMENTS ON MATERIALS AND TECHNIQUES IN COMB MANUFACTURE**

Wood, antler, bone, horn and various metals might be used for the manufacture of single-piece combs, but antler was used almost exclusively for manufacturing composite combs. Its superior



mechanical properties in comparison to bone (MacGregor and Currey 1983), in combination with the demands of fashion and the physical limitations of this raw material resulted in the development of the composite comb (MacGregor 1985, 28-9).

Where known, all extant LIA combs are antler. It has been shown in section 5.3. that antler was not used for LIA pins, but its usage became almost *de riguer* in the NP. Several reasons were suggested for this: that the Norse were better at managing or hunting mainland herds, or more probably that they were specifically importing raw material or finished products from their homeland. With Scottish Norse combs the second case is much easier to prove, with or without detailed analysis of the raw material (whether elk, reindeer or red deer antler); Ambrosiani demonstrates on the basis of form that her A and B combs were being imported from Scandinavia to the British Isles (1981, 31-40, fig 11). However, further work on the analysis of the material used for Norse combs found in Scotland would be very worthwhile, for, in the absence of total analysis of materials used, British imitations cannot be entirely discounted. There is evidence for the Norse manufacture of combs at Whithorn (Hill 1986, 8-9; 1987, 18); Pool (*pers comm* J Hunter); possibly at Birsay Brough Road sites 1 and 2 (C Batey *in litt*; forth); and there is a clamp of the type used in comb manufacture from the Lower Norse horizons at the Brough itself (Curle 1982, ill 20, cat no 287). Pre-Norse evidence for comb manufacture is limited to the sites of Caird's Cave, Rosemarkie; Castle Hill, Howrat (546; Smith 1919); and possibly Dunadd (1263) where a long length of apparent connecting plate has no rivet holes, suggesting that it forms part of an incomplete comb. It may alternatively be part of a comb case. Certainly the natives of LIA Scotland were using antler in comb manufacture, presumably local, for the very simple reason that it was technically the most suitable material to use. Its non-usage for LIA pins is perhaps therefore all the more suprising, because tines, appropriate for pins, would usually have been superfluous to the comb-making process. More likely the LIA comb-maker and pin-maker were not the same person. All LIA households had the raw materials for bone pins which were essentially a home-industry, but comb-making was probably a craft undertaken by specialists. In addition, metalworkers could have manufactured, or even borrowed, bone pins for the casting of metal



replicas.

Whilst requiring some dexterity, the manufacture of combs entails a fairly simple process (which MacGregor 1985, 74-75 describes in some detail). Thin plates of antler, roughly rectangular are placed side by side with their grain running in the direction of the proposed teeth. Using a clamp they are then secured on either side with two connecting-plates of long, relatively narrow antler strips. The grain of these runs at right angles to the teeth. Rivets secure all the plates together. Subsequently teeth are cut with a saw and shaped. An example from Dun Cuier (1154) has lightly scatched lines at the butt end of the teeth, possibly intended as a guideline for the person using the saw. Where necessary any tooth-plate above the connecting-plates is cut off or shaped, and decoration applied as required. Decoration usually takes the form of ring and dots, achieved with a bit-like implement, incised lines, or sometimes compass-drawn designs. Open work and arcading must have required sharp metal tools. Before iron tools became sophisticated enough the manufacture of combs such as these would have been an impossibility.

Rivets used to secure the combs vary. Iron is the main material because of its general availability and strength, and it was used extensively in the pre-Norse and Norse periods. Bone rivets were popular in pre-Viking Ireland, but rare on Scottish examples, although note the repaired comb from Dun Mor Vaul which has bone and iron rivets (1689). Copper alloy rivets never appear on native combs, but become increasingly popular in the early Norse period, where their decorative potential was exploited to the full (see in particular group 9). The number of rivets increases dramatically, and their arrangement becomes very decorative.

Ivory and horn combs, if they ever existed in LIA Scotland, are no longer extant. Fortunately, however, a few wooden combs have survived. Wood was particularly common for combs in the Roman period (such as from the second century AD levels at Newstead; J Curle 1911, 311), and Scottish examples survive at Ledaig Moss (641-43).

There are no extant LIA metal toilet combs in Scotland of either iron, copper alloy, silver or gold, nor are there any moulds for their casting. But documentary records pertaining to the discovery of the lost Pictish hoard from Burgar Broch, Orkney mention

silver combs. They are characterised as having rounded, perforated backs with teeth. Details disagree, but overall this second-hand description equates well with the high-backed combs of Celtic type (Graham-Campbell 1985), group 4. Graham-Campbell cites a unique silver comb from the Cuerdale hoard which confirms that silver combs were known in NW Europe by the end of the ninth century. Otherwise we are dependent on the occasional reference; early Irish literature contains at least one reference to a woman with a silver comb (*ibid*, 258, note 23). Copper alloy examples, whilst unknown in Scotland, do occur elsewhere in the British Isles (such as an open-backed example from Whitby: anon 1929, closely paralleled on the Frisian terps: Munro 1890, fig 100.14). An open-backed iron comb from Dunadd (Christison and Anderson 1905, fig 52) is too coarse and heavy to have been a comb for hair.

The comb was an expensive and valuable item which required handling with care otherwise the teeth would easily break. Combs of the Cu eskimos are so valuable that they are rarely used, even by their owners (Dunlevy 1969, 87). If broken they would often have been carefully repaired. Perforations suggest that many were intended to be suspended on the person or out of harm's way. Alternatively some of the perforations may possibly have been for the pegs which held them in a comb-case. Such is certainly the case for many Norse examples, but no LIA comb-cases are known (in either Scotland or contemporary Ireland: Dunlevy 1988, 373). Suggested representations of comb cases on Pictish symbol stones (Allen and Anderson 1903) are not convincing. Leather or woven purses or pouches may have been used instead. There are several examples of Norse comb-case: three from Birsay (61, 2024-25), a complete example with comb from a grave at Skaill (Wainwright 1962, pl 16), an example from Freswick Links (2100) and a fragment from Jarlshof (2119; Hamilton 1956, fig 77.8). A riveted plate with a raised ridge resembling a connecting plate, from Galson may possibly also be a fragment of a case (1182).

\* \* \* \* \*

Each comb type has been discussed and reviewed in this chapter. The next chapter will extract and draw together the evidence for LIA

- Chapter 6 -

pins and combs, and will provide an up-date and summary of the available dating evidence.



## CHAPTER 7: OVERVIEW OF THE DATING EVIDENCE FOR LIA PINS AND COMBS

### CHAPTER 7: OVERVIEW OF THE DATING EVIDENCE FOR LIA PINS AND COMBS



## CHAPTER 7: OVERVIEW OF THE DATING EVIDENCE FOR LIA PINS AND COMBS

In the last two chapters the dating evidence for individual pin and comb types was reviewed. These chapters took into account Scottish pins and combs of the IA to NP (as well as the occasional medieval example) so that the LIA examples could be seen in their context. In this chapter an overview is provided of the data, and from this the LIA artefacts are extracted for detailed discussion. Ultimately the dating evidence for these artefacts is up-dated and summarised. But the limitations of the available dating are emphasised because these have major implications for subsequent analysis of the settlement evidence. Some suggestions are made as to how these limitations might be ameliorated.

### 7.1 OVERVIEW OF CLASSIFICATION

#### 7.1.1 Overview of Scottish Pins

By weighing up the series of propositions made in chapter 5, the pin data base can be divided into several discrete groups (data base field = class):

- A. definitely MIA pins forms, although not necessarily of local manufacture, for example decorated ring-heads and Fowler type E
- B. Roman imports, or Roman-style pins
- C. LIA fashions, short bone or metal pins, commonly with hipped shanks, notably groups 3-11, 14A, 19, 24-25, 27-28 and 36
- D. MIA/ LIA fashions which are a part of a general Irish Sea culture province, for example some of the ring-head and projecting ring-head groups and group 15
- E. distinctively Norse period pins which tend to belong to an Irish Sea cultural milieu, for example loose ring-heads, disc/lozenge heads with fillets, lobed heads and groups 16-17.
- F. Anglo-Saxon imports

The distribution of each of these groups has been plotted in figs 33-35. Classes C and D are potentially relevant to any discussion of LIA settlement.

### 7.1.2 Overview of Scottish Combs

The combs were divided into 11 groups: group 0 (LBA); groups 2-3 (MIA); groups 4-6 (LIA); and groups 7-11 (Norse and medieval). Groups 4-6 are potentially relevant to any discussion of LIA settlement, and the distribution of these has been plotted in fig 36.

## 7.2 THE DATE RANGE OF THE PINS AND COMBS

Up to now the pins and combs have simply been described as potentially of LIA date, yet in section 3.1.3 it was suggested that the LIA may need to be broken into two parts, LIA I and LIA II, on either side of about cal AD 600. The questions we therefore need to ask are:

1. What are the date ranges of these artefacts?
2. Do these respect the divisions into LIA I and II?
3. If so, why, and might future work break down this division?

In evaluating the date range of these artefact classes it is obviously necessary to consider the earliest and latest date of manufacture and circulation of the artefacts, each bracket of which presents different problems and has different archaeological implications. The earliest date is crucial to identifying when recognisable LIA settlement began, and to understanding its developments over time. The latest dates are of relevance to the nature of native/Norse interaction.

There are two main means of dating these artefacts, either by typology, or by dating the context in which they were found, usually by scientific<sup>means</sup>, occasionally by the typology of other associated artefacts.

### 7.2.1 Dating the Appearance of LIA Pins and Combs by Typology

In terms of decoration LIA pins are very disappointing, and certainly, with few exceptions, no dating significance can be attached to a pin on this basis. Several unusual pins from Pool merit individual attention. Hunter contends (*pers comm*) that examples 1493-94 (figs 24 and 27) both display versions of ogam. In the case of the latter its runs unintelligibly in a circle around the hip. Whilst a similarity to ogam is undeniable, so is a resemblance to other geometric designs of this era. Note also a whorl from the Broch of Burrian with decoration resembling ogam (MacGregor 1974, cat



no 252, fig 18). Circular inscriptions (wheel-ogams) have also been found on the whorl at Buckquoy (A Ritchie 1977, cat no 84, fig 8) and at Elphinstone (Padel 1972, 13). Irish sources suggest they may have had a magical significance (Padel 1972, 13-14). A similar, and even weaker case, is put forth for some unintelligible scratches on the wide flat pin from Pool. Ogam inscriptions on portable objects are altogether rare; there is an unintelligible eighth century inscription from Buckquoy (A Ritchie 1977, 181, no 84), and two knife handles, one from pre-Norse contexts at Bac Mhic Connain (Wainwright 1962, 96) and the other from post-broch levels at Gurness (Hedges 1987 II, cat no 252, fig 2.22), which Padel (1972, 12) considers are not late. All these inscriptions are unintelligible and difficult to date.

There can be no doubt that the designs on the front and reverse of the flat wide pin (1493) from Pool are remnants of Pictish symbols (a double disc and Z-rod and part of a 'notched rectangle and curved end' or perhaps circular disc and rectangle). This comes from one of the earliest pin-producing levels at Pool, and is distinct in form from all other known Scottish examples. The excavator claims that Pool has produced the only scientifically dated symbol stone in Scotland, also with a double disc but unfortunately atypical. This appeared in one of the early Iron Age levels on the site (ph 4d) which J Hunter (*pers comm*) considers fifth or more probably sixth century. Examples of Pictish symbols on *art mobilier* are rare, but occur in silver, bronze, stone and bone, for example the Norries Law silver hand-pin (Stevenson 1976). Their date is problematic (see below). As few of the above pins are of the typical Class C form, and none of them belong to typical Class D forms either, typological analysis has not been very helpful in dating their appearance.

Attempts have been made to date the combs by art-historical means, studying either the decoration on the combs, or the sculptured class I and II Pictish stones upon which they are commonly depicted. There are arguments that the decoration on the back of group 4 combs, together with early Irish parallels (66.4.5), places some of them in the fourth to fifth century (Dunlevy 1988, 356-57; Laing 1975a, 300) but there are no Scottish examples from contexts which otherwise pre-date the seventh century. One of the Dun Cuier combs (1147), which is very similar to Irish examples, is dated by the excavator to the

seventh century. The Irish evidence suggests that the form evolved from about the fourth to fifth century, was popular in the sixth to ninth centuries, but was also found possibly as late as the tenth. The date of 200 AD applied to deposits at Lough Gara, which produced examples of this form, is probably too early (Dunlevy 1988, 357). Otherwise there is little distinctive decoration on the class 5 and 6 combs to which any chronological significance can be attached.

Turning to the symbol stones, combs, often in conjunction with mirrors, are two of the most common Pictish symbols. Cecil Curle (1982, 95-96) observes that the representations of combs on class I and II symbol stones differ, that is the groups 4 and 5 appear only on class I, group 6 on class II (fig 37). There is further reason to believe that groups 4 and 5 are contemporary, for they appear in similar archaeological contexts. It seems that group 6 was a later innovation. Curle's distinction between sculpted groups 5 and 6 has been made on the basis of proportions and whether or not the connecting plates and teeth (where indicated) extend to the end of the comb. On these grounds there are two possible exceptions to her rule: at Maiden Stone (fig 37.35) and Meigle 1 (fig 37.34) the connecting plates do not extend to the end of the comb, although the proportions of the Maiden Stone example perhaps suggest group 6. A wider variety of combs are displayed on class I stones. There is a single double-sided example (fig 37.25), apparently with teeth of different thickness on each side, which may thus be imitating a Roman form (group 1), but the majority of examples are immediately recognisable as group 5 or as being similar to group 4.

Examples of group 4 are obvious, but it must be emphasised that exact parallels for the representations can rarely be found. Some of the backs, such as Easterton of Roseisle (fig 37.10) are relatively easily paralleled, but otherwise most of the decorative and ornately shaped examples are not. In part this is because these are artistic and stylish, or abstract renderings, which therefore need not be faithful representations (although this is perhaps surprising considering the accurate representations of groups 5 and 6). But in addition the range of extant combs is few, and the combs depicted may be representing the range of examples which might have been manufactured in perishable materials, such as wood. Alternatively it may be prototypes of group 4 which are depicted, none of which have

come down to us.

But the next questions to ask are what are the date of the symbol stones, and can they be used to date the artefacts represented on them? The answer to the second question is no; in fact it is very surprising considering the supposed ancestry of the majority of the Pictish symbols (Thomas 1963) that any one symbol should seem to be portraying contemporary, up-dated models of its form. The fact that there are at least three different comb groups represented on these stones would suggest that this was happening, in contrast to other symbols whose decline has been charted (for example Murray 1986). The implication is that this symbol and what it represented was particularly important and of continuous significance. Perhaps the artefactual forms upon which the other symbols are based were no longer in circulation, and thus relegated to being abstract symbols only. This is even more suprising considering that the mirror form with which the comb is always juxtaposed is of a form only found in the early centuries of the first millennium AD (Fox 1949). One such bone mirror handle from Bac Mhic Connain (M MacGregor 1976, cat no 271) is unstratified.

Yet this raises the whole question of the date of class I and II stones (recently summarised in Ralston and Inglis 1984, 28-33). Class I dates between the late fifth (Thomas 1963; note also the recent example from Pool with associated C-14 date) and seventh or eighth century (Stevenson 1955b; 1976). If we knew the date at which class 4 and 5 combs first appeared, then this would supply a further *tpq* for some of the class I stones. Class II stones are later, and there is more agreement over their date range, which is from about the early eighth century. There is no other evidence to suggest that group 6 combs need pre-date this. Despite the evidence from the Brough of Birsay that this form is Norse, the sculpted evidence suggests that this was not always the case.

Comparison of the distribution of the stones and combs is informative. Class I stones and group 4 combs are almost mutually exclusive. There is a greater degree of overlap in the distribution of groups 5 and 6. Class II sculpture was influenced by Northumbrian art; this Anglian contact may go some way to explaining why group 6 combs, which have Anglo-Saxon parallels, appear on this sculpture.

Often pins and combs come from the same contexts, for which no



scientific dates are available. These sites/contexts are often 'dated' by typological means, but never any further back than the late seventh century AD. This is because of the absence of artefacts which can be specifically assigned to the fourth, fifth and sixth centuries (see section 3.1.3). Thus at sites such as Buckquoy (A Ritchie 1977) and the earlier excavations at Saevar Howe (Hedges 1983), there are no scientific dates, nor are there any typological grounds for pushing any of the material any earlier than the late seventh century. At the Brough of Birsay most of the activity in Area II is considered late eighth century, although excavations in Room 5 (Hunter and Morris in Curle 1982, 124-38) produced pins from structural contexts whose associated C-14 dates extend back into the mid seventh century. The full nature of this settlement is unknown, and Curle (*ibid*, 95) suggests that earlier occupation is hinted at by a penannular brooch of Fowler class F, possibly fourth or fifth century (which may, however, be scrap; a similar brooch comes from late levels at Howe: Smith forth, cat no 1, fig 29, phase 9).

In conclusion, when the typological evidence for the date of group 4-6 combs and class C pins is compared, a contradiction is apparent. Despite the fact that these artefacts have often been found in the same contexts, the pins cannot be dated back any further than the seventh century AD, but some of the combs may be fifth century AD. It remains to be seen how this discrepancy is affected by the evidence of scientific dates.

#### 7.2.2 Dating the First Use of LIA Pins and Combs by Scientific Means

At the time of writing, only C-14 scientific dates are available to the writer for contexts producing LIA pins and combs, and combs are rarely associated with these. The most striking aspect of the distribution of these dates (fig 38) is that so many of them begin in the period from about cal AD 530 to 660, and no earlier. This coincides with several particularly steep sections of the Trondheim calibration curve, the last of which is also associated with an inversion (fig 5). In §3.1.3 it was shown that the known dates for the Atlantic Province reflect the effects of the calibration curve upon this period. In effect the LIA is broken up into two parts, on either side of about cal AD 600. This division seems to be reflected in the date of the context which these pins and combs come from, and

thus they would appear to be exclusively LIA II. However, it remains to question the relevance of these C-14 samples, that is the relationship of the sample to the context, and of the context to its associated material, a series of relationships summarised in Taylor 1987, 113-15, fig 5.2): there may be a disjunction between the date of the event being sought and the date of the event datable by C-14 analysis; or a gap between the event datable by C-14 and the closest datable event that can be related to the event for which the date is actually being sought; or there may be a disparity between the dated event and the date being sought. Thus responsibility lies with the archaeologists to ensure accurate archaeological observations and the choice of relevant samples, and with the laboratories for rigorous testing.

But, as if to emphasise that this gap in the C-14 and present archaeological record is real, the later dates for phase 7 and 8 at Howe can be seen to predate this period. Is it more than coincidence that Howe's later phases, which only produce two possible LIA style pins, extend as far as the sixth to mid-seventh century, but terminate at the time these fashions are being introduced elsewhere in the Atlantic Province? (It cannot be totally discounted that the predominantly industrial nature of later activity at Howe may possibly account for their absence). Thus on the basis of C-14 data it does seem that LIA pins may respect the division between LIA I and II. Yet, as some of these artefacts are associated with combs to which on art-historical grounds a fifth century date might be applied, something is amiss.

### 7.2.3 A Suggestion for Reassessing the Date of the First Appearance of LIA Pins and Combs

Techniques of C-14 dating can now date very small quantities of bone or antler (0.2-0.5gm of compact bone, ideally 5-10 gm); it is possible to date part of a pin or comb. As both were probably manufactured from contemporary skeletal sources, their dates would obviously be more relevant than the date of other samples deriving from the same contexts. Firstly, where the samples submitted were from C-14 'dated' contexts, the relationship between context and associated artefacts could be usefully compared. Secondly, examples could be tested which come from type sites, such as Buckquoy, assumed

to be late seventh century at the earliest. Whilst appreciating that the calibration curve may yet distort the resultant C-14 dates, this is the only means by which we can ever hope to accurately estimate when forms such as this appeared. Obviously it is imperative to know whether the current division into a LIA I and/or LIA II is real.

#### 7.2.4. Dating the Last Use of LIA Pin and Comb Types

A LIA form artefact may have one of four possible life cycles prior to its recovery by archaeologists:

	Period of manufacture	Period of use	Period of deposition	Date of archaeological context
1	LIA	LIA	LIA	LIA
2	LIA	LIA	LIA	NP
3	LIA	LIA + NP	NP	NP
4	NP	NP	NP	NP

=====» TIME

Distinguishing between LIA and Norse contexts does not generally require C-14 dates; differences in most aspects of the material culture are profound.

In scenario 1, an artefact which is LIA in fashion and use, is not adopted by the Norse, nor does it continue to be manufactured by the natives in the NP. It perhaps suggests an abrupt change in aspects of the material culture. However, examples of such artefacts might, none the less, be found in a Norse context if scenario 2 or 3 occurs.

In scenario 2 an artefact is LIA in fashion and use, and is deposited in a LIA context, but ultimately finds its way into a Norse context, because of rubbish survival, or the disturbance of earlier archaeological strata. Thus the artefact is residual to the context from which it is recovered by the archaeologist. There are two sites where the issue of residuality can be examined in some detail because they have both produced a long and varied sequence of pins over the LIA and NP, namely the Brough of Birsay and Pool.



Recent excavations by Hunter (1986) at the Brough of Birsay did not produce any relevant artefacts, but the earlier pre-war excavations in Area II were prolific. There is no problem over the horizontal location of these finds, although vertical stratigraphy is not always so clear (Curle 1982, 15), so the approximate distribution of LIA fashion pins through various phases can be plotted (fig 39). In theory it might have been possible to compare both the distribution of artefacts and contemporary settlement; and also to estimate to what extent paving and levelling up in the Norse period had disturbed LIA levels, and was therefore responsible for the pins in later levels. In practice this is not possible. Although five zones of Pictish activity were recognised (on the basis of the pins, but more particularly moulds) the extent of these appears to have been limited by the somewhat unsystematic investigations of earlier archaeologists who were more concerned to conserve for presentation the Norse horizons than investigate underneath them. As a result it is unclear which areas were indeed thoroughly investigated. (This problem may be resolved with Radford's forthcoming publication of the structural evidence). No identifiable structures can be attributed to these zones save a small well (Curle 1982, 15). The area as a whole, particularly zone 4, was concerned with bronze working in the late eighth century AD (on the basis of analogies with the St Ninian's Isle material; *ibid*, 95), mainly for small decorative objects of personal use. Included are fairly numerous multiple pin moulds, a few of which were modelled on some of the extant pins (*ibid*, illus 57). The concentration of these pins, perhaps all dies, in zone 4 must surely reflect the nearby core of industrial activity. Moulds are concentrated in the area around the well in Zone 1, but pins in Zone 4 fit them. Ironically metal pins of this kind are very rare in the current archaeological record. The pins in Zones 1-3 and 5 may just be a tail off from this central activity area, brought up into later horizons by Norse disturbance of earlier strata. None of this therefore contributes to our understanding of whether residuality is recognisable in the domestic archaeological record, or whether these pins had an extended life into the NP. There are LIA fashion pins and moulds from the Norse houses in Area III, but it is not known whether there was any LIA activity in this area, indeed known LIA

activity on the site is still not very extensive (Hunter 1986).

At Pool residuality is an inherently more likely problem, particularly in the pre-Norse periods, where the semi-subterranean architecture involved excavating earlier middens and using the spoil to revet dwellings. Such major disturbance is probably the reason why a Fowler type E pin could appear in late Pictish levels (1804). Norse building techniques, whilst involving some disturbance, seem to have involved less digging into the ground. Of all the sites where the sequence of pins has been studied in any detail, Pool exhibits the starkest contrast between known LIA and NP levels. Of the 25 forms appearing in pre-Norse levels, only four definitely LIA fashion groups have been recovered in subsequent levels, and none of these have hips. Contrary to the opinion of the excavator (*pers comm* J Hunter) the earliest excavated Norse levels may not have been the earliest Norse horizons on the site, which would exacerbate the contrast. Moreover, the effects of the initial Interface period cannot be assessed.

But a LIA-fashion artefact may also be found in a NP context because the form was still popular with the natives and/or incoming Norse. It may thus have been kept as an heirloom, or re-used by the Norse. This type of scenario is one which is virtually impossible to recognise archaeologically, except perhaps by the presumed state of the object at the time of deposition, and a knowledge of the circumstances of its deposition.

The fourth possible scenario is where a LIA fashion proves to be popular with the Norse and/or surviving natives, and continues to be manufactured in the Norse period. This can only be proved where there is evidence for manufacture in the later levels.

What then are the implications of this for the date of LIA pins and combs? Class C pins are commonly found in Norse contexts, but not in antler, which would suggest that they were not being manufactured by the Norse, although natives could have continued to manufacture them. Evidence for their manufacture in any period is limited. A fragment of worked bone from Norse levels at the Brough of Birsay (Hunter 1986, cat no 1344, illus 77) is just as likely to be an unfinished head as an unfinished hipped shaft; by itself this single example is not sufficient to prove that class C pins continued to be manufactured in the Norse period. In conclusion



there is nothing to prove that the Norse either manufactured or wore LIA fashion pins, or that natives continued to manufacture these forms in the immediately post-Interface period. Only further evidence from sites with an Interface can help to resolve this dilemma. In the cases where an Interface has been recognised, most especially Pool, the pins emphasise that all aspects of material culture and structural evidence must be examined before the true nature of the interaction between natives and incomers can be understood. For example, how long does it take for a fashion to cease, why should it cease, and how long before discarded items become incorporated in the archaeological record?

It is even more difficult to date the period when class D pins ceased to be manufactured or to circulate. Group 15 pins form such a diverse assemblage, covering so many centuries, well into the Norse period, that even a uniform function cannot be suggested; there seems little point in even worrying about whether this form did or did not continue into the NP.

As with pins, it is difficult to recognise when LIA style combs ceased to be manufactured or went out of circulation. A large number of LIA style combs was excavated from Norse contexts. Were these residual, did they continue to be used by the natives, or did they continue to be manufactured by natives and/or Norse? The evidence for comb manufacture in all levels is scarce. The main evidence we have with which to examine this issue is the state of the comb upon discovery. Both pins and combs went out of the systemic context by the processes of either loss, discard or intentional deposition. Some examples may therefore have become incorporated into the archaeological record in almost complete, or perhaps complete but worn condition if processes 1, 3 and 4 were the case. However, in the case of process 2, where there was a disturbance of the primary archaeological context, it is likely that a complete or near complete comb will have become further broken (such an argument could not be propounded for slighter objects, such as pins). It does appear that of over 20 examples of LIA combs from Norse contexts only three examples were virtually complete (2011; 2032; 2034). More complete combs are found in earlier contexts, therefore this may suggest that the majority of LIA style combs appearing in Norse contexts were residual. Otherwise, unless the



reasons for deposition differ significantly from phase to phase it is difficult to explain this discrepancy.

### 7.3 REVISION OF STEVENSON'S 1955 CHRONOLOGY

To recapitulate, Stevenson suggests that:

1. certain short hipped pins [class C] are seventh century or later in date
2. certain composite combs are of late Roman or post-Roman date
3. wire projecting ring-heads, are secondary to brochs, that is of third to seventh century date, and thus may be contemporary with the hipped pins; that pottery impressed with them may, however, be as early as the first century AD; ibex-headed pins are fourth century, and many hand-pins are of seventh to eighth century date
4. 'native' pins II [group 15] may overlap the period between the broch building and the seventh century.

With respect to the first suggestion, it has been demonstrated that there is very little evidence that the pins did pre-date the early seventh century (§7.2.1-2). There is no Scottish evidence that this form had its origins in a late Roman or fifth century fashion, although there is the occasional Roman or post-Roman pin. Thus these pins are as yet exclusively LIA II, although there are grounds for suggesting that some of these pins may in fact pre-date the seventh century. This is because they come from the same context as combs which on typological grounds, may be as early as the fifth century AD.

With respect to the combs (chapter 6, §7.2) there were not many excavated examples of these at the time when Stevenson was writing. It can now be suggested that some of these combs are Roman, or of Roman-style (group 1), and that they may date as late as the fourth century AD. On art-historical grounds, group 4 combs may be as early as the LIA I. They occur in the same contexts as group 5 combs, which may therefore be contemporary. As yet there is no evidence for chronological overlap between Roman and LIA types. Group 6 combs are LIA II and later in date; whilst only a single example comes from a secure pre-Norse context, the form is illustrated on class II symbol stones which are assumed to commence in the early eighth century AD.

With regard to wire-projecting ring-heads (§5.6.7), this form

is probably the most chronologically insensitive of all metal IA pins, and an extremely wide date range is suspected. They have been found in contexts dating between the first century BC until as late as the mid first millennium AD. No example from recent excavations have been found in the same context as class C pins, thus, *contra* Stevenson, they need not be contemporary. It remains to be examined in part III why it was that certain sites produced both ranges of artefacts. Pin-impressed pottery has been found in pre-broch and broch levels, and there is no evidence for it having been produced in the LIA II. None of the sites for which a post-LIA I date is suggested have produced any, nor has it been found in association with class C pins.

Ibex heads are rare. There is no new evidence with which to contradict Stevenson's suggested fourth century date, although a degenerate version has been recognised at Dunadd, which may therefore be as late as the seventh to ninth centuries.

Hand-pins have a wide suggested date-range: early examples are late fourth century, the majority are late fifth or sixth century, and continue into the eighth or ninth century. A possible mould for manufacture of a hand-pin at Clatchard Craig is assumed to be eighth century, and by analogy the Gurness example may be of similar date. But the most recent example comes from Eilean Olabhat, and is associated with a very early C-14 date of cal AD 90-340 (2- $\sigma$ ), which, if the associations of this sample are correct, requires major amendments to the suggested chronology for this artefact form.

With regard to globular pins heads (group 15: 95.5.15), these were certainly manufactured in the MIA, but are rarely associated with levels which may be LIA I (as at Howe), but they are found in LIA II and Norse contexts. Most examples still come from non-dated contexts. As Stevenson suggests, they may overlap the period between the brochs and the seventh century, but there is as yet little associated dating evidence for this.

Stevenson used his chronology to suggest that post-seventh century activity could be recognised on brochs, and that post-broch, pre-seventh century activity was also recognisable where 'native' pins II [globular pin heads], wire projecting heads and pottery impressed with them was found. This evidence, he claimed, meant that wheelhouses had a longer time-span than was previously assumed,

extending into the second half of the first millennium AD, and that activity continued on broch sites until the Norse arrived. On present evidence it is now possible to recognise post-seventh century activity, but the recognition of LIA I activity cannot be proved by the presence of pins and combs alone.

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This chapter has reviewed and up-dated the dating evidence for LIA pins and combs. Whilst limitations of present knowledge have been expressed, it is now possible to re-examine the evidence for Atlantic Province LIA settlement.



## CHAPTER 8: REVIEW OF SETTLEMENT EVIDENCE IN ORKNEY AND CAITHNESS



## CHAPTER 8: REVIEW OF SETTLEMENT EVIDENCE IN ORKNEY AND CAITHNESS

This chapter reviews the evidence for LIA settlement in Orkney and Caithness; in the following chapter a general review of LIA settlement in the whole of the Atlantic Province places this evidence in its contemporary context. The sites which have produced LIA pins and combs are discussed first, because these have direct bearing on the date and nature of activity on broch and alternative settlement forms. With regard to the brochs it is necessary to distinguish between the activity in the broch itself, the date of the earliest outbuildings, and the activity which is associated with the pins and combs (see §4.1.2). In each case it is necessary to assess the nature of the activity of which the pins and combs are the by-product, and to attempt to identify any contemporary structural remains, distinguishing these from earlier developments on the site. Once each site has been reviewed, the evidence for each settlement form within the two different counties is drawn together, incorporating evidence from sites which did not produce LIA artefacts, but are none the less relevant. The settlement evidence is summarised in appendix IV. The ecclesiastical or ritual use of these sites forms the subject of §11.3, and is not discussed in detail here.

A further comment must be made here about the use of the term Pictish, which has chronological, geographical and cultural connotations. The first recorded use of this name was in AD 297 and is generally taken to mean those people living north of the Forth-Clyde line, a geographical as opposed to a necessarily cultural division. On the basis that no known population movement is known to have coincided with the first appearance of the name *Picti* in historical sources, Alcock (1984, 9; after Wainwright 1955, 15) is prepared to consider that the earlier recorded inhabitants of Scotland, the *Caledoni et al* were Proto-Pictish, but is not certain how<sup>far</sup> back this term can be projected whilst retaining some validity. A Ritchie (1985, 183) has adopted a more conservative approach to the use of the term Pictish and considers that 'in the present state of knowledge, the archaeologist ought not to use the term "Pictish" prior to the sixth century at the earliest'. I only use this term

where it has been applied by another author to the specific features under discussion, although it is not always clear in what sense they are using the term. I leave it to the reader to establish, if necessary, what other authors intended on the basis of the accompanying discussion and references. In §2.5 I advocated use of terms such as LIA I and LIA II in order to avoid such confusion, and these are the terms which I continue to apply.

## 8.1 NON-BROCH LIA SETTLEMENT EVIDENCE IN ORKNEY

Non-broch, particularly LIA-only sites, are discussed first. By examining these it is possible to recognise distinctively LIA structural forms, and on this basis to re-examine the later levels from broch sites (in §8.2).

### 8.1.1 Brough of Birsay HY 239 285

This site has produced the largest number of LIA pins and combs from any one site in the AP. There have been fairly extensive excavations on the Brough of Birsay since 1934, with earlier excavations tending to restrict themselves to obvious standing remains and being only superficial, to the extent that lower archaeological horizons appear not to have been disturbed. Hunter (1986, 22) estimates that about a 10% sample of the site has been investigated, although mainly concentrated around the ecclesiastical focus (fig 40).

Area 1, around the eleventh century church, was the first to be dug. Earlier foundations were found under its south wall and were believed to have belonged to a structure which had been demolished or had fallen into decay before the eleventh century. Two layers of graves were also discovered, the lower set being on the same orientation as these foundations. The walls of an extensive, but incomplete, enclosure were believed to be associated with these graves. Within the enclosure are the badly disturbed remains of several buildings: to the N side of the church a few *in situ* stones formed straight wall faces. Cruden (1965, 24) saw this as consistent with a series of small cells. He also describes the 'principal feature' within the cemetery as a rectangular structure with rounded angles, demolished at the level of the Norse ground surface. The area between this and the building beneath the present church was



free of graves. This complex of features is commonly interpreted as a church, either of Celtic or early Norse date, with enclosed graveyard and possibly with associated buildings. Radford (1983) sees this as a monastic complex, possibly dating to the period of the forcible conversion of the Earl and his followers in 995 AD. An earlier Celtic date has also been suggested on the basis of the fine decorated slab with both figures and Pictish symbols which came from within the enclosure. There are numerous varied accounts of where and how this was discovered. Least reliably these include the story that it had been erected at the head of a triple grave, opened in 1938, and reputed to have contained three skeletons laid in a row. One had the skull smashed in, and over two of the bodies boulders had been laid (Curle 1982, 92). However, its find spot within the graveyard is not doubted. A second sculpture with an irregular cross may also be a grave marker of this date. Otherwise there is only a single gaming board from the church which may be pre-Norse (Curle 1982, fig 50, cat no 274).

In general, taking into account the evidence from elsewhere on the island, there is nothing to disprove the monastic hypothesis, nor is there anything to prove it (Hunter 1986, 27-30 thoroughly investigates both possibilities). The fine metalworking attested in area 2 (where nearly all the recorded LIA pins and combs have been found) would fit into either a secular or an ecclesiastical context. With the exception of a well, no structures in this area have been identified as pre-Norse, but Curle does suggest five zones of 'Pictish' activity (fig 40).

If secular, then this was a high status establishment: witness the metalworking, the slab with its noble figures, and the general lack of land for farming on the island. This last consideration renders interpretation of the LIA settlement as a simple farmstead unsatisfactory (Hunter 1986, 169). The inhabitants must have been dependent on resources on the mainland. LIA structures have been recovered in excavations at widespread junctures of the island by Hunter (1986), Hunter and Morris (Curle 1982, Appendix 8) and earlier excavations (Radford 1978 illustrates a rectangular 'Celtic' structure to the E of the churchyard, but does not discuss it). These combine to suggest the extent of the settlement, which is certainly large for a community aiming to be self-sufficient on the

Brough. The structures on sites VII to IX are unique in the Orcadian record, both in plan and construction. They are interpreted as the thoroughly robbed foundation trenches of major cellular structures which had internal orthostatic facings and thick turf walls (Hunter 1986, 37-45; fig 41.d, 1). Otherwise they are similar in form to the type of polycellular buildings seen at Buckquoy (see below), and elsewhere. In addition a roundhouse form has been recognised on site VIII (*ibid*, structure 21, ill 17) which is assumed to be LIA II in date. Circular huts are novel in Orkney at this period, but are common in the architectural repertoire of the Celtic church. It cannot be proved, but these may be monastic cells. Certainly there are no features which are interpreted as specifically agricultural.

At this site there is no evidence for settlement pre-dating the mid-seventh century at the earliest (Hunter 1986, 61). The metalworking phase on site 2 belongs to the late eighth century; a phase underlying it produced only a bone pin, which is LIA II at the earliest. Earlier occupation is possibly hinted at by a penannular brooch of Fowler class F (Curle 1982, 95; Fowler 1963, 103-7), but this may be scrap.

#### 8.1.2 Buckquoy HY 243 282

This site produced numerous comb fragments and bone/antler pins, nearly all of which are distinctively LIA II. Much of the site had eroded into the sea, but what remained to be excavated were two (possibly three) phases of LIA, succeeded by a Norse farmstead (A Ritchie 1977). Each of the 'Pictish' farmsteads consists of polycellular buildings: small chambers opening off a larger room with a central hearth and benches down each side (*ibid*, figs 2-3; fig 41c, 421, o, r). These are the most distinctive LIA structural forms discovered throughout the AP, primarily on *de novo* settlements. Ritchie distinguishes two types of plan: in phase I her houses 5 and 6 are *cellular*, that is the main chamber is surrounded by cells; in her phase II house 6 is a *figure of eight form*, to emphasise the fact that the cell are arranged in a linear fashion. Henceforth *polycellular* is used for this form. I use this term in order to distinguish discrete structures composed of two or three aligned cells, with or without additional small cells, from more extensive and amorphous cellular complexes or settlements of the Pool type (see

below). At Buckquoy there are no absolute dates for any of the recognised archaeological horizons. Phases 1 and 2 are LIA because they precede recognisably Norse phases and include some distinctive LIA artefact forms, although none of these can be very securely dated. Ritchie believes phase I is seventh century because none of the finds would be inconsistent with a late seventh century date. An eighth century date is suggested for phase II on the basis of an ogam inscribed whorl. But little is known of the longevity of such LIA structures, therefore this dating is not very reliable. Buckquoy is often quoted as a 'Pictish' type-site, where Pictish is a term<sup>which</sup> cannot be applied before the sixth century. However, little is known of earlier native architecture (see below) and it is not even known how early buildings of the type seen at Buckquoy might have been built.

#### 8.1.3 Kirbister HY 28 25

The exact provenance of a metal nail-headed pin and handpin is unknown. One site in the vicinity which may relate to the IA is a small chapel on the 'Kirkie Brae' (RCAHMS 1946 II, item no 3) or alternatively the Knowe of Nesthouse, which covers the whole of a small, low-lying promontory jutting out into the Loch of Boardhouse, about 400 yards NW of the farm-house of Kirbister (*ibid*, item no 26). Of the two candidates, this latter site is the more likely. At the turn of the century excavation discovered 'a central passage of considerable dimensions, with several chambers', and that the main room or central court

*from which most of the chambers were entered ran in a north-east and south-west direction, and extended in length to over 32 feet [about 9.7m] . The breadth varies from 12 feet [about 3.6m] to about 8 feet [about 2.4m] (Spence 1903)*

The Royal Commission records more recent excavations on the S side, when the farmer discovered another irregular chamber of dry-stone masonry with walls as high as five feet [about 1.5m] in places. A cist-like cavity set into the floor contained a clay vessel of unusual design. Other finds included portions of iron implements, and a polished serpentine disc, but nothing intrinsically datable. None the less, the plans from earlier excavations suggest polycellular forms which may be of LIA date (fig 41b)



#### 8.1.4 Pool HY 610 378

Pool is an example of a type of settlement which developed (apparently *de novo*) on some non-broch sites. It takes the form of a settlement mound (Hunter and Dockrill 1982, fig 2). Excavation has revealed substantial prehistoric settlement underlying Norse halls and byres of the ninth to thirteenth centuries (*Archaeol Extra*; *pers comm* J Hunter). A roundhouse and associated buildings of about fourth or fifth century AD date were preceded by a probable souterrain and associated structure, which were built into Neolithic middens underlying the site (D and E 1988). This then developed into a *cellular settlement* of adjoining and interconnecting roundhouses and smaller circular cells, and it is at this stage that the distinctive LIA pins are found. This is the settlement at its largest extent. Immediately prior to the arrival of the Norse the surviving part of the settlement contracts (*pers comm* J Hunter). No polycellular structures have been recovered. Perhaps most of the site had eroded into the sea, but there is certainly no reason to suggest any broch settlement in the immediate vicinity.

The excavations have produced numerous LIA pins from the site's sixth/seventh-century, and more particularly eighth/?early ninth-century levels. Most recently a globular pin (type 15) was produced from its fourth/fifth-century roundhouse levels (not included in appendices II-III). Proto-zoomorphic pin(s) (from the top soil and phase 5c, where they were undoubtedly residual), and an unusual form decorated with Pictish symbols, probably also belong to this horizon. The majority of pins, of typical LIA form, were produced from phases 5c-d, the immediately pre-Norse horizons.

#### 8.1.5 Skail, Deerness HY 58 06

Gelling's excavations at this complex of sites have produced several LIA pins and combs (Buteux forth). From a total of six sites (Gelling 1984, fig 1) with activity spanning the LBA/EIA to Norse periods, LIA activity was found on sites 2 and 6. On site 6 South the roundhouse and courtyard of level 2 were replaced after a period of abandonment by a rectangular structure (or structures) on a paved area. Radiocarbon dates have been obtained for the period of abandonment: cal AD 420-790 (B-763) and cal AD 530-890 (B-762). Both pins and combs came from this site, including several Fowler E

pins (2104-6).

The only pins from site 2 are a pair of proto-zoomorphic and zoomorphic pins, discovered together, with suspension loops from one giving the impression of their having been worn together. The only LIA structure, house 1 is not particularly distinctive. Five LIA combs were associated with the subsequent Norse levels.

There was also a pin and comb from site 5, which was a LBA/EIA settlement with traces of late reoccupation in the LIA when the centre of occupation had moved to site 6.

The overall impression from these sites is both of prehistoric settlement shifting within the Skaill area, and of possibly contemporary domestic units in relatively close proximity to each other in both the EIA and LIA. It can be tentatively suggested that the main focus of activity shifted in the MIA to a nearby broch site, for which Riggan of Kami and the Broch of Deerness are the nearest contenders. On none of these sites is there evidence of continuity from the roundhouses (of presumed EIA date) to the LIA horizons. The only finds of possible fourth to fifth century date are the proto-zoomorphic and zoomorphic pins from the excavator's so-called 'Pictish' level 1.3 (South) on site 6, and possibly the type G1 penannular brooch from the ultimate occupation layer in the 'Pictish' level 1 (North) on site 6. Neither of these are therefore from contexts for which such early dates would otherwise have been proposed, and they may therefore be residual. The structural remains are not diagnostic enough to suggest parallels with known LIA forms.

#### 8.1.6 Skaill, Sandwick HY 23 18

A metal open-disc-headed pin, for which a LIA II, possibly eighth century date is suggested, has been recorded from an unknown context at Skaill. The area of Skaill Bay has always been a focus for earlier settlement, and some of the recognised features, such as a settlement mound, may be LIA (Morris 1985). There is also some slight evidence to propose that there may have been an early chapel in the area, which is suggestively associated with a dedication to Saint Peter (*pers comm* R Lamb; §11.3).

#### 8.1.7 St Boniface's, Papa Westray HY 48 52

A LIA comb (group 4) has been recovered from somewhere in the



vicinity of St Boniface's church, an area rich in archaeological monuments covering approximately one hectare. The complex comprises LIA settlement, possibly continuing into the early Norse period and having a monastic element; a farm mound; and a derelict church, the fabric of which is medieval, but early gravestones, including a hog-back, have been found in its vicinity. The comb was found during grave-digging to the NE of the church in 1966. It is possibly contemporary with or related to a structure described in the 1879 Name-Book:

*.. an underground Picts House situated close to and west of the Established Church. It has only partly been excavated but one passage underground has been laid open and altho not explored it seems to penetrate for some distance in the direction of the Church (ONB 1880, no 26 1879, 11).*

The whole complex was probably centered on a broch (SMR no 847); a massive structure is presently visible in the eroding cliff section (fig 43).

#### 8.1.8 Saevar Howe HY 246 270

Both nineteenth and twentieth century excavations in this large settlement mound have produced LIA combs and pins (Donations 1862; 1868; Hedges 1983). No artefacts have been recovered which suggest an earlier horizon, although excavations did not remove lower layers on the site. As a result of the nineteenth century probings, the 1977 excavations uncovered seven islands of archaeological remains which are difficult to connect. Three phases of Norse hall-houses were recovered, but the underlying layers are confusing, particularly as they were not fully excavated, and no complete structures can be made out. A LIA date is assumed for the phase I levels for several reasons: the structures are abandoned before the Norse arrive; there is no steatite until the Norse levels of phase II; but the main evidence is derived from the presence of pins and combs.

## 8.2 BROCH SITES WITH EVIDENCE FOR LIA ACTIVITY IN ORKNEY



### 8.2.1 Broch of Ayre HY 470 013

A globular pin head (605) and a sherd of pin-impressed pottery (1447) may suggest that activity on this broch site continued into the early LIA. Several pins are known only from their descriptions and published illustrations: a bone pin with flattened sphere for a head and swollen shaft, 1 7/8" (47mm) long, context unknown; and a bronze pin with an 'expanding flat-topped head' (Graeme 1914, 44, no 31, fig 11; 45, no 2). These possibly hint at LIA II activity, which is also suggested by some of the structural remains. Whilst there is no reason to believe any of the broch internal features are secondary, both the plans of some of the outbuildings, and the observed stratigraphy suggest several phases of activity here. The plan of Ayre as excavated (fig 44A) shows outbuildings to the E and W of the broch. A passageway (E and F) encircles the broch, whilst radiating outbuildings (I, G and possibly C) are suggested. This is similar to the type of layout seen at Gurness, Midhowe, Howe and Lingro (fig 48), and for which a MIA primary date is suggested (see below). G is a sub-rectangular passage with an aumbry (H) set in the wall. I is described as a passage which proceeds

*in a winding direction into an open chamber 9 feet wide. On the right hand side of this the original wall was very low, and a second wall had been built above and slightly behind it, so that a bench was left. Near the centre of the chamber was found a curious grouping of flagstones. The chamber concluded in a small tunnel, which led out through the wall A [at J?], the sides being guarded with slabs, and it was roofed with flags, the hole being about 2 feet square (ibid, 36).*

Graeme records several distinct layers of archaeological strata in passage I, including three occupation horizons (*ibid*, 50-1, fig 16). Associated artefacts do not elucidate the length of time over which these layers built up, but if his section is reliable, then it does suggest that there were two occupation horizons at a period after I had fallen out of use. These may relate to LIA levels. Parallels for the 'tunnel' are not easily established, although an earth-house is a possibility. Unfortunately the structures connecting I and A are not indicated in the excavator's plan. Wall A is interesting. Nothing is known of its stratigraphical relationship to the other buildings, but its plan bears little resemblance to them. It is most plausible as the foundations of a LIA 'figure of eight' house.

Unfortunately it only survived to two courses, and showed strong signs of fire. The small cellular structure B, which abuts the outside of the broch wall in the NW, and is undoubtedly but a small part of a larger building, is probably also LIA, and its plan compares favourably with some of the post-broch structures at Gurness.

With the exception of the aforementioned pins, there are no other artefacts which might be associated with these suggested LIA levels. However, TL dating of pottery might prove useful. The majority of it is described as red, fairly coarse and with some decoration, but a few sherds of a finer yellow ware were recovered from layer F in passageway I, a layer which appears to post-date this area of the primary outbuildings (*ibid*, 48).

#### 8.2.2 Broch of Borwick HY 227 168

Nineteenth century excavations produced a group 3 comb, presumably of MIA date (2), but in addition a composite comb of type 4 (1). Several bone pins, including two with 'knobbly heads' are now lost from Tankerhouse Museum (THM S57, S60-1).

Two phases of occupation were recognised in the interior (Watt 1882). No description is recorded of the lowest level except that a large number of flags on edge crop out above the level of the secondary occupation debris. The whole of this interior is described as being filled up with about 3 feet [c 0.9m] of stones, above which an interior circular wall, about 6 feet [c 1.8m] high on the west side and at its widest 7 feet [c 2.1m] is constructed around the inside of the broch:

*Level with this a wall crosses between the two walls forming an oblong chamber, with an entrance at the east end. A similar chamber adjoining it is 12 feet [c 3.65m] long and 5 feet [c 1.5m] wide at the centre, and the partition wall is between 3 and 4 feet [c 0.9-1.2m] high (*ibid*, 445).*

Watt was unclear as to whether the entrance from this chamber led to the broch passageway or to its intramural chamber. To the east of the interior a staircase of stone was built at this level, presumably leading to the wall head. These upper structures had all been subjected to great heat, particularly on the east side.

On the basis of Watt's description and the available



artefactual record, it cannot be shown how late this secondary building was. Outside the broch there are suggestions of an encircling passageway and the entrance through the outworks, possibly through a block-house type structure, is more or less aligned on the broch entrance (fig 45D). However, there are definite structural indications of LIA activity to the S of the broch, but inside the defences. Here a small cell, now almost unrecognisable due to cliff erosion, looks as if it is a part of a larger cellular structure, possibly of the type seen at Buckquoy (above). Watt maintains that the whole of the promontory within the outer wall was covered with outbuildings, but leaves no record of how many he investigated, or what they looked like. With the exception of the pins and combs there are no other artefacts which may be contemporary with this. An unusual 'glazed' sherd (Watt 1882, 449, no 11) is a piece of Roman coarse ware (Bell 1982).

### 8.2.3 Broch of Burgar HY 352 277

In the early eighteenth century a hoard of precious objects was found at the Broch of Burgar, its findspot suggested in a plan of 1852, which is undoubtedly rather imaginative (Thomas 1852, pl xvii, chamber marked 'jewels'; fig 44J). Descriptions of the hoard, now lost, vary, but include eight silver vessels, one decorated with projecting knobs, as many as five or six silver pins, amber beads, several silver combs and several lengths of silver chain. This hoard has recently been the subject of a paper by Graham-Campbell (1985) who puts forward a convincing argument for it being of eighth century date, and buried at the onset of Norse attacks. There is no reason to expect any contemporary structures with this cache. Whilst Thomas's plan does indicate internal features within the broch which are unlikely to be primary, nothing is known of their stratigraphical relationship to the broch. Certainly there is no reason to believe them to be LIA. As Petrie observed in 1874, it is likely that the hoard was deposited when the broch was in ruins (Petrie 1874, 89).

Recently a polished but undistinctive bone pin (THM 1981.6) and about thirty sherds of coarse pottery have been recovered from the site (D and E 1980, 24).



#### 8.2.4 East Broch of Burray ND 490 988

Early excavations at this site produced several distinctively LIA II pins (1082-91, 1094-95) and a comb fragment (1096). Two globular pin-heads (1092-93) may hint at intermediate activity. The majority of the pins and the comb fragment are simply recorded as coming from the interior of the broch, but one unspecified pin was found in rubble covering the well passage and chamber which lies immediately to the N of the broch entrance (Farrer 1857, 6).

The internal features recorded by Petrie (1890, fig 1; fig 46B) are not out of place in a primary broch context. Petrie argued for a long life for the building because the lintel over the entrance to one of the intra-mural cells was propped up (*ibid*, 75). The Royal Commission (RCAHMS 1946 II, item no 862) argues that this is not necessarily the case, but that the door was originally built with a double lintel which was not able to support the weight of the wall, and therefore a strut was needed to support the broken end. There is no indication of when this took place. A Roman enamelled button and piece of samian are of first and second century date respectively (A Robertson 1970).

To the NE of the broch, where the outwork extends towards the present beach, the Royal Commission have recorded a masonry structure with a straight wall face. This is probably the entrance through the outworks, but alternatively it may be related to LIA activity on the site. Recently well-made pottery, described as probably 'Pictish' has been recovered from rubble in the cliff section in this area (D and E 1984, 20; THM 1984.213). Otherwise, there are no structures to relate to the obvious LIA presence on this site, and they have undoubtedly eroded into the sea, for there would have been little space for their construction in the enclosed area to the S of the broch.

#### 8.2.5 Broch of Burrian HY 763 514

As the classic example of a broch with LIA settlement, this site has already received some coverage (§4.1.2). In addition to numerous LIA pins and combs it also produced LIA artefacts such as symbol-incised ox-phalanges, painted pebbles, and an ogam-incised cross-slab.

It must be emphasised that there is no reason to believe that

there was *continuous* settlement in the broch itself. The earliest levels are typically broch period, with their internal partitions for cells and possibly two main chambers (Traill 1890, pl xlv; MacGregor 1974, fig 2-3; fig 46C). It is not always clear which finds belong to this horizon; note the painted pebble which is described as coming from both levels. The late levels in the broch, which consist of a secondary floor and various partition walls (with some reuse of earlier orthostats), are not structurally diagnostic enough to suggest a dating horizon, but the level at which they occur may suggest that a considerable period of time has elapsed between the respective phases.

To the W, running almost up to the broch, is a settlement mound which extends for almost 100m (Stromness HY 761 513, SMR no 216). Visible exposures in this mound suggest a prehistoric date, probably extending into the Norse period. Traill (1890, 344) records the discovery of a Norse comb, probably from this area. It is feasible that the broch settlement migrated along the coast, returning to utilise the broch, and the area around it, several centuries later. However, some potentially LIA I finds, namely the globular pin-heads and the painted pebble, are found in these broch levels, although <sup>they</sup> may be from MIA levels. Traill uncovered small cells adjacent to the broch which are undoubtedly LIA, for he records the recovery of pins and combs from them (*ibid*, 342). The circular cell appended to a larger room is a later rather than earlier form (see below), and the sub-rectangular room compares favourably with one of the post-broch structures to the NE of the broch at Gurness (Hedges 1987 II, fig 2.11).

The cross slab with ogam and possibly the fragmentary remains of a fish symbol (probably eighth century: MacGregor 1974, 96, fig 21) was recovered from the south side of the broch. Here the wall was so low that although the slab was not much above the floor of the tower, it was also not far from the surface (Traill 1890, 346). In §11.3 the relationship between an apparent residential and ecclesiastical focus is considered. No burials have been noted at the site.

#### 8.2.6 Broch of Deerness HY 58 06

A fragment of a group 6 comb (628) is recorded as coming from



the broch of Deerness, the probable broch mound recorded to the south of the churchyard at Skaill (RCAHMS 1946 II, item no 629). In this grass-grown hillock fragments of dry-stone buildings have been noted. That this whole area was a focus of IA and Norse activity is attested by the nearby extensive site of Skaill (Gelling 1984; 1985; Buteux forth).

#### 8.2.7 Broch of Lamaness HY 613 379

A globular pin (731) may pre-date the LIA II activity suggested by a comb and pin (732-33). There is no surviving evidence of the so-called broch, and records are more likely to refer to the mound known variously as a chapel or Pict's House (SMR no 336). A rectangular structure, about 9 by 8m with linear features running to the N and E, was identified as an *urisland* chapel (Hunter and Dockrill 1982; an early Norse chapel preceding the parish organisation: Thomson 1987, 38), until, when the turf was stripped off, the remains of a roundhouse were found. The comb and pin may relate to this structure. The OS records a tradition that a man once dug into the site and exposed a flagstone which concealed a 'pit' which was not explored and immediately reburied.

#### 8.2.8 Howe HY 275 109

This site was excavated between 1978 and 1982, and constitutes the most recent large-scale excavation of a broch anywhere in Scotland; this description is based on Carter *et al* 1984 and personal communications with B Smith. The IA sequence (fig 47) commences with a roundhouse and earthhouse built into the ruins of Neolithic chambered tomb (phase 5), followed by roundhouse or broch with intramural stairs, an extended enclosed area and probable outbuildings (phase 6). In phase 7 (fig 48) the area lying within the phase 5/6 ramparts was thoroughly levelled and the interior of the roundhouse was cleared. A massive circular drystone structure was built over the earlier roundhouse, its entrance aligned as before, and an earlier cell and intramural staircase were rebuilt. Its interior furnishings consisted of a circular area with external encircling passage, some of which was divided into radial apartments. On the outside of the tower an external celled doorway was built, and surrounding the broch were six buildings and their associated yards,



arranged in a basically radial arrangement. C-14 estimates for this phase average to cal BC 90-cal AD 129 (appendix I:c), whilst a total of 5 unaveraged dates span the period between cal BC 332-540 cal AD. In later phase 7 the broch suffered some collapse which resulted in changes to some of the outbuildings, the construction of buttresses, and its interior was cleared. Unwanted structural debris was placed in the ditch terminals, which ceased to be maintained. The tower was reoccupied as a workshop, although its interior plan changed little. Rebuilding of many of the outbuildings took place, but the basic domestic units were still similar in form to the earlier ones. Some of the outbuildings were now being used for industrial purposes. The weighted mean for activity in this (appendix I:u) phase calibrates to cal AD 132-324, whilst a total of 5 unaveraged dates span the period between cal BC 390-410 cal AD.

LIA levels are distinguished from MIA ones by the next big collapse of the broch tower. By now the settlement is no longer nucleated, and consists essentially of a single domestic unit. In the early LIA levels the broch is no longer accessible except over the wallhead, and is still used as a workshop. Some of the outbuildings were also cleared and continued to fulfill a domestic rôle. Several were paved, and were possibly byres or sheds. Several of these structures also fulfilled a domestic rôle. Later a large rectangular structure (11 by 4.5m) with massive orthostatic projections from the N wall, forming stalls, was built into the rubble of the collapsed tower; at the W end of the building was an impressive double hearth. Seemingly this area was completely abandoned before the activity of later phase 8.

In late phase 8 the site continued to evolve as a single domestic unit. Only in stage 6 were there two hearths. These structures were very poor, essentially amorphous cellular complexes, although there was a rectangular structure with an aligned sub-circular cell. This phase of settlement bears comparison with some of the post-broch structures at Gurness, where there was also a similar reuse of some earlier features. An earth-house was attached to one of the yards.

In the very last stages a new domestic structure was built, almost polycellular in form (fig 411), with a hearth and associated shed or byre. There may have been more settlement in the vicinity,

but the area to the south was destroyed by ploughing. This building was much rearranged and then abandoned in favour of the reuse of the NE buildings, and former earth-house. The date of this later settlement is open to some questioning. A recent date for the reuse of a phase 7 building (GU-2347) calibrates to cal AD 690-980, which is considerably later than the date from a subsequent context (GU-1757) of cal AD 535-660. There are few LIA II artefacts to justify such a late date, only a copper alloy pin (169) and examples of group 5 combs (160), which may be LIA II in date (§7.3), a couple of group 6 comb fragments (163-64), and some less positively identified fragments (161-62). Smith suggests (*pers comm*) that 164 is Norse, but a LIA II date is equally probable. Several factors may be brought forward to account for the paucity of LIA II artefacts on this site, and the most obvious is that the excavated levels do not extend chronologically to this date. Alternatively if there was late settlement on this site it was in the ploughed-out area to the S. From phase 8, stage 8, pathways are seen to be leading here.

Other pins, including projecting ring-heads (172-73, 175), globular pin heads (32-34) and a unique iron pin with spherical paste head (168) have been found in various levels from phase 5/6 upwards, and contribute to the overwhelming body of evidence which suggests that there was continuity of settlement on this site for some considerable period after the primary broch period.

#### 8.2.9 Gurness HY 382 269

The large mound at Gurness/Aikerness was excavated between 1929 and 1939, but has only just been published. Despite the rudimentary knowledge of stratigraphy and the poor recording employed by the earlier excavators, Hedges has been able to present carefully all the available evidence, and suggest a convincing structural development (Hedges 1987 II). The recognised structures break into three approximate horizons: a MIA of broch, outworks and nucleated village (fig 48); a LIA I, and possibly LIA II horizon of polycellular, cellular and sub-rectangular buildings; and a Norse horizon.

The site as we see it now consists of a broch surrounded by outbuildings, all enclosed within a series of massive ramparts and ditches complete with a fine gatehouse. The chronological relationship of the outworks to the broch is not known, but as the



later gatehouse is probably on the line of the original causeway through the defences, it can be noted how the broch entrance aligns with this, suggesting they were conceived of as an entity. This subsection includes a detailed discussion of the early development of this site about which there is much debate, because without knowledge of this later features cannot be correctly identified. The same argument applies to the descriptions of Lingro and Midhowe.

The extant internal structures of the broch belong to more than one phase, but there is no reason to suspect that these were not a continuous succession. Problems arise in establishing the chronological relationship between observed, but not necessarily related, structural changes. E MacKie (*pers comm*) sees the broch in its earliest stages as a massive stone tower enclosing a roundhouse. The visible scarcement level acted as the support for a wooden gallery or roof; this was supported towards the interior by a ring of post-holes. There is no evidence for these post-holes, but he believes that they would be discovered upon removal of the extant internal structures. The well and central hearth belong to this phase. The intra-mural galleries at the 1.8m and scarcement levels were open. At some stage the broch superstructure started to become unsafe. A set of internal stairs was built in the W of the interior, which MacKie believes ignores the scarcement, which may still be in use. At the same time as the stairs were built, or so MacKie argues, the intra-mural gallery at the 1.8m level was filled in; the entrance to the W was converted into an aumbry, and a cell was created in the space at the foot of the intra-mural staircase to the S. He relates all extant internal features to this secondary phase, as well as the construction of the guard cells outside the broch entrance (MacKie 1987b, 294), and the erection of the broch village from the masonry derived from the dismantled broch structure.

Neither Hedges nor the present writer disagree about the secondary nature of most of the broch internal fittings, but MacKie's interpretation may be queried on several counts:

1. Nothing is known of the earliest broch period interior save that there was a well and a central hearth. In other respects the interior may have been similar in style to the present one (albeit a single rather than double unit). There is no reason to believe that the scarcement was not functioning in its original capacity as either



a gallery- or roof-support.

2. The small structures which abut either side of the broch entrance are obviously later than the broch tower, but are not necessarily much later. Even if conceived of as a part of the original plan, no builder would have felt compelled to join these slight, low buildings to the towering mass of the broch. Indeed, this would have been an unnecessary inconvenience, and might possibly have weakened the broch superstructure. There is no evidence that the original broch entrance ceased to function after their erection, although a pivot stone indicates that there was now an outer entrance into the broch.

3. Alterations to the intra-mural gallery might relate to any stage in the history of the broch

4. The relationship of the 'guard chambers' to the broch is important because the layout of the surrounding outbuildings obviously respects these (pace MacKie 1987b). The outbuildings need not have been built at the same time as the secondary internal constructions of the broch, nor need they have been built from the dismantled broch superstructure (part of which is stacked in the inner ditch: *pers comm* E MacKie).

Hedges acknowledges that there was an earlier floor level, if not two, in the broch, evidence for which consists of a central hearth, a well to which access could not have been gained in the later period, and a lower paved floor and occupation horizon 0.1-0.15m in depth (Hedges 1987 II, 35). Although most of the extant internal features are secondary, some may be common to both of the identified phases of broch use (*ibid*, 34). Craw, the original excavator, considered the extant fittings to be secondary to the broch, although still belonging to the broch period. This view was based on the fact that the fittings seemed architecturally dissimilar from the broch. But they were considered contemporary with the outbuildings with which they bore a resemblance (*ibid*, 15 for summary of Craw's scheme). However, Hedges argues that the outbuildings are similar to both the primary and secondary interiors of the broch, both of which are early. In the logical sequence of events the outbuildings were obviously built after the broch tower, but their layout with its encircling path and path leading up to the broch entrance, would suggest that the whole was conceived of as a unity. Their radial disposition, full use of space and ordered sequence of

construction (*ibid*, 45) suggests a pre-conceived plan. The site as we see it now includes rebuilds and extensions of some the outbuildings into the inner ditch.

The present writer is in full agreement with Hedges (*ibid*, 16) that 'there is no reason why they [the outbuildings] should not have started to develop during the earliest occupation of the broch'. None the less, there are problems with this:

1. The earliest phases of use of the broch will remain an unknown element in this structural equation, unless further excavation takes place

2. The lower levels of the radial outbuildings have not been thoroughly investigated, and the possibility that earlier, perhaps non-radial, outbuildings preceded them, cannot be discounted. When the floor of the outbuildings were lifted during the final stage of consolidation and excavation, drains were found under the outbuildings (*ibid*, 42), but there is no mention of any other structures.

Turning now to the LIA activity, several phases of reflooring and rebuilding were observed in the outbuildings. These included extending some of the buildings into the area of the inner ditch, which suggests a long period of activity. However, at some stage the architectural layout of the site changes dramatically (*ibid*, fig 2.11). Obviously it needs to be considered whether abrupt changes such as this imply re-occupation after a period of abandonment. A series of structures can be observed within various areas of the ramparts; unfortunately the precise chronological relationships between them are unknown. They include the so-called 'Shamrock' and 'Annex' (fig 42a) which are multi-cellular buildings of the type seen at Buckquoy. Adjacent to them is a long oblong structure with an apsidal end and paved floor, for which LIA parallels can be found elsewhere (see below). To the north of the broch are the remains of various other cellular structures, some of which appear to be circular. There is also a small sub-rectangular structure similar to the one at the Broch of Burrian. The present plan gives the appearance of these comprising a cellular complex, but these buildings need not all be contemporary. In addition there are ill-understood fragments of walling, and areas of paving. The passage through the outbuildings was used at a higher level, and still gave



access to the broch. Here a staircase was built upon rubble, partly blocking access to the interior, but giving access to a higher level (possibly above the entrance to the broch where intrusive buildings suggest that the wall height of the broch must have been severely reduced). To the NW are the remains of a rectilinear structure whose date is unknown, but may be Norse.

Despite the recognition of a LIA horizon at this site there are surprisingly few artefacts to accompany it: only two pins, type 6C\* and 8B?, the former coming from the floor of the rectangular building (149). This does not constitute sufficient proof for its pre-Norse date. There are, however, several artefacts which may belong to the MIA/LIA I period: globular pins (152) (an atypical example from the lowest levels of the broch interior [130] and several from the floor of the Shamrock, although one could not be traced [129] and two other examples which were unstratified); several projecting ring-heads (154-55), one unstratified and the other from a broch/post-broch context in the vicinity of outbuilding 7; a mould for a handpin (1739) from the upper floor of the Shamrock annex; various projecting ring-head pins (1736-37), from the Great Ditch; two unstratified penannular brooches (*ibid*, fig 2.39, cat nos 218-9), a knife with a bone handle with possible ogam inscription (*ibid*, fig 2.22, cat no 252) from the area of the Shamrock and annex; and a stone slab with Pictish symbols (*ibid*, fig 2.51, cat no 305) which was found 0.7 m above floor level in the vicinity of outbuildings 3 and 4, and is tentatively associated with the Shamrock. Many other artefact types are found simply to be common to both the broch and post-broch levels.

A third to fourth century date is argued by Close-Brooks for the projecting ring-headed pins, a seventh to eighth century date for the hand-pin mould, and a date in the later fifth to seventh century for the penannular brooch mould fragment (*ibid*, fig 2.85, cat no 827) and the larger of the penannular brooches which are both of Fowler type F2 (*ibid*, 303-4). J N G Ritchie (1969, 131) argues a late fifth to eighth century date for the symbol stone, in line with the art-historical arguments for these objects (§7.2.1). Padel (1972, 98) gives the the ogam knife-handle an eighth century date because it was found at a level beneath a ninth century Norse grave; Pictish ogam inscriptions centre in the eighth to ninth centuries (*ibid*, 1).



As a result of this dating evidence it is possible to suggest that occupation on this site may have been continuous from the broch period. Artefacts covering the fourth to sixth centuries are sparse, and their association with the structures is not reliable, but a continuous presence on parts of the site is feasible, whether it means that the life of some of the outbuildings needs to be extended, or the nascence of the multi-cellular structures pushed back from the seventh century.

#### 8.2.10 Lingro HY 435 088

Although excavated in the 1870s, very little has been published (for example J Anderson 1883, 242-44; RCAHMS 1946 II, item no 406) owing to the death of the original excavator. A report is now in preparation (Hedges and Bell forth). This site is particularly important because of the similarities it bears in its plan with the nucleated broch settlements at Howe, Gurness and Midhowe. Not all the outbuildings were excavated, but those which were have been recorded in at least two published plans (J Anderson 1883, fig 220; RCAHMS 1946 II, fig 230). Both these plans are based on originals by George Petrie and Henry Dryden, but the plan in Anderson is more faithful to the originals, as it incorporates the few relationships between walls which the excavators recorded. I have examined Petrie and Dryden's original MSS (Petrie and Dryden MSa; Petrie MS a-g) to see if any further information could be obtained as to the relative chronology of the site. The lettering used for each room by the original excavator has been applied to Anderson's plan (fig 49), and is that referred to below.

The published site plans (fig 49) note only one piece of phasing: to the SE, the foundations of a wall which runs NE-SW, can be seen to underlie buildings H and L. This wall was apparently made up of several sections, and its outer side was 'backed by loose stones' (Petrie MS c). I suggest that this wall represents an outwork, whilst its corner, if projected in a north westerly direction, can be seen to align with the entrance to the broch. Whilst this wall does not appear to have been traced very far, it can be seen that the outer edge of the outbuildings otherwise form a continuous, if irregular, circuit around the NW-SW arcs of the settlement. The outer walling of building F has two components, part

of which may also be related to an encircling wall. Even if the outbuildings recorded in plan are not the earliest outbuildings on the site, their extent would probably have been dictated by the presence of a feature such as this. This is particularly interesting in view of the fact that no outwork is visible on the ground (the site has been levelled), or from 1:10,000 aerial photographs (NMR Sortie 40A.463: 3296-97; Fairey coastal surveys 44 418-19), and because Lingro otherwise is only one of two settlements with such extensive outbuildings which was not enclosed by large outworks (the other being Ayre). However, the compilers of the ONB, writing a few years after the excavation of the site, did note that the site was:

*now in a ruinous condition with the exception of the large outer circle and the inner circle or tower which is still in a fair state of preservation,*

which can perhaps be interpreted as implying that the site gave every appearance of being enclosed.

There are suggestions in one plan (Petrie MS c, 26-27; fig 50) of an older wall running through building G. It is not clear which section of sketched walling is being referred to. If it is the line of apparent orthostats (aligned approximately NWW-SSE), then it is unlikely to be related to the proposed passageway leading to the broch. Alternatively, it may relate to an earlier, but unspecified, feature which pre-dates G. In the SW corner of G, as indicated on the published plans, is a V-shaped stretch of walling which seems to make little sense in terms of the sub-circular structure (which possibly post-dates it).

Elsewhere there is also evidence for features which pre-date those planned. Underneath the NW wall of the wall between rooms G and I, pieces of a large ornamental clay vessel with projecting knobs were found (Petrie MS e). A regular feature on many of the MSS (for example Dryden and Petrie MS a; fig 51) is a wall (?or step) in front of the broch entrance and an encircling passage extending to the right of the entrance. In the published plans neither of these features are indicated, and a 'guard cell' is shown. I am not sure whether these features relate to an earlier or later stage in the site's development, or an unclear or partial stage in its understanding by the excavator. However, it appears that the guard cell probably post-dates the passage which may have partly encircled



the broch, but was now blocked. There are suggestions that the SE wall of P pre-dates its northern wall.

There is also evidence for several phases of activity and rebuilding in the outbuildings, but which may post-date the planned features:

1. To the S of building R there is a box which lies in:

*a bed of clay and rotten stone about 1'3" thick. The bottom of the bed or layer is on a level with the foundation of wall of chamber and it extends upwards halfway on side of box. A bed of ashes 8 to 10 inches thick rests on this clay bed on floor and on top of the layer of ashes is a stone floor the surface of which is 1 foot above edge of box (Dryden and Petrie MS a, ORD/182/11).*

Some of this relative stratigraphy is indicated by Petrie in an accompanying sketch. Certainly the implication is that there was at least one floor level in this building, but that only the lowest level was recorded in plan.

2. A drawing of a wall and accompanying schematic longitudinal and latitudinal section, with 'old stony wall' and 'later wall' indicated, is unfortunately unlabelled, but may relate to the relationship of some of the outbuildings (fig 52; Petrie MS c, 24-25). It follows close on from a plan of building R. However, I see this as recording (from the NW) the interior of the earlier foundation wall, and buildings L and H (which overlie it). There are some problems with this, but the break in the wall, as indicated in the plan, would seem to correspond roughly with those marked on the MSS drawing. I suggest the drawing is of the interior of the wall because the external wall is described as 'backed up by loose stones', which is apparently not the case here. A break in the walling is only included in the naturalistic sketch, and not the schematic drawing, implying that the break was made by the excavators; perhaps it was where they took their section (as illustrated in fig 51) across the outer circuit of the site.

3. I suggest that buildings G and H are later than the majority of the structures on the site, and that the outworks may therefore have been contemporary with the radiating structures. There are several reasons for suggesting this. Firstly, in terms of their location in relation to the rest of the site; otherwise the main line of access to the site would have been through building G. Secondly, in its



plan G shares more in common with the post-broch structures which are seen at sites such as Howe. A reconstruction of the original appearance of the site is suggested in fig 53, with an expanding forecourt, as at Gurness. If structures G and H are seen as late, this goes some way to resolving the relationship between the outbuildings and outworks. These can now be postulated to have functioned as a unity, albeit that the relationship between the SE wall of building L and the outwork does show that the outwork considerably pre-dated the outbuildings in this area.

Mention must also be made of several features which are illustrated in the various MSS pertaining to the site, but are not included (for whatever reasons) in any of the final plans. These are: a rectangular stone setting in room E (Dryden and Petrie MS a); a possible stone pillar or hearth in room V (continuing the line of the two pillar which are planned)(*ibid*); and a drain which runs between buildings G, H and F up towards the entrance to the broch, from where it bends to the left and continues into the encircling passage until just past the entrance to K (*ibid*, ORD 182/3). Petrie MS e indicates an un-named feature at a similar alignment, but which also bifurcates to enter room F, and the passageway leading up to D. In the broch interior there was an additional tank to the W of the orthostatic divisions dividing the broch into two.

The finds from Lingro will not be discussed in any great detail here because of their extensive treatment by Bell (1982, 129-77), who in addition to describing and listing the objects, also incorporates the contexts of those articles described by Petrie in his notebooks. However, a few specific comments can be made concerning the dating of these artefacts. Firstly, with regard to the date of the broch itself it is relevant to note that a rotary quern was apparently used in its construction, and that the broch is thus first century BC or later in date. A large number of Roman coins were recovered from outbuildings F and Y, including *denarii* of Vespasian (AD 69-79), Hadrian (AD 117-38), Antoninus Pius (AD 138-61) and two coins of Crispina (AD 180-3) (RCAHMS 1946 II, item no 406). Attempts to locate these coins in both the Hunterian Museum and the Royal Museum of Scotland have failed.

Most of the artefacts are perfectly acceptable within a traditional MIA context. The decorated pottery has good parallels at

Warebeth, Ayre and Howe (Bell forth). The mould for a projecting ring-headed pin and globular headed pin may suggest that activity continued in the LIA I, but they may also be MIA. It is listed in the original donation notes that 'fragments of bronze, being apparently parts of rings or pins' were also found, but nothing more is known of these (Donations 1872, 360). Only one find, now lost, is a possible indication of LIA II activity on the site, and this is a short pin (material unknown) with a faceted and perforated head. It was sketched by Petrie and marked as being found on or in the NE wall of the broch (Dryden and Petrie MS a), probably in an area where the inside of the broch was much collapsed (fig 54). However, the form of the pin (group 7) suggests it was probably a Roman type (Cool 1983 Group XVII) which was primarily used during the fourth century AD, but developed during the third century. Very similar pins were made during the Middle Saxon and Anglo-Scandinavian period, although these usually have a collar at the junction of head and shaft. On balance it seems more likely this pin is early (its perforation is unique). It is the sole evidence at Lingro for activity post-dating the second century, although there was obviously a long sequence of MIA occupation at the site. Its location, in or on a decayed section of the broch wall, is indicative of later, largely unrecognised activity.

#### 8.2.11 Midhowe HY 372 306

Excavations were conducted at the broch of Midhowe by Grant between 1930 and 1933. Although a group 5 or 6 comb from the path encircling the broch, at 'a higher level' (Callander and Grant 1934, 472, fig 32.1), may suggest LIA II activity, only MIA levels have been recognised otherwise. These encompass many phases of activity, some of which may plausibly be extended into the LIA.

The site as we see it today sits on the edge of low cliffs, defined on two sides by deep geos, and with a series of strong ditches and ramparts (fig 48). The entrance through the outworks does not align with the broch entrance, and the chronological relationship of the broch and the outworks is not known. The outworks possibly incorporate a blockhouse (Lamb 1980a, 90) and a second outer rampart (Hedges 1987 III, 114). A couple of cup and ring-marked stones are incorporated into the extant structures, but



their provenance is unknown, and there are no recognised pre-MIA features.

The extant internal features of the broch belong to more than one phase, but as at Gurness, there is dispute as to both their date and their similarity, or otherwise, with earlier broch internal fittings. The majority of extant fittings are probably secondary, although they may be similar in certain respects to earlier ones. Hedges (1987 III, 115) believes they may be original. As at Gurness, E MacKie (*pers comm*) sees the broch in its earliest stages as enclosing a wooden roundhouse. The excavator inferred a primary occupation from the fact that a well or cellar is partly sealed by two superimposed hearths. These relate to extant internal structures in compartment C (Callander and Grant 1934, 461). They also expected to find a hearth in the middle of the court, but the necessity to leave standing the interior partitions meant that they could only probe the 18 inches of material on the floor to try and locate it. They did not manage this, but inferred its presence from the quantity of burnt material which they recovered (*ibid*, 455). That there was at least one earlier floor level is obvious from the way in which the structures in compartment D can be seen to be established on a level substantially higher than the pathway which encircles its outer edge. Some of the internal features in compartment C are obviously secondary because they are secured to the interior wall by an additional casing wall. This facing also covers parts of the scarcement in the SW sector, suggesting that the scarcement was no longer fulfilling its primary function as the support for a roof or gallery. The question is how much later these alterations are than the broch tower, and how they relate to the outbuildings which encircle the broch to the NW, but which were originally probably more extensive.

Both MacKie and Callander and Grant relate these internal changes to a phase when the superstructure of the broch had started to collapse. According to MacKie, as this happened, the outbuildings were constructed from the masonry, and spare lintels were stacked in the broch intra-mural galleries, and in the passageway around the broch. However, it is obvious that the outbuildings preceded the dismantling of parts of the broch, from the fact that once the lintels were stacked in the encircling passage, new entrances had to



be found to the outbuildings. MacKie (*pers comm*) relates the construction of the extant internal fittings to the building of guard cells outside the main broch entrance. He observes that these guard cells must relate to a phase when the level of the original broch entrance passage was raised, and the original broch entrance became redundant, because no pivot stone now survives. The correlation between redundancy of original entrance and the construction of the guard cells seems correct, but questions remain as to whether the construction of this length of paving is contemporary with the rest of the changes in the broch interior.

The chronology of Callander and Grant is very similar with regard to the relative dating of the broch internal fittings and the outbuildings. In the primary period the broch was built. Then a series of oval and linear outbuildings (E-H on their map, pl VII) were constructed. The enterprise of constructing the outbuildings entailed the cutting back of a part of the broch wall and the infilling of a part of the inner ditch. Both these activities are specific to the vicinity of house H. The idea of radially disposed main walls is seen throughout. With the exception of an industrial hearth in house G, no hearths were recovered from the investigated areas of any of these rooms. In their third period the broch tower had to be strengthened: the basal gallery was infilled, and buttressing was constructed around the NW exterior of the broch. As a result of this reinforcing, the passage encircling the broch was blocked in part, and a new entrance had to be constructed to the outbuildings, in areas of the site now lost to the sea. At the same time, some of the internal divisions were added to the outbuildings. The extant secondary constructions in the broch were being built at this time.

Callander and Grant were unable to relate several features stratigraphically to their suggested phasing: at some stage the S entrance through the outworks was narrowed; parts of the outer ditch were paved, and a new stretch was added to it; whilst there were also 'late' buildings to the S and SE of the tower, but these were so dilapidated that their form and purpose cannot be established.

An alternative relative chronology can be suggested:

1. In the earliest stages of the site the broch and outworks were constructed, although they are not necessarily strictly coeval. The

exact nature of the interior of the broch is unknown, but there was a cistern or cellar. The lower gallery was open and almost completely encircled the interior. The stairs in the east may be original (they do not overlap the scarcement, but at present end about two feet below this level) and led to a doorway at scarcement level. From here access was gained to an intra-mural gallery, which in the N led down to a doorway at an intermediate level, and from which access to the gallery may have been possible. The scarcement probably also supported a gallery. If the internal stairs were not original, then sole access to the upper levels may have been from the lower internal doorway. At this intermediate level an intra-mural passage led around much of the broch, with further ingress via a small raised entrance to the SSE.

2. At an early stage in the brochs's development, if not from its inception, a series of outbuildings (E, F and G: fig 55A) were constructed around the NW quadrant of the broch. Their layout respected the outworks, the northern wall of G being a strong wall which followed the line of the ditch. Their masonry is little inferior to that of the broch (RCAHMS 1946 II, 198).

3. The outbuildings were extended by the addition of building H, which had a single entrance to the SW. That this building is later than building G can be seen from the masonry joint where the curving wall of H is added onto that of G (fig 43B). The construction of this room also entailed the removal of part of the inner face of the outer defensive wall, a part of the outer northern wall of the broch, and the infilling of a length of the inner ditch. It follows in plan the general radial disposition of the outbuildings with their entrance from a common passage which encircles the broch. A cellar was constructed in an area which was in the inner ditch.

4. It became necessary to dismantle parts of the broch superstructure as the upper storeys became unsafe. The extant ground plan may relate to a phase prior to this, but it seems more probable that the majority of features belong to this period. The lower intra-mural gallery was carefully filled around much of its circumference with upright slabs, parts of the intermediate gallery were also filled up, and a cell was inserted into the entrance to the upper mural gallery, blocking all further access to it. The interior of the broch was changed (see above). Outside the broch, excess



stones were stacked in parts of the encircling passage, acting as buttresses. As a result, the original doorways to the outbuildings were blocked up, and new entrances created in areas of the site which are no longer extant. An entrance was knocked into the SE side of building H. The broch entrance was probably extended at this time by guard cells, and the original doorway became redundant. Many of the internal walls in the outbuildings may also belong to this phase. The elaborate rearrangement and much of the present appearance of H is particularly difficult to explain satisfactorily.

So, whilst it is possible to suggest a new structural sequence for this site, it is still not possible to identify any of the activity with which a LIA II comb fragment might be associated. The excavators suggest that secondary structures were being built in the broch interior when 5-6 feet of debris had accumulated on the original floor (Callander and Grant 1934, 465), but the date and exact nature of this activity are, again, unknown. The main phases of activity at the site are dated by the presence of second century Roman pottery (A Robertson 1970, table II) and three penannular brooches with affinities with Fowler A derivatives, a form which was current in its various elaborations until perhaps as late as the fourth century AD (Fowler 1960; Hedges 1987 III, 25; Callander and Grant 1934, fig 44.4-5, fig 45).

#### 8.2.12 Netlater HY 323 173

There are no definitely LIA finds from this broch, only a globular pin head which may be post-MIA. The excavation plan of 1890 (fig 44C) shows traces of a ?broken encircling wall around the broch, which might suggest that outbuildings contemporary to the broch can be expected, but there is no record of any. An oval enclosure in direct line with the broch entrance is not a feature common to MIA outbuildings. This feature was observed by Petrie, but he did not measure it, and his reconstruction is on the basis of Traill's observations. Petrie has a recollection of a well, with steps leading down to it, being situated in this enclosure (Petrie 1890, 81). It is not distinctive enough to propose a LIA date, and probably belongs to a period shortly after the broch was in use. A circular enclosure lies in a similar position outside Keiss Broch West.



### 8.2.13 Oxtro HY 253 267

The only examined pin from this site is not chronologically distinctive. Curle (1934, 367, no 84) refers to possible Roman pins, but these were not located. Petrie (1890, 78) records the information that a wall reputedly extended over the well which is situated almost in the centre of the broch. Hedges (1987 III, 56) puts forward a convincing argument that this wall may be contemporary with the other stone fittings in the broch interior. Nothing is recorded of any later levels, or if there were any outbuildings (fig 44G). Only a penannular brooch of Fowler type E (1960, 168, fig 13; 1963, 101), probably of fourth century manufacture, may suggest prolonged occupation of the broch interior. Other distinctive finds include a tankard holdfast (M MacGregor 1976, no 291) and clamped fragments of samian (D45 of second or third century date: A Robertson 1970, table II). Samian ware is renowned for its potentially long circulation (Warner 1976). The efforts made to clamp this piece testify to its value, but by itself this sherd cannot testify to LIA settlement.

The only distinctive LIA find from this site was a symbol stone carved with an eagle, unfortunately now lost. This was recovered from a short cist cemetery, presumably of LIA date, which overlay the broch mound (S Laing 1868; Petrie 1890).

### 8.2.14 Peterkirk, Sanday HY 713 436

A single LIA comb (group 5) has been found at this site. Raymond Lamb has no doubt this is a broch-type site, but the only structural feature which has been recognised is a well (SMR no 276).

## 8.3 SUMMARY OF EVIDENCE FOR LIA ACTIVITY IN ORKNEY (Appendix IV a-b)

Orkney is the area in the AP with the most detailed evidence for all aspects of LIA settlement. The large number of pins and combs coming from broch sites testifies to continued activity on these sites in the LIA II, but in very few cases can LIA I activity be proved.

Turning first to the broch structures themselves, the original internal fittings at Howe suggest that some brochs primarily had a residential function, and that the fittings seen in many need not be secondary, or very late, as has long been assumed to be the case.

Little is known of the earliest internal fittings at Gurness and Midhowe, the best known brochs in Orkney. Whilst there is some suggestion that they may have been similar in nature to much of the extant features, it is obvious in the case of Midhowe that there were differences. But activity within the brochs was in any case prolonged, and there might be repeated revision of the internal fittings both during the MIA, and subsequently in the LIA. There is no evidence, however, that any of the broch towers still had a residential function in the LIA II, although pins and combs indicate some form of activity. At Howe the broch became a series of workshops. Unlike in Shetland, there is no evidence for the insertion of wheelhouses into the broch towers. To date there is only a single excavated example of a possible wheelhouse in Orkney, at the site of Howmae, North Ronaldsay (W Traill 1885; J Traill 1890), and this would seem to be broadly contemporary with the Shetland examples (see below).

With regard to the broch outbuildings, a case has been made that the radial examples are more or less contemporary with the broch itself. These encircle the broch in a regular fashion, a passage leading through them to the broch, which is usually surrounded by a narrow encircling passage; there is very full use of all the available space between the broch and its surrounding outworks, where these exist. The dating evidence for these rests almost exclusively on the evidence from Howe (Carter *et al* 1984), Gurness (Hedges 1987 II) and Midhowe (Callander and Grant 1934). Hedges (1987 III, 14) estimates that 20 out of 52 of his Orkney broch population have evidence for well-ordered outbuildings, and some of their plans are illustrated in illus 44-46, 48. On the basis of present evidence, outbuildings elsewhere tend to be of the non-radial type, although it is not always possible to distinguish the two on the basis of fieldwork alone. Outbuildings may not even be obvious from surface features, except for the presence of rubble, as was the case at Howe (B Smith pers comm). Hedges' work suggests that some of the outbuildings associated with brochs in Orkney have been built in the same phase of construction as the broch, or are near contemporary afterthoughts, because the layout of some of the outbuildings and the broch is by and large systematic, and their floor areas, fittings and furnishings are comparable (1987 II-III; §8.2.2).



Whilst many undated non-radial outbuildings may be LIA, the redating of radial structures now generates more of a gap in the LIA settlement record. Still, whatever one's stance in the debate about how soon after the construction of the broch the outbuildings were erected, it cannot be disputed that the broch and outbuildings co-existed at some point, functioning as a unity.

But many of the outbuildings on Orkney brochs are later than the radial structures, and the problem comes in assessing how long modified occupation continued on these sites, because in artefactual terms this period is difficult to recognise. Further, there are, of course, dangers of a circular argument here, because if few objects can be dated to the LIA I, there will be a tendency for the settlement to be either MIA or LIA II. In addition, the sample of sites is as yet too small. Both post-broch and non-broch settlements may be expected to fill this gap one day. Nor need it surprise us if some broch outbuildings are found to have had an extremely extended life span - at Pool a small (probably multi-celled) unit has been demonstrated to have been occupied over about five centuries (*pers comm* Hunter). Only at Howe is there dated evidence for continuity from the broch period into the LIA I. It is not always possible to recognise changes in structural form on broch sites because of the tendency seen here to reuse earlier buildings, but the general impression at Howe is of a series of interconnecting sub-circular and sub-rectangular rooms with yards. There is no evidence for any more than a couple of domestic units. nor is there positive evidence that settlement on this site continued into the LIA II.

On the basis of the pins and combs there was evidently some activity on broch sites in the LIA (fig 56). On the basis of artefacts there are slight suggestions of fourth-fifth century activity at Lingro and Netlater; whilst at the Burrian 1, Burray East, Howe, and Gurness there are hints of continuous occupation from the MIA well into the LIA. At Lamaness, Deerness, Borwick, Midhowe, Bugar and possibly Ayre there are suggestions of activity in LIA II, possibly after a period of abandonment lasting several centuries. As previous discussion has shown, there are structures to accompany this postulated activity at Ayre, Borwick, Burrian 1, Howe, Gurness, and possibly at Netlater. Lamaness is probably not a broch site, and Bugar was simply reused to deposit a hoard. There is only one broch



site where structural evidence suggests LIA activity, but no LIA artefacts have been found. This is at Burroughston where the long rectilinear structure with an apsidal end, opposite to and aligned with the broch entrance, is similar to LIA structures recognised at Pool and Howe (discussed further in §8.8).

What are the factors which determined which broch sites would be still in use and which would be abandoned after the MIA? What determined which would be reused in LIA II? What is it that these sites have in common? Of the 14 sites with artefactual evidence for LIA activity, 10 of these have defences. Three of the exceptions are not typical: little is known of the broch at Deerness or the exact provenance of the LIA comb which may have come from the adjacent settlement at Skail; only a hoard was deposited at Bugar, and Lamaness is probably not a broch site. Broch of Ayre appears similar to Lingro, in that it has radiating buildings but no enclosing outworks. In addition it can be suggested that the majority of the sites producing LIA artefacts had a radially disposed nucleated settlement around them, and a large number of them produced Roman finds. In structural terms these settlements thus would appear to epitomise the apogee of MIA settlement. Of the 19 sites with evidence or possible evidence for LIA burial and/or structures, 6 of these had evidence for defences. Of the 39 other sites with, or possibly with evidence for LIA structures, 20 of these had, or possibly had, defences. The question is whether we are seeing selective reuse/continuity on some of these sites which were more important than others, and if so why? The Norse application of names which are variants of the word for strong places would suggest that in some cases the towers were still standing, and even where they were not that the former importance of the sites did not pass unnoticed.

It may be no coincidence that these sites are the ones which have been most extensively, and usually most carefully excavated. As previous discussion shows, earlier antiquaries were on the whole not skilled enough to recognise LIA structures on broch sites, and the number of distinctively LIA artefacts which need be associated with them is few. Compare the extent of the post-broch settlement at Gurness with its contemporary artefacts. Thus it is probable that many unexcavated or partially excavated sites could now be expected to produce evidence for LIA settlement if excavated. Equally probable

is that many other sites could on further excavation produce evidence for nucleated villages of the type recognised at Gurness, Midhowe, Lingro and Howe. As appendix IV b shows, on the basis of field identification, a considerable number of sites have evidence for both external defences and outbuildings. A number of sites have evidence for outbuildings but no obvious outworks, and these may thus be similar to Lingro.

In other words, there is a considerable number of unexcavated sites which might be expected to have developed from MIA nucleated settlements into the LIA I, and from then into the LIA II, or to have been selected for reoccupation after a period of abandonment. In Orkney we are perhaps seeing the preference for selective reuse of sites which have both massive outworks and surrounding settlements, sites which by implication may have been of especial importance in the MIA. However, it remains to be emphasized that there has been little excavation on late occupied brochs.

Sites reused specifically for burial are at present more likely to be inland than the secular and ecclesiastical sites, which are almost exclusively coastal. Natural and physical factors affecting the choice of these sites had probably not changed from the MIA, and probably included adjacency to a good beach, and possibly to natural harbours. Most of these sites are adjacent to good harbours, some of which receive special mention from eighteenth and nineteenth century authors (1st Statistical Account; 2nd Statistical Account; Brand 1701; Low 1879): Gurness is next to Aikerness Bay; Stromness and Howe are within easy reach of present day Stromness Harbour; Ayre and East Burray are on either side of Holm Sound; Burrian 1 is adjacent to Stromness and Linklet Bays; and there are good harbours all around Rousay where Midhowe is situated. That naval resources were quite considerable considerations in LIA Scotland can be inferred from the fact that a fleet of one hundred and fifty ships was wrecked off the Aberdeenshire coast in AD 729 (*Tigernach Annals* c 729), and that the Southern Picts and Dalriadans were capable of launching several sea-borne attacks in the sixth and seventh centuries (*Tigernach Annals* c 682; 719; 733). It is therefore not a totally unreasonable assumption that the Orcadians also possessed a large number of boats.

Twenty-two sites (or their immediate environs) have produced evidence for reuse as burial places, which can sometimes be identified



as LIA or Norse. Very little is known of LIA burial practice, but there is evidence for burial of inhumations in both long and short cists, and of cremations in stone-capped urns at the following sites:

long cists - cists and graves to the north of the broch at Ness of Ork (RCAHMS 1946 II, item no 777); a long-cist cemetery on the outskirts of the midden surrounding the broch at Warebeth (S Laing 1868, 60); an unaccompanied inhumation in a slab-lined grave set 'in the bank close to the broch' at Breckness (Watt 1905, 60); and two inhumations were found in 1812 and 1887 at Green Hill of Quoyness which may have been the same and were probably extended in long-cists or slab-lined graves (Cursiter 1923, 52; Hedges 1987 III, 101-2).

short cists - schematised sections of the broch at Oxtro clearly show groups of cists above the broch, which are described as containing burnt bone and ashes (Petrie 1874, fig 4, 76). One of these incorporated a symbol stone with an eagle, now lost. Other unstratified finds included a Norse copper-alloy pin which may have accompanied a burial. At Taft excavations were concentrated on the wallhead, but outside this, and amongst a considerable accumulation of earth and stones, a number of 'short cists, most rudely made, and without bottoms' were found (Watt 1882, 449-50). Surprisingly there is no mention of human bone. Close-Brooks (1975, 210) notes that short cists at Golspie in Sutherland are almost certainly pagan LIA.

cremation in pots - immediately to the south of the broch wall at Netlater, Petrie (1890, 81; fig 6, area K) records the discovery of two covered urns containing cremated bone, their upper surfaces nearly on a level with the original floor of the broch. It cannot be proved, but these sound as if they were inserted burials. No Iron Age parallels are known from Scotland for this burial rite, which is presumably pagan, but the possibility that they are Bronze Age, and pre-date the site cannot be discounted. It does not resemble any Norse burial rite known to the writer.

Finally from a number of sites there are unspecific references to human bone: Burrian 5 (ONB 17: 1880, 182); Stackrue (ONB 17: 1880, 278); part of a mandible from Burrian 1 (MacGregor 1974, 114); skull fragments from the outer ditch at Midhowe (Callander and Grant 1934, 514); fragments of skulls and other human bones from the broch infill at Ingshowe (SMR no 575; Fraser 1927, 52; RCAHMS 1946 II, item no 322); a large number of skulls and a stone axe from excavations in the



nineteenth century at Knoll of Skulzie (*ibid*, item no 1072); a skull and other bones from the right hand guard cell at Lingro (Hedges 1987 III, 81-3); two inhumations from Burgar (Peterkin 1831, 44-45; Wilson 1863, 106); the bones of at least three individuals from Ayre (Graeme 1914, 49); and finally at the Knowe of Swandro the RCAHMS (1946 II, item no 579) suggests that there may have been graves because there are slabs set on edge over a large area of the site.

Furnished cist graves can be Norse, and their presence is inferred at Howe from a glass linen smoother (Hedges 1987 III, 49); the rune-incised disc at Stackrue (Olsen 1954); a ring-headed pin from Oxtro which possibly comes from one of the cists (Grieg 1940, fig 67); and at Gurness a number of furnished Viking graves have been recorded (Hedges 1987 II, 72-4, fig 2.15-6; Robertson, W N 1969). Unfurnished cist graves are intrinsically impossible to date, as they are possibly LIA, late Norse, or even later medieval.

It can be seen from appendix IV b that if a site was used for presumed settlement in the LIA it was not also used as a burial ground within the same time-span. Broch sites used as LIA burial grounds all appear to have been both undefended and abandoned since the MIA (with the possible exception of Netlater). There is of course the possibility that associated churches await discovery on these sites. The Norse reused some broch sites for burial which had had LIA settlement, but they also preferred to use sites which had been abandoned for a longer period, in this case probably at least 500 years, and which were by now grassy *howes* (the name implying mere mounds: Cursiter 1923, 50). The implication is therefore that a large number of these broch sites were grassy mounds by the time they came to be reused as burial sites, although the former presence of LIA settlement in the immediate vicinity of the broch mound cannot as yet be verified. The collapse of broch and surrounding structures might have created so much debris that it was more convenient to build adjacent to the mound, which is not where the archaeologists tend to investigate. Further, this is where most subsequent degradation is likely to take place (as at Howe where there are suggestions of features running off into the ploughed out area which surrounded the mound: *pers comm* B Smith). Both these factors militate against the recognition of later activity around broch sites.

Burials have also been recognised on non-broch sites: the lower

cemetery at the Brough of Birsay consists of long-cist graves orientated east-west, many with head stones, and including the supposed triple grave, two ogam inscriptions, the well-known symbol stone and an eighth-century cross (Cruden 1965, 25); long cist graves and burials in circular cairns at Birsay Bay are probably LIA (Morris 1983, site BY 76, cuttings 1-4; BY areas 1-2); a long cist burial containing a male to the north of the domestic site at Buckquoy is not dated, but perhaps pre-dates the cemetery on the Brough of Birsay (A Ritchie 1977, fig 3, pl 11b, c; 183-84); at Westness, Rousay, a long cist cemetery is dated by C-14 to between the fifth and ninth centuries - unfurnished graves with headstones, subsequently respected by the Norse are LIA (Kaland 1987); and finally, at Saevar Howe, a long cist cemetery was excavated by Farrer in the nineteenth century, and included the find of an early christian iron bell (Bourke 1983). Morris argues that this cemetery is later Norse rather than LIA (Morris 1983, 141).

Distinctive structural forms can be seen on sites which on present evidence are exclusively LIA II in date, and these can also be recognised on broch sites. Take for example the structural forms seen in *settlement mounds*. Settlement mounds (often with extant farms on top) are particularly common in Sanday, N Ronaldsay and Papa Westray. They may be up to 5m deep and cover surface areas of up to 5000m<sup>2</sup>. Within a complex and varied stratigraphy, mainly of organically-derived material, are to be found the remains of structures. The mounds themselves are assumed to be the product of a long sequence of settlement on a single site which leads to the accumulation of undispersed organic debris. Preliminary work at Westbrough, Langskaill and Skelbrae (Davidson et al 1983) and Pool (Hunter pers comm) suggests that the N Islands mounds are essentially composed of burnt peat. Hunter suggests this is burnt peat not being dispersed as fertiliser to the fields because of the wide availability of seaweed as an alternative resource on these islands. There is no evidence that LIA settlement at sites such as Pool extends any further back than about the fourth or fifth centuries AD. The type of cellular settlement seen here is also paralleled at Howmae (J Traill 1890; W Traill 1885). This site was excavated in the 1880s and consists of an unphased complex of roundhouses, one possibly a *wheelhouse* (fig 57; unique so far in Orkney), courtyards, and a long rectangular form



which can also be paralleled at Pool (see below). Howmae is undated, but there is nothing in its artefactual assemblage to contradict a date range of about 300-600 AD. The absence of any distinctive LIA II artefacts perhaps weighs in favour of this date, although of course there is nothing to affirm such a date either. It thus seems that settlement mounds are characteristic of LIA settlement. The number of domestic units which might have been extant in any one settlement at a single time is unknown, but the presence of interconnecting courtyards hints at a degree of complexity not immediately apparent in their amorphous plans.

But to date, the most distinctive LIA II structural forms are the polycellular structures discovered throughout the AP, and exemplified at Buckquoy. Unfortunately no tight chronology can be applied to the Orcadian examples. These, and the related structures at the Brough of Birsay, serve to remind us why it is so difficult to detect non-broch and non-settlement-mound occupation: because the structures are relatively slight and because building techniques are such that robbing would leave the structures totally without physical remains. Therefore, there is at present a bias towards the recognition of later settlement on broch sites, sites which have always been the focus of archaeological attention; this must result in an unbalanced picture of the exact nature of LIA settlement. It is difficult to suggest an immediate remedy for this unbalance. Whilst fieldwalking has proved successful for recognising Neolithic sites in Orkney, the nature of the IA artefactual assemblages, essentially the fact that they do not possess their own distinctive repertoire of flints, means that it is virtually impossible to detect IA activity in this manner (C Richards *pers comm*). Aerial photography, whilst under-exploited, has little potential in this area, where topography, climate and the agricultural regime act against high rewards. At the very least, when LIA settlement is detected or suspected then phosphate survey or remote sensing techniques may have the potential to recognise the extent of features which are otherwise invisible on the ground.

#### 8.4 NON-BROCH LIA SETTLEMENT EVIDENCE IN CAITHNESS

In Caithness we meet for the first time the problem of defining



the limits of a site: when can it be demonstrated, in an area that forms the focus for multi-period settlement, that a broch site, as opposed to its vicinity, has been chosen for settlement? Relevant here are the sites of Freswick Links and Birkle Hill, and their relationship with the brochs at Freswick Sands and Wester. For present purposes they will be considered separate sites, but the brochs will be discussed along with the later settlements.

Only a small number of possible IA non-broch sites is known in Caithness, and with the exception of wags, no distinctively LIA structural forms have been recognised. Thus we are reliant to a certain extent on parallels with the rest of the Atlantic Province, particularly Orkney. This creates particular problems when dealing with the nature of the subsidiary and secondary settlement on broch sites, as will be seen.

#### 8.4.1 Freswick Links ND 37 67

Freswick Links consist of an area of sandy hollows and gullies to the north of Freswick House, measuring about half a mile long and quarter of a mile wide. The area is best known for its eponymous late Norse site, which has been the focus of attention for several archaeologists, particularly A O Curle (1939) and more recently C Batey. Batey is responsible for a recent reappraisal of the Norse site, which also draws together most of the evidence for LIA activity in the area (Batey 1987a). Despite the relatively large number of finds, the majority are unstratified, often just casual finds from the eroding sands. None the less, there are about a dozen metal and bone pins and a couple of combs which point to LIA activity in this vicinity. The majority of these are specifically LIA II finds, but a silver hand-pin (773) may hint at earlier activity. The only other artefacts which might be LIA are two pennanular brooches of possible eighth century date (Batey 1987a, 135-36; 2.2.1-2, pl 20).

Structures which might relate to these artefacts are unknown, unless they are represented by the wattle and daub building underlying Curle's building VII, or any of the three earth-houses excavated by Edwards during the 1920s (Edwards 1925; 1927). Batey believes the wattle and daub building is more probably Norse (1987a, 64), but she suggests that the earth-houses may be 'Pictish'. However, the little dating evidence there is, and this is mainly from

outwith the Atlantic Province, mainly suggests a date for the use of earth-houses in the early first millennium AD (Alcock 1984, 14), perhaps until as late as the sixth century, although continuous occupation at Newmill may have extended into the ninth century (Watkins 1984). In Orkney examples can be shown in rare cases to be contemporary with broch structures or later levels (such as Howe); there is no definite proof that they are LIA II (Pictish). Evidence for their dating in Caithness is totally absent. Nor is there any evidence for associated above ground features. In plan earth house A (Edwards 1925, fig 3) is almost identical to structure G at Yarrows (fig 42g) and similar to post-broch structures at Gurness (fig 42c-e). It consists of a small sub-circular chamber, entered from a narrow passage, and with a small sub-rectangular annex. A second, larger, pear-shaped structure was situated about ten feet six inches (c 3.2m) away. This was entered from a longer passage, via a low creep, about one foot two inches (c 0.35m) above floor level. From here access was gained to a sub-circular chamber, its walls converging towards the far end to produce a second room which had a corbelled roof, covered with clay (*ibid*, fig 4). The only finds from either of these were a skull fragment, the lower jaw of a child, and a saddle quern from the larger compartment of structure B, not very helpful for dating. In this case the compartment had been blackened by fire and filled with a mass of burnt stone and dark soil, possibly indicating deliberate back-filling. Edwards also excavated a third earth-house on the Links. This consisted of two chambers, their exteriors part plastered with clay, which were again entered from a long passage (Edwards 1927, fig 6). There were no finds directly from the structure, but middens close to the west wall produced plain, hard-baked pottery.

There are three items from the broch itself which hint at prolonged activity in its immediate vicinity. A globular pin head (788) may belong to the fourth and fifth centuries, whereas two bone pins (787; 791) are of distinctively LIA II form. The broch was excavated by Tress Barry and described by J Anderson (1901, 143-44; RCAHMS 1911a item no 34; fig 58F). There are no structures on the site which are suggestive of LIA activity. Anderson describes as secondary the interior divisions of the broch, which whilst apparently more substantial than the orthostatic divisions recognised



on other sites as primary, may none the less be similar. Certainly Anderson produces no archaeological evidence to justify his statement, unless it is the casing wall which appears to block off one of the intramural cells. If this is the case, then as at Crosskirk (below), this additional facing need not be much later than the primary building of the broch itself. The excavated outbuildings consist of an extension to the broch entrance, on the west side of which is an apparent guard cell; the intramural staircase is unusually located to the left of the broch entrance, in the position where a cell might more normally be placed, thus this extramural cell may be coeval. Further to the west a large sub-divided, sub-rectangular chamber was probably reached by a long passage from the main broch passage. The disposition of this building, indeed the additional external cell, is paralleled in the phase 7 village at Howe (fig 48).

#### 8.4.2 Reay ND 9 6

The mould for a projecting ring-headed pin (804) is the only artefact from the Reay area which is possibly of fourth century or later date. The exact provenance of the find is unknown, but was probably the sands at Sandside Bay where, as at Freswick Links, there is considerable evidence for multi-period activity (Mercer 1981, 44-57). The nearest broch structures, at Achvarasdal, Achbuiligan and Achunabust are all a couple of kilometres away from Reay itself, and there are no known MIA structures with which this artefact might be associated. There is, however, evidence for LIA II (and later) activity in the vicinity of Reay. In the village churchyard, there is a Class III stone (Allen and Anderson 1903 III, 36; RCAHMS 1911a item no 340), but most of the evidence comes from around Sandside Bay. Here, in the mid nineteenth-century, a second symbol stone was discovered 'near the site of an ancient settlement on the sand links by the seashore' (Allen and Anderson 1903 III, 29-30, fig 26; RCAHMS 1911a, item no 407). This may be related to a pre-Norse cemetery which can be postulated on the basis of a reassessment of Edward's excavations (1929, 138-39). Whilst investigating the Norse cemetery he found a group of unfurnished long cist graves and a dry-stone structure, about four feet (c 1.2m) in breadth, four feet wide and about a foot (c 0.3m) high. This and other similar structures to the



west of the Drill Hall sound as if they may constitute a LIA cemetery which included kerbed cairns.

#### 8.4.3 Birkle Hills ND 339 584

The Birkle Hills (alternatively Castle Linglas) is a name given to two mounds in the sandy links near Keiss, which were investigated by Tress Barry in 1894-95 (J Anderson 1901), although it is apparent from an earlier account that there had been previous excavations (Laing 1866, 30-36). Laing describes the larger mound as roughly conical, about 40 feet (c 12.2m) high and 120 yards (c 110m) in circumference at the base. This is the site of Wester Broch (RCAHMS 1911a item no 513; fig 59A), subsequently excavated by Tress Barry. This site produced no structures which were distinctively LIA, but in addition to a series of typical broch period finds, there were three bone pins which are possibly LIA or Norse (598, 601-2). The broch was surrounded at a distance of 30-40 feet (c 9.15-12.2m) by a wall, and on the landward side, between this and the broch, were recorded the foundations of eight or nine small cells or outbuildings (J Anderson 1901). Unfortunately no plan of these has been published. The second mound, commencing about 100 yards (c 91.5m) NE of the other, was both lower and smaller. Its irregular form was about 30 feet (c 9.15m) high, 100 yards (c 91.5m) long and 30 yards (c 27.5m) wide. At its base was a collection of small cists containing inhumations and rude stone implements (Laing 1866, 10-18), which were possibly LIA (58.8). This mound was only partly investigated, and at the top a series of interconnecting passages was discovered, their floor covered with midden and including a stone and bone spindle whorl, some pieces of flint, and a Norse type stone fishing weight with encircling groove. In the upper strata of the outside midden a LIA pin (556) was the only distinctively LIA II find. Later excavations by Tress Barry revealed a rectangular stone structure which included amongst the stones paving its floor a symbol stone (Anderson and Allen 1903, 27). This is plausibly a Norse building (Batey 1987b, 131), but the symbol stone and single pin do hint at LIA activity in the vicinity, to which the 'interconnecting passages', and some of the artefacts from the broch, may be related. A second symbol stone from the south of Keiss Bay (Anderson and Allen 1903, 28-29) further emphasises LIA activity in this area.

## 8.5 BROCH SITES WITH EVIDENCE FOR LIA ACTIVITY IN CAITHNESS'

### 8.5.1 Bowermadden ND 254 635

Unfortunately very little is known of this site, not even its plan, as it was destroyed by the farmer. None the less a projecting ring-headed pin, with a half-corrugated head, is ascribed to this site. It suggests activity may have lasted into the fourth century AD.

### 8.5.2 Crosskirk ND 025 701

This site is the best excavated and most fully recorded broch in Caithness. The implications of its development are therefore crucial for an understanding of the development of IA society in Caithness, and wider afield. The following summary and discussion is based on Fairhurst 1984, where the site is divided into five periods. Period 1 saw the construction of the promontory fort, which is presumed to pre-date the broch because there are some indications of pre-broch activity on the site: a C-14 date which calibrates at the 2 $\sigma$  level to 1260-795 BC (SRR-269), a possible bronze age sherd from the broch well, and about one hundred sherds from the area of the outbuildings, which are similar to the pre-Iron Age pottery at Clickhimin (*ibid*, 57, 59, 108-10). Presumably this activity could even pre-date the outworks. Then, in about 200 BC, if not earlier (*ibid*, 165; fig 59C), a solid based broch was built. Lacking both a gallery and a scarcement it is argued to be early. Its wall core consisted of earth, rubble and boulders, which is possibly one of the reasons why from an early date its superstructure started to collapse. Three different types of casing were noted by the excavators: an external casing 0.3-0.75 m thick built facing the outside, shortly after the construction of the broch; a casing to contain rubble and slabs after collapse; and a low, solidly built platform along the external face to buttress the lower part of the wall. These indicate a series of structural weaknesses and reflect the inadequate experience of the builders in constructing high

#### Note:

1. This section owes much to the unpublished work of C Swanson (1988).

walling. This observation is particularly constructive, as it helps to explain similar casings observed on brochs, possibly even the internal facings which are obviously secondary where they block original intra-mural features. Anomalous features observed at this stage include a seated burial in a cist beside the hearth of enclosure 1 (*ibid*, illus 45-46), and an arrangement of a pillar and recess which may have had a ritual function.

The interior of the broch was divided by orthostats into two main compartments, each of which was further sub-divided by radial divisions. From these very earliest levels a residential function is suggested for the site.

The broch originally stood alone, but shortly afterwards a number of outbuildings were built around it in an *ad hoc* manner, and went through several stages of modifications in period 3, including a slight extension of the broch passageway. These buildings were circular, sub-circular, sub-rectangular, and one of them had a small cell appended to it. Similar structural forms can be observed around many of the brochs of Caithness. Meanwhile the interior of the broch was being modified by further floors, and it became necessary to open a second entrance at the foot of the staircase. The occurrence of two entrances in a broch appears to be peculiar to the east coastal plain of Caithness, other examples occurring at Keiss South, Keiss West, Kettleburn, Ness, Skirza Head, Yarrows, and possibly at Cairn of Elsay and Hill of Works. Crosskirk is the only example where the secondary nature of the second doorway has been indicated by modern excavation techniques. MacKie (1973) believes that all the second entrances are secondary, although Swanson (1988) would dispute this view. Only one of the entrances at any of these sites ever has any guard cells (although see possible exception at Keiss South). However, at Ness it is the unguarded entrance which is more or less aligned with the entrance through the outworks, perhaps suggesting that it was the main one. All this took place while there was no significant modification in the material culture of the inhabitants. It is particularly important to observe that there is a considerable phase of occupation of broch and outbuildings before the appearance of Roman finds on the site. This is in contrast to the Orcadian sites where Roman finds are associated with the earliest outbuildings (at Gurness, Howe, and from unspecified contexts in the outbuildings



at Lingro).

But there then follows an apparent period of abandonment before the site is reoccupied in period 4. The reasons for postulating a period of abandonment are as follows: there is a gap between the C-14 dates for period 3 and the Roman finds of period 4; and period 4 internal structures were located in such a manner as to indicate complete ignorance of underlying features. There is some evidence that the gap between periods 3 and 4 may not have been great; in late period 3 enclosure I appears. It is circular and uses different building techniques to sub-rectangular enclosure II, factors which may indicate it represents a new, later building tradition (in addition it incorporates a reused rotary quern). How true or common this is elsewhere in Caithness cannot be accurately gauged, but is pertinent to the large number of circular structures which appear around Caithness brochs, most of which incidently occur on sites which have also produced Roman finds, suggesting a later rather than earlier date for their occupation (at Keiss West, Nybster and Crosskirk). None the less, that there was a break of some sort is implied by the change in pottery fabric and form at this time.

The broch interior was reconditioned in period 4, the secondary entrance now being the sole entrance. Yet the passage leading up to the original entrance, now blocked, was extended to the gateway in the external rampart, and from there it has been detected extending a further 20m south (fig 60a). The pre-existing layout presumably dictated the reuse of an earlier hollow way, and the passage may have been for storage of produce or animals rather than primarily for access. Obvious similarities with the extensive passageway at Yarrows (fig 60b) can be suggested. However, this is the only outbuilding which can as yet be ascribed to period 4. The wide passage was up to 1m above the original passage level, yet to the excavators gave every appearance of being primary. Here at Crosskirk the monument was not being preserved for display, and thus this passage, which was almost as dominating a monument as the broch itself, could be removed. Structures to the south of the rampart were not investigated. It is not known how long this phase of activity lasted - a group of C-14 dates suggests it need not have been later than about the second century AD, although Roman Castor ware suggests activity in the fourth century AD. Certainly there is

no evidence to suggest that the site was anything more than a grassed-over mound when long-cist burials were inserted into it, probably in about the seventh century.

However, a single, metal, nail-headed pin from Crosskirk (1624) creates some dating problems. As earlier discussion has shown, moulds from Dunadd and Mote of Mark suggest a seventh/eighth (possibly also sixth) century horizon for this form, but the Crosskirk pin comes from phase 3 levels of the broch, an horizon which may date from the second century until possibly as late as the fourth century AD. The example bears little comparison with Roman forms; if it is later, it may have worked its way into earlier levels by any one of a series of taphonomic processes (see discussion in §7.2). Notwithstanding this item, there is evidence for LIA burial practices in the form of two unaccompanied long-cist graves from the area of the broch outbuildings (on a platform area to the W of the period 4 extended passage). Neither of these are orientated E-W, and the excavator tentatively suggests a period of about 600 AD (Fairhurst 1984, 102; illus 42, 49, graves I and II). They are probably related to a symbol stone which was discovered in the nineteenth century

*just outside the enclosure of the burying ground  
attached to the ancient church of St Mary at  
Lybster in Reay (Allen and Anderson 1903, 30).*

### 8.5.3 Cairn of Elsay (Staxigoe) ND 387 520

Excavations at this site by Tress Barry in about 1902 produced three items which suggest LIA activity: two comb fragments of group 6 (558-59) and a headless pin with a tell-tale hipped shaft (557). There are no distinctively LIA structures which might be associated with these. Excavations revealed a standard broch plan, with the vestiges of potentially primary radial divisions in the NW side of the broch, and possibly two entrances. Indicated on plan (RCAHMS 1911a, fig 44; fig 61C) as a thick wall with concave sides, an internal division is described by the Commission as secondary. It rose to some eight or nine feet (c 2.4-7m) above floor level, but it is not clear whether this was a solid block of masonry, or two sections of walling, the area between which was unexcavated (Swanson 1988). Swanson has shown from a photograph taken at the time of the original excavation that the passage extension as indicated on the

plan did not exist. The majority of the unstratified finds are of broch-type. Any outbuildings which may have existed around the broch were not excavated by Tress Barry. It is unclear on the ground whether the apparent hollow ways are the result of nineteenth century investigation, or are the product of underlying features. Modern disturbance in the enclosed area to the south of the broch has uncovered a cist-like feature.

#### 8.5.4 Everley ND 370 683

A projecting ring-headed pin (562) suggests that activity on this site may have continued as late as the fourth century, but there is nothing to suggest a LIA horizon. This broch, excluding its outbuildings, was excavated by Tress Barry. In addition to the usual broch type finds were some Roman finds of glass and pottery (A Robertson 1970, table II). Occupation of the broch interior was obviously prolonged, because J Anderson (1901, 142) describes

*secondary flooring in the entrance passage and traces of a secondary paving of the area.*

#### 8.5.5 Hillhead ND 376 514

A single bone pin (579) and group 5 or 6 comb fragment (582) are all there is to suggest LIA activity at Hillhead, all the other finds being distinctively broch type. The plan of this site (fig 61A) indicates nothing which is distinctively LIA. The extension of the main wall of the broch (which contains steps down to a well), and the diverging broch entrance passage, all point to the presence of unrecognised outbuildings which are plausibly early.

#### 8.5.6 Kilmster (Skitten) ND 323 566

A projecting ring-headed pin (809) and two bone pins (807-8) suggest there may have been activity here as late as the fourth century, and then again in the seventh and eighth centuries. This site was investigated by Tress Barry (?unpublished) and Calder (1948). The accession numbers of the examined bone pins (RMS HD.433 and HD.454) do not correspond with the accession numbers for the bone pins donated to the Royal Museum by Tress Barry (HD.431-2; Calder 1948, 142), but then there is no mention of Calder having recovered any. Unfortunately their exact provenance must therefore remain



unknown.

The structural evidence from Calder's excavations suggests a prolonged occupation of the site, although there is nothing indicative of LIA settlement (fig 59B). Within the broch interior several layers of paving were recovered; a second level extended over the northern half of the interior, and a fireback was obviously a later addition. It was suggested that the radial divisions of the interior were not primary: one of the radial chambers was set into the wall, and the finishing of its back walling suggested it was an insertion; and a broken stone dish had been incorporated into paving:

*Structurally, therefore, all the compartments are somewhat later than the broch, but from the absence of any pronounced occupation layer under the floor it would seem that their erection had taken place as necessary furnishing improvements at an early stage in the primary occupation (Calder 1948, 132).*

These spatially limited observations seem rather a weak basis on which to presume all the radial divisions are secondary.

The broch was surrounded by a substantial earthwork. Set up against this to the south, on a level with the broch footings, was chamber 1 which had an unpaved floor. In contradiction to the excavator (Calder 1948, 137) there seems no reason to suppose that this chamber was not contemporary with the broch. Any other possible evidence for coeval structures was probably buried under a massive additional rampart. This was constructed between the broch and the ramparts (in an area which seems not to have been investigated), constricting available space to a narrow passage between it and broch tower. A second chamber was also on practically the same level as the broch, but

*was undoubtedly of the latest period of building as the chambers had encroached through the debris of the strengthening wall right into the original rampart where these had become ruinous and no longer required (ibid, 137).*

so the implication is that this may be fairly late in date.

#### 8.5.7 Ness ND 381 667

This promontory site, now much eroded and overgrown, was excavated by Tress Barry in the 1890s. Amongst the finds, which included two copper alloy ingots, ingot moulds and a chain from the

guard cell, was a cast projecting ring-headed pin (801), which may indicate late activity on the site. The broch interior is divided by orthostats into three compartments (one half and two quarter segments). There is no record of any secondary activity here. But to the east of the entrance the plan (RCAHMS 1911a, fig 5; fig 62A) indicates a building which would appear to be secondary; some of the exterior broch wall has been cut back to accommodate a passageway around the remains of a small building. It is difficult to understand why the building was not constructed a little further away from the broch exterior, unless perhaps it was constructed after a part of the original broch entrance had collapsed. Certainly the enclosed area was probably quite extensive, and only a small proportion of the settlement has been, or can ever be, recovered.

The excavation plan indicates a well and complex of buildings situated on the landward side of the wall which cuts off the headland. Swanson (1988) has been unable to detect either the well or the entrance through the wall. If the original plan is correct, then the siting of the freshwater supply outside the defended area seems rather strange. A number of buildings were built in front of this wall; a circular structure appears to underlie a structure composed of two sub-circular rooms, neither of which need be contemporary. The northernmost cell has a small cell appended at one end, which may suggest an Iron Age date. This building complex, now bisected by an encroaching geo, may be late because it lies outside the apparent defences of the broch.

Although no Norse presence has been detected on this site, it is a possible contender for *Lambaborg* (Lamb 1980a, 96), mentioned in the *Orkneyinga Saga* (chapters 82-83):

*The fortress stood on a sea-cliff with a stoutly built stone wall to landward. The cliff stretched quite a distance along the coast .*

#### 8.5.8 Nybster ND 370 631

A 'bronze pin with a fixed annular head set on a short right-angled projection from the stalk' is recorded as having been recovered from the excavations by Tress Barry in the 1890s (RCAHMS 1911a, item no 518), but is not recorded as being donated to the Royal Museum (J Anderson 1901). This was obviously a projecting ring-headed pin, suggesting that occupation on this site may have

continued into the fourth century AD. The broch is situated on a headland which is cut off on the landward side by a substantial wall with stairways and the suggestion of a gallery; it thus qualifies for consideration as a promontory fort (Lamb 1980a, 20). The earlier plan (fig 61B) equates with a recent survey by Swanson (1988), which indicates how an extensive series of outbuildings butt up to this wall and cluster around the broch. A relative chronology for these diverse circular, sub-circular, and sub-rectangular structures and small cells with attendant passages is not possible, but parallels can be seen elsewhere. The small cells with long passages are reminiscent of the earth-houses at Freswick Links which are possibly LIA, and the stretches of walling with partitions are best paralleled in the long amorphous structures at Yarrows (fig 60b). The westernmost surviving complex includes a lady-bird like structure with a hearth and attendant sub-rectangular courtyard. This, of all the structures, is reminiscent of the LIA structures at the Udal (period XI.2: chapter 9). Adjacent to it is a sub-circular paved area, to which parallels can be found elsewhere (Mercer 1985, MON FOR 488, fig 54). Others of the circular structures have small cells appended to them, which are not dissimilar to the phase 7 village at Howe (fig 48). But the closest parallel for this amorphous cellular complex can be seen at Lingro, where similar forms appear to overly a series of radially disposed outbuildings. There are vague hints of a planned layout at Nybster, where there is an extended passage leading from the broch entrance with outbuildings accessible from either side. The excavation plan of the interior depicts orthostatic structures, but there is no record of their stratigraphical relationship to each other. In conclusion some of these structures may be co-eval with the broch, but others probably represent the later activity suggested by the projecting ring-headed pin. There is no other artefactual evidence to suggest later activity.

## 8.6 CAITHNESS SITES WITH ONLY STRUCTURAL EVIDENCE FOR PROLONGED OCCUPATION IN THE BROCH INTERIOR

On the basis of §8.4-5, it is now possible to review the rest of the evidence for extended settlement on broch sites which have not



produced any LIA artefacts. This consists of structural evidence for rebuilding and secondary structures in the broch interior and/or accompanying outbuildings of undetermined date.

#### 8.6.1 Coghill ND 267 571

The excavator's plan (RCAHMS 1911a, fig 31; fig 58C) indicates radial slabs to the left of the entrance, which are possibly related to a more substantial semi-circular wall which terminates in projections at right angles. There is no evidence for the relationship of this wall to the radial features, although they could have operated together, with the heavy wall acting as a roof support. Alternatively the wall is a large elaborate fireback, similar to the smaller and late example at Kilmster. This plan is similar in concept to the roundhouse at Bu (Hedges 1987 I), with its central sub-circular service area, and surrounding radial compartments.

#### 8.6.2 Skirza Head ND 394 685

This site is a promontory fort with dubious *chevaux de frise* on the opposite side of the geo to the south (Lamb 1980a, 74; Batey 1984, CAN 050, CAN 051). An internal revetment or casing of irregular width on the north arc of the broch is possibly secondary (Swanson 1988; MacKie 1973), and Swanson points to the occurrence of a tank-like construction in the floor of the possible second entrance. According to J Anderson (1901, 143-44) there were two secondary curved walls dividing up the interior, but no plan of these remains.

### 8.7 CAITHNESS BROCH SITES WITH STRUCTURAL EVIDENCE FOR OUTBUILDINGS OF UNDETERMINED DATE

#### 8.7.1 Hill of Works ND 290 626

There is no reason to believe that the internal divisions of the broch should be secondary, but a short length of facing wall does appear on plan to block the entrance to the intramural cell/stairway (RCAHMS 1911a, fig 1; fig 61E). A passageway appears to encircle three quarters of the broch, and joins at the broch entrance to an extended passageway which includes at least one door check. A sub-

circular chamber is indicated to the right of the broch entrance. No stratigraphic details are available.

#### 8.7.2 Keiss North ND 354 612

The interior of the broch is divided by orthostats into three long chambers, the two western examples of which are further subdivided by radial divisions, or partitions perpendicular to the straight wall of the central chamber (fig 61D). MacKie (1973) believes these settings are secondary, although there is no stratigraphic evidence to confirm this. J Anderson (1901, 128) describes as secondary a chamber, about seven feet (c 2.1m) in diameter and set into the wall of the broch at about two feet (c 0.6m) above the original floor. The extended entrance passage has been added to the broch, and straight joints are visible on either side (Swanson 1988). There is no evidence that the buildings to either side of the passageway could be entered from it, and their relative chronology is unknown. The only relatively complete building is sub-rectangular with internal divisions, and there is no reason why this and the other structures were not more or less contemporary with the broch. Between this site and the broch at Keiss South there are the remains of three rectangular buildings. The one nearest the N broch is possibly related to it (Batey 1984, 67, WIC 100).

#### 8.7.3 Keiss South ND 353 610

J Anderson (1901, 125) and S Laing (1866, 24-25) record the discovery of three levels of pavement within the broch, and three middens or occupation layers above them, including a hearth, amounting to a total of seven feet (c 2.1m) of occupational stratigraphy (Laing even attempts to show this in section, figs 35-36). Laing also observed that the class of relics found in the upper and lower middens were essentially distinct, with rude forms of pottery confined to the two lower middens, and the few instances of metallic objects, finer pottery and well-wrought bone implements to the upper one. This change in pottery is reminiscent of a similar observation between periods 3 and 4 at Crosskirk. Presumably the internal features recorded in plan are primary. Anderson also mentions the remains of a guard chamber in the second SE entrance,



which suggests that the Royal Commission plan (RCAHMS 1911a, fig 39; fig 62C) is incomplete and misleading. If this identification was correct, then this broch is unique among Caithness brochs in having two guarded entrances. MacKie (1973) sees the SE entrance as secondary, which the presence of a guard cell might disprove (Swanson 1988; Young 1962, 180-81 suggests a different scheme). Swanson (1988) suggests that the inner wall of the broch from the E to the SW appears to be secondary rather than an integral scarcement. In addition, at some stage, the NE entrance was partly blocked across the outer end also by a cross wall. Outside the broch can be seen a small circular cell with a long passage similar to the structures at Freswick Links and Yarrows, a structure which partly overlaps the broch wall (or is built into it), a rectangular structure which is floating both spatially and chronologically, and a series of structures immediately outside the NE entrance. The exact relationship of these structures to each other cannot be gauged, but there is no reason to believe any of them to be LIA as opposed to a product of the developing MIA broch site. The finds include Roman pottery and glass, and native painted pebbles, but nothing exclusively LIA in date.

#### 8.7.4 Keiss West ND 349 615

The interior of the broch (fig 62D) is divided by orthostats into four equal sections, but the relationship of these features to the broch tower was not recorded by the original excavators (Anderson 1901), but is plausibly primary. Anderson (1901, 135) describes the second entrance as being blocked with a secondary facing of masonry. There is also a chamber in the west wall of the broch, but it is obscure whether this is an original or later feature. On all sides of the broch are the vestiges of outbuildings, passages and sub-circular paved areas, but their exact relationship cannot be established, and it is impossible, with the exception of the circular court in front of the broch tower, to relate these constructions to the broch or to each other. Swanson (1988) notes that the building technique is commonly a curving stone face, but that two cubicles employ a post-and-panel technique, although the chronological significance of this is unknown.

The courtyard, about ten by eight metres, obviously post-dates the broch structure because it was



*partially founded on the lower courses of the addition to the exterior wall of the broch ... and partially on an accumulation of debris two and a half feet [c 0.75m] in height (J Anderson 1901, 137).*

In the centre of the circular court is the remains of walling which forms a passage roughly aligned on the ESE entrance of the broch, and for which a hollow way suggests its further extent to the SE. Although there is no direct evidence for phasing (because the joints are obscured by vegetation and collapse), Swanson believes that as the revetment of the court continues past the cross-wall on the S side, this passage was added at a later stage to the court. To the ENE are the remains of a building at a higher level than them both (Swanson 1988).

Laing (1866, 19-20, fig 25) describes the foundations of a massive buildings which he identifies most likely as a broch. But, as Swanson points out, his section through the mound shows it adjacent to the road, whereas the broch is set back from the present road. It is therefore possible that Laing is describing a later building overlying the broch midden. J Anderson (1901, 131, 139) describes an oblong building between the broch and church, one wall of which appears to pass four feet (c 1.2m) beneath the supposed church).

#### 8.7.5 Kettleburn ND 349 519

The only plan for this site is very early, and highly schematic (Rhind 1853, 185; fig 59F). The broch interior is full of thick and irregular dividing walls, which are not representative of the orthostatic divisions which pass for primary on other sites. There is some evidence for a facing wall which runs a short distance to the north of the NE entrance. To the NW are traces of outbuildings, straight, curved and sub-circular stretches of walling with orthostatic division along some of their lengths, reminiscent perhaps of wag structures. It is unclear from Rhind's account of the excavation just how much of the enclosed area was investigated, or how far the enclosing wall extends around the site.

#### 8.7.6 Norwall ND 327 545

Excavations by Tress Barry in 1903 uncovered a broch and an area of outbuildings to the NW of the entrance (fig 62B). In the

interior only a few radial divisions are indicated, but from the broch entrance there runs an extended passage with door checks and buildings running off it from either side. Originally there were probably also external buildings on the W and SW side of the broch (Swanson 1988). The recorded structures are rectilinear with regular orthostatic divisions.

#### 8.7.7 Thing's Va ND 081 682

Nothing is known of the nature of the external buildings on this site, but there is the possibility of a secondary casing wall (RCAHMS 1911a, item no 432; fig 58A).

#### 8.7.8 Warehouse ND 303 413

The W part of the pre-existing mound has on its surface a series of irregular amorphous cellular structures with occasional facing walls visible (Mercer 1985, 101; fig 63A), and the date of these is unknown.

#### 8.7.9 Westerdale ND 133 510

This site was excavated in the 1950s by Murray Thriepland, but no details are available. This is unfortunate as there are suggestions of outbuildings and even an encircling passage and extended entrance passage (RCAHMS 1911a, item no 105). The excavations were not backfilled, and a section from the exterior of the broch to the outworks is visible in the eastern segment of the site. From this section it is possible to see that the outbuildings indicated at surface level are situated within one, perhaps two, metres of fallen debris; this is not to exclude the possibility of earlier outbuildings, but none are apparent.

#### 8.7.10 Yarrows ND 308 440

This extensive site, lying at the foot of a shallow slope on a short, blunt promontory projecting into the loch, was excavated between 1866-67 by J Anderson (fig 62E). The interior was clad with a casing wall which the excavator considered was bonded into the broch at the door openings (Anderson 1890, 135), although it is also stated to have lain above the level of the inner face of the broch wall. None the less it appears to respect all intra-mural features.

The E entrance is lined with large slabs, which MacKie postulates are possibly secondary, concealing the original door equipment, for at present neither guard cells nor bar-holes are visible. Although only a couple of lengths of internal partitioning are recorded on plan. Anderson states that

*Partition walls were met with at three different levels, dividing the internal area on three different plans, the last being a partial partition utilising only one side of the area at a time when the original floor had become covered with eight feet of stones and rubbish (Anderson 1883, 229).*

It is not clear from his descriptions what the primary broch surface looked like, but it is obvious that occupation in the broch was prolonged. Evidence of later occupation was found at scarcement level, eight or nine feet above the floor:

*we found evidence of this later occupation and adaption of the original building to subsequent purposes in the remains of two walls cutting off a portion of the area, and abutting on the inner wall of the broch as to form cells at different levels, the one having been seven or eight feet and the other ten or eleven feet of the debris formed by the ruin of the broch under their respective foundations (Anderson 1870, 234).*

From a second (but primary: Mercer 1985, 103) entrance access could be gained into a series of long amorphous structures, often with orthostats dividing them up into bays. It is probable that these were byres. Access to them was also gained from a long, wide extension of the broch entrance, very reminiscent of the period 4 entranceway at Crosskirk (where the broch entrance was also aligned with the entrance through the outworks), and a similar date may thus be suggested here. The precise relationship of this passage to the other external structures is not known, but structures C, D and E are plausibly a part of the same complex, and probably post-date the broch, although by how long a period cannot be gauged. Mercer notes the same relationship between the broch and galleried structures at Wag of Forse (Mercer 1985, 103). The S wall of the broch was clad with a revetting wall built in a different style to the broch, and which is clearly secondary (Mercer 1985, 102-3; MON WAR 13; RCAHMS 1911a, fig 37). This need not necessarily pre-date the galleried structures.



Structures F, G and H (fig 42g-h) are all smaller structures set apart from the rest of the site, consisting of sub-rectangular cells (sometimes sub-divided by orthostats) and with a smaller cell appended to the end opposite the entrance. These are similar to post-broch structures at Gurness and several other sites, but their exact dates are unknown. They do not have the long passages which are seen at Nybster and Freswick Links. There is no reason to believe they were not contemporary with the galleried structures; their distinctive form may be indicative of their function. Only structure G produced any finds: pottery, a steatite vessel and human bones (Anderson 1890, 136), and again these do not help with dating.

In addition, the S and W sides of the monument are protected by a ditch, which Mercer (1985, 103) believes to exhibit evidence for secondary remodellings.

#### 8.8 SUMMARY OF EVIDENCE FOR LIA ACTIVITY IN CAITHNESS (Appendix IV c-d)

As in Orkney, there are only a few broch sites where artefacts hint that LIA activity can be expected (fig 65); five broch sites produced LIA II pins and combs, and in two of these cases these probably relate to attested settlement *adjacent* to the broch site. There are no structural remains which can *definitely* be associated with this postulated activity. Yet there is extensive evidence to indicate that activity on Caithness brochs was prolonged, namely there were several phases of occupation within the broch tower itself, extensive complexes of (multi-phase) outbuildings, and artefacts which date to the LIA (at Bowermadden, Everley, Ness, Kilminster, Freswick Sands, and possibly at Crosskirk). With the exceptions of the LIA II artefacts discussed above, there are virtually no pointers to a LIA II presence in any of these outbuildings. Yet, although outbuildings are equally as common in Caithness as in Orkney, none of them seem to be representative of the radially disposed settlements which we have seen there. There is some evidence for an encircling passage at Kilminster, Crosskirk, Hillhead, Keiss West and Green Tullochs, and extended broch entrances are common, but the complexes on either side of them are amorphous and tend to exhibit a wider range of buildings than we saw in Orkney. In view of the lack of recognised LIA structures, there is virtually

nothing to compare the buildings surrounding brochs with, vital where the relative chronology of the broch and these buildings is not known. This is the case for virtually all sites except Crosskirk, the best excavated and most fully recorded broch site in Caithness. There is no evidence for the insertion of wheelhouses into broch interiors, as in Shetland.

In terms of physical structure it is not possible to identify factors which might have led to the preference for subsequent activity on some sites rather than on others. Some are defended with outworks, others were enclosed with just a wall, and at all of them there were buildings external to the broch. All the sites are coastal or near coastal, but their distribution as known reflects the activity of earlier antiquaries, particularly Tress Barry, rather than any other factor. Unlike in Orkney, there seems to be no preference for sites which in terms of their structure (for example the presence of outworks) indicate a higher status for their occupants than others. In Orkney the reused sites tended to be those which had also produced Roman artefacts, but in Caithness Roman finds are not exclusive to those sites with prolonged activity.

A larger number of these sites have produced evidence for use as burial grounds, which are *possibly* of LIA date. As in Orkney there is a tendency for these *not* to be the sites on which there may have been LIA occupation, the implication being that they were probably grassy mounds by this stage. As in Orkney, sites reused for burial purpose tend to have an inland distribution (fig 65); contemporary settlement, whilst probable, has simply not been recorded. The familiar problem is that of recognising when a burial is LIA rather than Norse, or even MIA. There is an increasing tendency to assume unfurnished long-cist burials are LIA or late Norse. Yet there is evidence from Crosskirk for a seated male burial deposited within a long cist, adjacent to the fire-place of enclosure I in the period 3 outbuildings (Fairhurst 1984, 87-88). There is no evidence to suggest this was an intrusive grave, and its proximity to the domestic areas is reminiscent of graves which have been discovered adjacent to the earliest 'Scotto-Pictish' [LIA] levels at the Udal (Crawford 1986). Certainly the early presence of long-cist burial (there is also a similar burial at Skaill, Sandwick: *Statistical Account* 1799, 459) cautions us against too quick an



interpretation of these graves as peculiarly LIA or later.

In addition to the above, the following evidence has been recovered for human burial on broch sites:

long cists: at Wester four cists were inserted into the sand over the mound, and there were the bones of a child in the outbuilding (RCAHMS 1911a, item no 513); at Brounabon the remains of a skeleton were close to the door of one of the stairs and a long cist was close by the side of the door - human bones were also found outside the broch wall where two standing stones appear (Anderson 1890, 142); in addition to the aforementioned burial, there was a couple of unaccompanied long cists in the period 5 levels at Crosskirk (Fairhurst 1984); at Thrumster a cist burial was in the 'mould' heaped up against the outside of the broch (RCAHMS 1911a, item no 502); an unspecified cist containing human bones was excavated at Achingale in 1841 (RCAHMS 1911a, item no 473); an unspecified cist at Dale 2, excavated in the 1850s, contained bones (Anderson 1890, 185); a cist with skeleton was found at Dunbeath (Anderson 1870, 230); a stone coffin at Latheron Wheel (*ibid*); and a stone cist containing human remains was found near Green Tullochs in 1871 (RCAHMS 1911a, item no 348).

short cists: remains were found at Achavar (Anderson 1890, 187; RCAHMS 1911a, item no 199); it is only their context which suggests an IA date.

miscellaneous human remains (some of which may be the by-product of late burials): human bones were found in the interior at Achvarasdal Lodge (RCAHMS 1911a, item no 353); at Hill of Works two skeletons were lying on the floor of the chamber within the wall (RCAHMS 1911a, item no 3); a child's lower jaw was recovered at Keiss South from the secondary midden B at the spot marked X (Laing 1866, fig 36); at Kettleburn four pieces of human cranium were embedded in the ashes of chamber O - the excavator suggests this is evidence for cannibalism! (Rhind 1853, 216-17); fragments of mixed human remains came from the debris at Kilmster (Calder 1948); human bones were recovered from outbuilding G at Yarrows, along with fragments of pottery and a steatite vessel (Anderson 1890, 136) and also from the broch mound, in one case in a short cist (Anderson 1870, 229); at Ousedale Burn a burial was found in the narrow opening up against the outside of the broch, head downwards (MacKay 1892, 354); excavations



in the 1870s, for which there are no records, produced the remains of as many as forty skulls at Burn of Latheron Wheel (RCAHMS 1911a, item no 212); human remains are recorded from Halcro (RCAHMS 1911a, item no 1); at Hoy, about one foot (c 0.3m) below the surface on the top of the mound, skeletons aligned E-W have been noted protruding from the S edge of the mound (RCAHMS 1911a, item no 435); human remains and querns came from Murkle (RCAHMS 1911a, item no 319); at Dalwinnan a burying ground is believed to be on top of the broch (Anderson 1890, 186); and at Brimsade in the parish of Thurso, eight or ten skulls were taken out from the broch and reburied (Anderson 1890, 184).

There are also Norse graves at Westerseat near to the broch of Kettleburn (Batey 1987b, 139; NGR ND 357 513); a furnished cist burial at Castlehill (Batey 1987b, 138-39; RCAHMS 1911a, item no 320); and furnished cists at Housel Cairn may be Norse (RCAHMS 1911a, item no 1151; Batey 1987b, 142).

Finally, mention must be made of another cemetery from the links at Keiss which is probably contemporary with the Ackergill and Watenan cemeteries, described by Laing (Laing 1866, 10-18). The site is described as a long, low mound, about three hundred yards (c 275m) long, running parallel to the beach. Excavations took place in about the 1840s, and in it

*Kists were found in every instance with wonderful regularity at about fifteen feet [c 4.6m] apart, in the central line of the mound. They were all undisturbed and contained human skeletons, and were all of the same structure, consisting of walls of unhewn flagstones from the beach, with no floor, but covered with large flat stones. The kists generally lay north and south, or at a slight angle to the direction of the mound and seashore ... The skeletons were all laid full length, except one, in which the head and legs seem to have been partially crumpled up ... above each kist was a small cairn or pile of stones from the beach, from one to three feet [c 0.3-0.9m] high ... In one instance the kists lay in a double tier, one over the other*

All these graves were unfurnished, with the exception of a dog bone in one. The central cairn was described as the 'Chief's Kist', and appears to have been distinguished on the basis of a number of supposed stone implements which were found in the grave (*ibid*, figs 8-18), but nearly all of these can be dismissed as natural stone

flakes, and it is impossible to identify figure 9 positively as a broken stone axe without a section drawing.

In conclusion, it is impossible to identify definitely LIA settlement on any of the brochs in Caithness, although the occasional pin and comb may suggest that there was unrecognised activity in the vicinity. Most identified structures are credible in a broch or late broch context, and many were obviously in use during at least one of the prolonged periods when the broch interiors were in use. The general absence of recognisable LIA artefacts perhaps confirms the general impression that LIA domestic occupation was elsewhere. A part of this activity probably took place around certain oblong or rectangular buildings known locally as wags (fig 66). Of these, Langwell and Forse are the only excavated examples (A O Curle 1912; 1941; 1946; 1948), but recent survey on the Dunbeath estate suggests further examples (Morrison 1986). Wags have long been held to be unique to Caithness, more particularly the parishes of Latheron and Dunbeath, but an increasing number of similar structures are now being discovered in Orkney where there is evidence for their LIA pedigree: from sixth and seventh century levels at Pool; early phase 8 at Howe; and possibly at the Brough of Birsay (for example structure 15, Hunter 1986, 56; fig 66). The structure at Howe is probably domestic rather than a byre (*pers comm* B Smith; *contra* Carter *et al* 1984, 68-69), and such an interpretation is not implausible for many of the other sub-rectangular forms from Orkney and Caithness. With the possible exception of these wags (and none of the Caithness examples are dated), there are no structural forms in Caithness which are as yet recognisably and distinctively LIA.

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It now remains to examine how these observations in the study area of Orkney and Caithness fit into the overall picture of LIA settlement in the Atlantic Province.



## CHAPTER 9: GENERAL REVIEW OF SETTLEMENT EVIDENCE IN THE ATLANTIC PROVINCE



## CHAPTER 9: GENERAL REVIEW OF LIA SETTLEMENT IN THE ATLANTIC PROVINCE

This chapter briefly examines the evidence for LIA settlement and activity from elsewhere in the Atlantic Province (Shetland, Sutherland, the Outer Hebrides, and the West Coast, Inner Hebrides and Small Isles). The relevant evidence from each area is summarised in appendix IV e-n. The evidence from Sutherland and Shetland is summarised in closer detail, because these are the zones immediately adjacent to the study area, and thus bear more comparison.

### 9.1 SUMMARY OF EVIDENCE FOR LIA SETTLEMENT IN SHETLAND (Appendix IV e-f)

It can be shown that activity inside brochs continues into the LIA I, possibly LIA II, when wheelhouses are inserted into their interior. A wheelhouse is a roundhouse with a series of radial piers around its circumference, whose function is to support the roof of the structure, and thus create a series of discrete spaces. The peripheral cells often have corbelled roofs. When the piers are not contiguous with the inner wall, then this is known as an aisled wheelhouse. The excavated evidence from Clickhimin (fig 67; Hamilton 1968a) and Jarlshof (fig 68; Hamilton 1956) suggests an appreciable lapse of time after the construction of the brochs before the wheelhouses were inserted, an observation also supported by the evidence of Mousa (Fojut 1985, 63). There is no evidence for the type of multiple slab divisions seen in many Orkney and Caithness brochs; the original fittings at Clickhimin were wood (*ibid*). No definitely LIA II artefacts have been found in the primary levels of wheelhouses, whether they are inside or outside the brochs. Hamilton (1968a, fig 3) describes the Shetland wheelhouse as beginning in the second or third century AD, and persisting

*though latterly in economic decline, until the eighth-ninth centuries when the islands were colonised by Norsemen.*

Yet there is no evidence that wheelhouses continued to be constructed into the LIA II. Rather, LIA II artefacts at both Clickhimin and Jarlshof tend to be associated with semi-subterranean sub-circular huts and passage house complexes, or their associated middens.

Fojut (1985, 60-66) has observed that many of the identified

broch sites show clear foundations of less substantial structures which may have served a residential function. Pre-Norse examples have a tendency to be circular and sub-circular (internal diameter 2-4m) or oval to oblong (2-5m internal length, 1.5-3m width), but little chronological significance can be attached to any of these forms. However, the mode of semi-subterranean construction does seem to bear some chronological significance, albeit only on the basis of Jarlshof and Clickhimin. Some of the subsidiary buildings may be contemporary with the brochs, but on present evidence these seem to have had an agricultural, rather than residential, function; there is no evidence for the radiating outbuildings seen in both Orkney and Caithness (chapter 8).

## 9.2 SUMMARY OF EVIDENCE FOR LIA ACTIVITY IN SUTHERLAND (Appendix IV g-h)

Nothing is known of LIA activity on or in brochs in Sutherland, and only marginally more is known of MIA activity. In part this is because very few sites have been thoroughly investigated, in either past or recent times. There is also the possibility that LIA use of broch sites was not so frequent as has been observed in Orkney and Caithness. Only a very few sites have revealed any evidence for outbuildings, and only in one, possibly two, cases do they appear to be either radially disposed, or is there any evidence that they might be in part contemporary with the broch itself (at Carn Liath and Kintradwell: Anderson 1883; Joass 1864; 1890; fig 69).

In a few cases there is evidence that a site was reused for burial in the post-broch, probably LIA period; at Carn Liath shallow, lidless cists and burials were found outside the broch, and there was a human skeleton on top of the scarcement (Joass 1890, 104; but note also the recently discovered BA cist on the site: Love 1986); at Carrol a series of skeletons was found at various places to overlie the structure (Joass 1890, 107-9); and at Kintradwell a total of 14 bodies was found in and around the broch (*ibid*, 99-101). At this last site the identified burials included men and children, only a few associated with any arrangement of stones, but, interestingly, a few were furnished by iron weapons. As it is not known whether LIA burials were ever furnished, there is no need to dismiss these



automatically as Norse. The excavator believed that at least some of these burials were inserted when the broch was dilapidated. Another burial was noted in a shallow grave on the neighbouring links:

*Many such interments occur there at a depth of from three to four feet. The body generally lies on the side, the limbs partly bent, and the whole set round and packed with small slabs and stones. Occasionally there is a covering of slabs, and generally a paved circular space, about four feet in diameter, a few inches under the turf over each interment. Cases of burial in short cists occur in the same sandy terrace (Joass 1890, 100)*

On the basis of description alone these bear a resemblance to LIA burial rites (for example Close-Brooks 1984), and may have been of this date. This amounts to a large concentration of burials, apparently of LIA date, in one small area. One Pictish stone (Allen and Anderson 1903, 43) was found in the nearby cliff adjacent to a further burial (Joass 1864, fig 1.H), a second in an earth-house (Allen and Anderson 1903, 43-45) which also incorporated a runic inscription (RCAHMS 1911b, no 469); in total four fragments of symbol stone have been found within a quarter of a mile radius of the broch (*ibid*, no 297). All these, in association with the name of the site, which possibly is derived from an association with Saint Triduana or Tredwell (MacKinlay 1904, 304; Watson 1926), and perhaps suggests an important early Christian presence in this vicinity (§11.3).

### 9.3 SUMMARY OF LIA SETTLEMENT IN THE OUTER HEBRIDES, SKYE AND THE SMALL ISLES (Appendix IV i-k)

In the Western Isles the range of potential IA sites is wide; we are looking for evidence of the lengthy use of broch, dun, wheelhouse and fort sites as well as evidence for the date of construction and use of these structural forms. Examples of LIA pin and comb are found on most of these settlement forms, in addition to miscellaneous other sites types, notably sandhill sites. There are also a number of sites which on the basis of pottery can be assumed to be LIA, despite the fact that they have not produced any other LIA artefacts. Pottery has long been used to indicate the presence of Dark Age settlement; in contrast to other areas of the Atlantic Province, the area between Tiree and N Lewis has always been a ceramic rich zone (Lane 1983, 5) (more recent excavations, particularly in Orkney, are now transforming this bias). In 1966 Young outlined a sequence in which she saw the



development from ceramics of incised and cordon wares on wheelhouse sites to later sparsely decorated forms, subsequently evolving in about 500 AD into coarse plain wares. Whilst her chronological arguments were weak, recent work by Lane (1983) has not been able to supersede this basic structure. Yet his work has dramatically increased the number of sites on which LIA activity can be suggested, and his results are incorporated into appendix IV. There is no evidence for LIA activity in fort sites on these islands, although there is on the adjacent mainland. A small polygonal fort at the Udal, only 7m across, was built in a novel technique, and is reputedly Norse rather than LIA (Crawford and Switsur 1977, 131; Crawford 1986).

LIA pins and combs are fairly ubiquitous in the Western Isles, but in very few cases are secure archaeological contexts known. With regard to brochs, which are relatively few in number in the W, there is evidence for prolonged activity in their interiors. At Loch na Berie, a very definite structure, an example of a polycellular building, was constructed at the scarcement level (Topping 1986a; Harding 1987). Dun Cuier is another example where a broch (or dun) can now be shown to have several phases of later IA activity (Young 1956; Armit 1988a; fig 70a).

But wheelhouses are the real issue in the Western Isles. Stevenson (1955a) had used the evidence of the pins and combs to suggest that this architectural form had a longer time-span than was previously assumed, extending into the second half of the first millennium AD. However, there is still no evidence that wheelhouses were being constructed in the LIA II or even LIA I (Armit forth). It seems the majority were probably built in the MIA. Their earlier pedigree is perhaps suggested at the Udal where a series of wheelhouses overlay a LBA structure. In addition, recent excavations by Barber at Hornish Point may have produced evidence for an origin in the late first millennium BC (Barber *in litt*). Mackie (1965a), in his scheme for the Atlantic Iron Age, divides the material culture into five stages. Period III is his broch stage. He suggests that the wheelhouses were devised at Jarlshof, and the idea was then carried to other regions. He dates all wheelhouses to his stage IV which embraces

*the late broch phase and all the wheelhouse stage  
in the west, though not perhaps in Shetland. By  
the time the composite combs and pins of stage V*

*appear, in the 6th century, or later, most of the brochs and wheelhouses were probably in ruins or choked with occupation debris (ibid, 132).*

There is, however, not sufficient evidence from the W to suggest that wheelhouses are consistently later than brochs, which with the exception of Skye are only present in small numbers. In terms of material culture, wheelhouses are virtually identical to brochs throughout the Atlantic Province (MacKie 1965a, 110). No satisfactory chronological distinction can as yet be made between free-standing wheelhouses and recessed/subterranean examples, nor between aisled and non-aisled examples.

Wheelhouses were often associated with outbuildings of various kinds, both domestic and agricultural (Scott 1947, 22), but never anything as complex or integrated as the MIA nucleated broch settlements seen in Orkney. In addition, several wheelhouses and associated structures were sometimes grouped together, as at Foshigarry (Beveridge and Callander 1931) or the recent excavations at Kneep (Armit 1988c). These complexes bear a similarity in overall form, if not detail, to the LIA I cellular complexes noted in Orkney at Pool and Howmae (§8.2). As with brochs, the wheelhouses commonly went through several phases of occupation, albeit not necessarily continuous, often with extensive modifications and additions, as at Kneep (Armit 1988c) or à Cheardach Mhor (Young and Richardson 1960; fig 70b). In no cases can LIA II artefacts be definitely associated with their primary levels. For example, at Bac Mhic Connain the LIA pins and combs were associated with later reuse of the wheelhouse interior for metalworking (Beveridge and Callander 1932) and at Foshigarry a group 5 comb was found on top of the remains of a wheelhouse pier (Beveridge and Callander 1931, 312).

Evidence for the reuse of broch and wheelhouse sites for burial appears to be scant, and unknown for ecclesiastical purposes. However, this subject has not been thoroughly pursued here.

However, evidence for LIA settlement in the Western Isles is not restricted to the reuse of brochs and wheelhouses. Nor is there any evidence that increasing pressure on the soil and climatic deterioration led the 'most energetic colonists' to move S to the Scottish mainland as Scott (1948a, 115) suggests. One site, Coileagan an Udal, henceforth the Udal, is fundamental to our comprehension of LIA settlement in the W. Excavations here have



continued for nearly thirty years under the directorship of I Crawford. As yet only interim reports have been produced, for example Crawford 1986, from where the following summary is taken. Between 130-300 AD settlement migrated along the machair ridge from a wheelhouse complex at Udal South (US) to the end of its associated field systems, Udal North (UN). Three stages of development can be traced in the buildings. In levels XIV-XIII (the levels are numbered from the top down) there are simple, oval-bellied buildings with small satellite hearths lying along the long axis, and a single internal revetted platform. In level XII the buildings take a more symmetric 'ladybird-like' plan: a large oval chamber, 6 m long, with a satellite on one end, a doorway on the other, and a central slab hearth, framed by opposed revetted platforms, also containing major post-holes. Crawford describes this as a *ventral* house. The third phase sees the ventral house above embellished with minor satellites, hence the *polyventral* [here *polycellular*] house (fig 41a). Many of these later houses were enclosed by timber palisaded enclosures, which were obviously important, one example going through at least ten replacements. A sequence of adjacent enclosures is strung out along the machair ridge, but no details of their chronological inter-relationships are yet available. At all periods these buildings were accompanied by minor buildings, 'four posters', 2.4m square, with tiny slab-lined hearths. The latter have not been recognised elsewhere. Crawford believes that this settlement is probably Scottic. Elsewhere in the AP and Ireland, ventral and polycellular forms can as yet only be ascribed a seventh century, or later date (68.1). In the case of Deer Park Farm, Antrim, the date is very precise - a *tpq* of 648 AD derived from two wooden uprights (Lynn 1989). Few, if any, of the Dark Age artefacts at the Udal can be shown to have derived from IA forms. None the less, Crawford (1986, 12) bids caution before interpreting these new settlement forms as a direct result of the invasion of *Scotti* from Dál Riata in the early sixth century AD. Lane (1983) suggests a break in the chronological sequence.

A new type of IA settlement form has recently been discovered on Skye which may be LIA in date. At Tungadale, upon investigation of a supposed souterrain, it was found to be entered from a long rectangular building with one apsidal end, and a doorway in the

other. Were it not for the absence of piers, this form is very similar to the wags in Caithness, which may be LIA in date (§8.8). At the very least this site suggests that IA structures in the West may be rectangular, calling for future revision of earlier fieldwork (when rectangular structures were likely to have been considered as medieval).

#### 9.4 SUMMARY OF EVIDENCE FOR LIA SETTLEMENT IN THE WEST COAST AND INNER HEBRIDES (Appendix IV 1-n)

On the West Coast and in the Inner Hebrides the main types of IA settlement evidence to be considered are forts, duns and brochs. The wheehouse and its variants are rare in Argyll, despite being comparatively common in Skye and the Outer Hebrides (RCAHMS 1980, 23). Such forts as are dated seem to belong largely to the pre-Roman IA (Alcock *et al* 1987, 131). Brochs are also few, and duns constitute the majority of fortified sites in the area. These are defined as

*a comparatively small defensive structure, usually but not always sub-circular or oval on plan, and with a disproportionally thick dry-stone wall enclosing an area that rarely exceeds 375 m<sup>2</sup> (RCAHMS 1971, 18).*

A more detailed discussion of their form and function can be found elsewhere (Alcock and Alcock 1987, 132-34). Alcock and Alcock (*ibid*, 134) estimate that 29% of all duns in Argyll had outworks but not outbuildings. The walling of the dun was sometimes timber-laced, and on occasion this has become vitrified. The earliest duns were possibly founded in the sixth or seventh century BC, but the majority were probably built in the first to third century AD. Alcock and Alcock (*ibid*, 131) estimate that 85% of excavated duns in mainland Argyll were occupied in the first millennium AD, and that 70% were certainly occupied, and many were built or modified after AD 500. Forts sometimes share some architectural features with duns, the distinction being their size, not necessarily their function. In a few cases forts are sometimes overlain by duns, as at Belfield, Cullan Doon and Dùn Skeig (RCAHMS 1971, nos 159, 162, 165), but the dates of either form are unknown. Very few internal structures have been recorded in either duns or forts by fieldwork alone. In a few



cases these may be contemporary with the walling, as at Dùn Tealtig, Dùn Uragaig and Dùn Meadhonach (RCAHMS 1984, 22).

There is as yet no definite evidence for LIA, more particularly LIA II use of broch sites, except perhaps at Dun Mor Vul (MacKie 1974). However, there was reuse of/continued activity on both dun and fort sites, some of which continued to be constructed in the LIA, as at Dunadd (Christison *et al* 1905; RCAHMS 1988, no 248) and Dunollie (Alcock and Alcock 1987). Dunadd and Dunollie are both high status sites, but there is also evidence that sites of a slightly lesser monumental status, such as Kildonan (Fairhurst 1939; Peltenburg 1982), were also being constructed or at least remodelled in the LIA. Peltenburg (*ibid*, 208) emphasises how, in Kintyre at least, there is no uniform evolution from one monument type to another. The question is thus how many recognised duns and enclosed sites are LIA rather than MIA? With the exception of Kildonan, very little in the way of internal structures can be associated with any of this later activity. Little work has been done on crannogs in this area, but at least one of them has been shown to be LIA in date, and many more will probably be shown to be contemporary; at Loch Glashan, only partially excavated, a rectangular structure was detected on the crannog platform (RCAHMS 1988, no 354).

A problem common to the whole of the Atlantic Province is the recognition of settlement which was not of a monumental nature. However, at Arnabost (Beveridge 1903, 1-3; RCAHMS 1980, no 231), and Kerrera (RCAHMS 1975, 22) there are suggestions of activity associated with a souterrain, and presumably associated with domestic structures, perhaps similar to the single-roomed houses seen at both Machrins (fig 41f; J N G Ritchie 1981) and Bruach an Drùmlein (RCAHMS 1988, no 350). Despite differences in scale and method of construction the structures at both these two last sites exemplify the slight nature of the structural remains which survive to be discovered by the archaeologist. Ritchie (1981, 268) thought the flimsy nature of the stonework at Machrins suggested little more than stances for impermanent structures, although the sequence of hearths in some houses suggests that prolonged occupation, or on a number of occasions. Much evidence may therefore be lost, and certainly the chances of discovering such settlements in the course of routine archaeological survey are slight. Chances of discovery are further

reduced in the absence of enclosing outworks. This problem is obviously not one which is confined to later prehistory (note the fragile nature of the structures at Ardnave: Ritchie and Welfare 1983), but it is certainly more acute here, when it seems that perhaps a greater proportion of settlement was not monumental in either scale or nature.

It is not possible to generalise about the nature of LIA settlement in this region, but the diversity in settlement forms can be noted, ranging from nuclear forts through duns to structurally slight, undefended (but sometimes enclosed), single or grouped, domestic units. There is as yet no evidence for the polycellular type units seen elsewhere in the Atlantic Province, although at Machrins two of the cells did abut each other, whilst apparently retaining their own entrances.

## 9.5 CONCLUDING COMMENTS

This survey has emphasised the diversity of settlement types and patterns which are to be found throughout the IA in the AP. As Stevenson (1955a) rightly observed, there is evidence for seventh century or later activity on many broch sites, but the picture of both broch-orientated and non-broch IA settlement is now much fuller, and slightly more complex than perhaps he envisaged.

Brochs are particularly concentrated in the N and NE parts of the AP, and it is mainly here that there is any evidence for their LIA II reuse. But even here the form of activity on these sites varies from region to area, and from the MIA onwards. In the study area of Orkney and Caithness the settlement pattern shares more in common than other areas. From their inception, many of the brochs here had a domestic role. Rebuilding and modification of the interiors was common, and might commence from an early date. By the LIA II the interiors were sometimes used for non-domestic activities, but this took place at a high level within the tower, or its shell (domestic reuse, as at Loch na Berie, is probable, but as yet unrecognised). Only in Shetland is there evidence for the insertion of wheelhouses into the interior of the brochs. Fojut's interpretation of this is

*that when the wheelhouse type of structure was current, Orkney already had an adequate stock of*



*buildings of this capacity [ie large roundhouses]. This leads to the suggestion that the abandonment of brochs in their primary form of use was a later event in Shetland than in Orkney, and that the wheelhouse developed from old ideas after the dispersal from broch to outbuildings had become well-established in the more southerly isles. (1985, 64)*

His view is based on the assumption that broch outbuildings post-date brochs by some more considerable period of time than the present Orcadian evidence would seem to suggest (§8.2). However, at Howmae there is some suggestion that there were free-standing wheelhouses in the study area, and future investigation will undoubtedly reveal more cases. But the main evidence for their distribution definitely comes from the W, where they are either freestanding or semi-subterranean, but rarely in direct association with brochs. Stevenson (1955a) used the evidence of the pins and combs to suggest that wheelhouses had a time-span extending into the second half of the first millenium AD, and by implication he was suggesting that they were being built later than the brochs. Whilst this hypothesis may still stand true, there is no evidence for their construction in the LIA II. In addition they do not exclusively post-date brochs, as seemed to be the case in Shetland; wheelhouses in the Western Isles have recently been shown to have an EIA, if not LBA pedigree.

Many of the brochs in Orkney and Caithness were surrounded by an extensive series of outbuildings, which were commonly arranged in a radiating fashion. These can be shown to have co-existed with the broch tower, and probably to have been constructed early in its history (chapter 8). Their early date creates something of a gap in the LIA I structural record for this area. Similar integrated settlements may also have existed at a few places in Sutherland, but are unknown elsewhere. This is not to say that in other parts of the AP the brochs stood alone; often they were associated with the occasional domestic and agricultural structures, particularly in Shetland. Here, as in Orkney and Caithness, there is a correlation between the presence of outbuildings and sites which lie in areas well-endowed with respect to arable farming (Fojut 1985, 63).

Evidence for the ritual and/or ecclesiastical reuse of MIA settlement sites is as yet limited to the N and E of the province. It forms the subject of discussion in §11.3.

But not all LIA settlement was on re-used broch, wheelhouse,

dun and fort sites. In the W of the province duns and forts continued to be constructed. But in Orkney and Caithness, perhaps also Shetland and Sutherland, it would appear that such monumental architecture ceased to be constructed in the LIA, nor were new types of settlements fortified. Here, as elsewhere in the AP, the problem is thus one of recognising and hence recovering such slight structural remains. These take the form of single, perhaps double, domestic units, sometimes individually enclosed, sometimes grouped together. At Buckquoy, for example, the walling was often laid onto the earth, and hence robbing would leave the former structure totally unevidenced (Hunter 1986, 61). Structures which are dug into settlement mounds, or ultimately enveloped by them, are usually better preserved, but in the absence of excavation it is rarely possible to date such mounds, or identify the precise nature of the settlement within them.

\* \* \* \* \*

The last two chapters have summarised the evidence for LIA settlement in the AP, drawing heavily on information derived from a re-analysis of the pins and combs found at many of these sites. The fullest picture exists for Orkney and Caithness. This area now forms the subject of part III of this thesis. An attempt is made in chapter 11 to explain the significance of the profound changes in the settlement record described in these last chapters.



PART III: A MODEL FOR ORKNEY AND CAITHNESS IN THE IRON AGE

CHAPTER 10: ANALYSIS OF SPATIAL PATTERNS IN BUILDINGS (ACCESS  
ANALYSIS) AS AN INSIGHT INTO SOCIAL STRUCTURE



PART III: MODEL FOR ORKNEY AND CAITHNESS IN THE IRON AGE

CHAPTER 10: ANALYSIS OF SPATIAL PATTERNS IN BUILDINGS (ACCESS ANALYSIS) AS AN INSIGHT INTO SOCIAL STRUCTURE

This chapter will examine the way architecture structured the reproduction of society (§3.2.1) in Orkney and Caithness from around the middle centuries of the first millennium BC to the eighth or ninth century AD, that is from the period of the Late Bronze Age/EIA to the arrival of the Norse. A scheme is suggested for structural developments witnessed over this period, much of which is summarised from the findings in chapter 8, to which reference must therefore also be made.

On the basis of the general trends observed, a social interpretation is put forward. At the same time the technique of access analysis is used to investigate how the use of space structured and reproduced these changing social relations.

10.1 SUMMARY OF STRUCTURAL DEVELOPMENT

10.1.1 THE EARLY IRON AGE

*Lobate multi-cellular buildings, otherwise courtyard houses,* represent an architectural tradition whose origins lie in the Neolithic (such as Scord of Brouster, Shetland: Whittle et al 1986), but which still occurs in the late Bronze Age, such as village I at Jarlshof (Hamilton 1956, 18-31, fig 10). These lobate multi-cellular structures may also have continued to be constructed into the period of the EIA, as at Wilktrow in Shetland (Curle 1936b) where a smithy is associated with an example. But the EIA is generally characterised here by the introduction of a large *roundhouse* (sometimes oval) tradition, which has been recognised as taking two organisational forms (fig 71): isolated houses with thick walls sited in visually dominant situations and smaller structures with thinner walls which tend to exist in clusters, of which Jarlshof II is the best example (Sharples 1984, 119-20). Abrupt changes in many aspects of the material culture at this time are sometimes attributed to a population migration (Hamilton 1956;



Hedges 1987 III, 38). In Orkney thin-walled roundhouses have been recovered at Spurdagrove (Øvrevik 1985, 148, fig 7.4) and Skaill (Gelling 1984; Buteux forth) where they are associated with further agricultural structures such as a byre. The late date of one of the Skaill roundhouses highlights how late this tradition of thinner walled roundhouses continued (sometime between 360 cal BC-AD 220), and demonstrates that the development from thinner to thicker walled roundhouses was not unilinear. A series of five roundhouses was excavated at Kilphedir in Sutherland (Fairhurst and Taylor 1971) and the same number at Cnoc Stanger in Caithness (Mercer 1981, 52-56). In neither case can it be proved that these represent anything other than a succession of structures on one site. The slender dating evidence from these sites may be used to suggest a horizon of very large roundhouse construction in north Scotland prior to 500 BC (Mercer 1985, 73). The impression is of relatively small domestic/agricultural units, whilst the evidence from both Skaill and Kilphedir may suggest the shifting of settlement within a small area.

Thicker walled roundhouses have recently been recognised in Orkney and Caithness. Examples have been excavated at Bu (Hedges 1987 I), Howe (Carter *et al* 1984), Calf of Eday (Calder 1937; 1939), Pierowall (Sharples 1984) and Quanterness (Renfrew 1979), whilst the early broch at Crosskirk is sometimes also described as a roundhouse (Fairhurst 1984). It is clear from the evidence of Bu, Quanterness and Pierowall (fig 72) that these structures were established by about the seventh century BC, although a Bronze Age horizon for a large thick walled structure at Tofts Ness on Sanday, recently excavated by Dockrill, suggest that this was not purely an EIA innovation (*Archaeol Extra*, 3-4; there is now evidence for a further two structures, one of them a roundhouse, pre-dating this roundhouse: *D and E* 1988). The particular importance of these roundhouses is that they now provide a native pedigree for the later brochs, both in their thick walling and interior features. At several sites it can be seen how both types of roundhouse acquired broch-like features.

Most roundhouses were isolated save perhaps for a few ephemeral outbuildings, probably of agricultural function. Many both thin and thicker walled structures possessed *souterrains* or

*earth-houses* entered from their interiors. There is increasing evidence that examples of these which now appear as isolated monuments in the landscape were usually, if not always, ancillary to an above ground structure of a domestic nature (for example at Grain in Orkney: Haigh 1983). Most probably these northern examples were for storage of food products from both land and sea.

The direct development from the roundhouse to the broch is chronicled at Howe. At Crosskirk the early broch resembled a roundhouse in many respects, and at Clickhimin in Shetland a roundhouse precedes the broch (Hamilton 1968a). In Caithness it is becoming increasingly obvious that the brochs are but a later addition to an underlying palimpsest of earlier settlement (Mercer 1985, 98). Whilst the 'mound upon mound' profile is not one which is so common in Orkney, the same probably holds true here also.

#### 10.1.2 THE MIDDLE IRON AGE

*Brochs* represent a major monumental divergence out of an otherwise fairly continuous tradition of native architecture (cf MacKie 1987b) and the MIA is defined as the period when the broch became prevalent. It has to be recognised that the broch class (for want of a better term) covers a whole series of structures differing perhaps in age and form; a structure is best considered in terms of the 'social practices its plan was designed to cover' (Scott 1947, 26).

The date of the inception of this architectural form is not well established, but dates from Crosskirk, Howe and Dun Mor Vaul (MacKie 1974) suggest a broad horizon of use between the fourth centuries BC and AD, but probably concentrated between the second centuries BC and AD.

Many brochs in Orkney and Caithness were enclosed by outworks, sometimes incorporating a *blockhouse*. When the respective entrances are aligned it may suggest that the broch and outwork were conceived as a unity and may have been planned at the same time. At Clickhimin and Crosskirk, where there is some evidence for pre-broch activity, the outworks may pre-date the brochs. The majority of brochs in Orkney and Caithness are situated in positions where defence was apparently not the prime consideration (cf Fojut 1982 for similar conclusions on the Shetland brochs). A number are in



totally defensive positions, what Mercer (1985, 100) calls fortalice brochs. *Promontory forts* sometimes enclose brochs. They occur in Orkney and Shetland when hillforts do not and in Caithness where there are a few hillforts. Excavations at Castle Rock, Auchmithie, Angus (Ralston 1986) suggest that promontory forts may sometimes enclose lean-to-structures, or less probably in this case a roundhouse, of about first to second century AD date.

The primary internal broch fittings at Crosskirk (Fairhurst 1984, ill 28) and Howe (fig 48) suggest that in these cases the broch had initially a domestic function, in common with the earlier roundhouses which had similar plans. Little is known of the earliest internal features at Gurness and Midhowe, the best known brochs in Orkney. Whilst there is some suggestion that they may have been similar in nature to many of the extant features, it is obvious that in the case of Midhowe there were differences. Internal and external casing walls, which appear on many brochs in Orkney and Caithness need not be late; at Crosskirk their early construction reflected a series of structural weaknesses and the inadequate experience of the builders in constructing high walling.

Any isolated broch probably did not stand isolated for long. Outbuildings can be divided roughly into two forms: radial and non-radial (§8.3 and 8.8). The non-radial form may have arisen very early in the development of brochs (as at Crosskirk where outbuildings were constructed prior to the period of Roman artefacts, and possibly as early as 200 BC). This is in contrast to the Orcadian sites with outbuildings, where Roman artefacts may be associated with their earliest levels. In some cases non-radial outbuildings may precede radial outbuildings (as possibly in phase 6 at Howe).

In Caithness there is little evidence for the radially disposed settlement seen in Orkney, despite the fact that outbuildings are equally common in each area. However, there is occasional evidence for an encircling passage, and extended entrances are common, but the complexes on either side of them are amorphous and tend to exhibit a wider range of building types than is seen in Orkney. It is not known if later Iron Age structures are chronologically distinctive in Caithness, and there is virtually nothing to compare the buildings around the broch with. Artefacts are no more helpful because the contexts of either Roman or

suggestively MIA artefacts have never been ascribed specifically to any of the out structures.

Returning to the examples of radial outbuildings, the dating evidence for these rests almost exclusively on the evidence from Howe (Carter *et al* 1984), Gurness (Hedges 1987 II) and Midhowe (Callander and Grant 1934). Hedges' work (1987 II-III) suggests that some of the outbuildings associated with brochs in Orkney have been built in the same phase of construction as the broch, or are near contemporary afterthoughts, because the layout of some of the outbuildings and the broch is by and large systematic, and their floor areas, fittings and furnishings are comparable. Whatever one's stance in the debate about how soon after the construction of the broch the outbuildings were erected, it cannot be disputed that the broch and outbuildings co-existed at some point, functioning as a unity.

Contemporary with the brochs are likely to have been some roundhouses and more fragile settlement types which are not so obvious on the ground, particularly the settlements associated with earth-houses. The extent to which the northern MIA population lived in or in the immediate vicinity of brochs cannot be gauged.

### 10.1.3 THE LATE IRON AGE I

The LIA I marks the time when the brochs ceased to be occupied as anything other than temporary workshops or as foundations for less monumental domestic structures. The function of the broch sites had probably been changing up to this time, for example outworks were not being maintained (as at Howe and Crosskirk), although the broch might still be in use. Settlement either continued on the broch site in a modified manner, or was created *de novo* elsewhere. Often similar structural forms are found on both. The LIA I is taken to end in the early seventh century when more distinctive artefacts and buildings appear. The LIA I is the period of which least settlement is known.

A considerable element of LIA I settlement is probably present on broch sites, as a fourth century sherd from Crosskirk may suggest (Fairhurst 1984). At present there is no dating evidence to show that non-broch sites, such as Pool, extend back any further than about the fourth or fifth centuries AD. As yet the sample of sites



is too small, and both post-broch and non-broch settlements may be expected to fill this gap one day. Nor need it surprise us if some broch outbuildings are found to have had an extremely extended life span - at Pool a small (probably multi-celled) unit has been demonstrated to have been occupied over a number of centuries (*pers comm* Hunter). It is not always possible to recognise changes in structural form on broch sites because of the tendency to reuse earlier structures, but the general impression at Howe is of a series of interconnecting sub-circular and sub-rectangular rooms with yards. There is no evidence for any more than a couple of domestic units.

A new type of settlement was developed *de novo* on some non-broch sites. At Pool excavation of a settlement mound has revealed substantial prehistoric settlement underlying Norse halls and byres of the ninth to thirteenth centuries (*Archaeol Extra*; Hunter *pers comm*). Here, in about the fourth or fifth centuries AD a roundhouse and associated buildings, preceded by a probable souterrain and associated structure, were built into Neolithic middens underlying the site. This then developed into a *cellular settlement* of adjoining and interconnecting roundhouses and smaller circular cells. Perhaps most of the site had eroded into the sea, but there is certainly no reason to suggest any broch settlement in the immediate vicinity. Indeed it seems that this cellular type of complex may be paralleled at Howmae, North Ronaldsay (Traill W 1885; Traill J 1890). It thus seems that settlement mounds are characteristic of LIA settlement. The number of domestic units which might have been extant in any one settlement at a single time is unknown, but the presence of interconnecting courtyards hints at a degree of complexity not immediately apparent in their amorphous plans.

It has recently been recognised that certain oblong or rectangular buildings may be pre-Norse, most notably the oblong wags of Caithness. With the possible exception of these wags there are no structural forms in Caithness which are as yet recognisably and distinctively LIA.

#### 10.1.4 THE LATE IRON AGE II

To date the most distinctive LIA II structural forms are the

polycellular structures (figs 41-42) discovered throughout the Atlantic Province, primarily on *de novo* settlements. At the Udal many of these houses were enclosed by timber palisades, which were obviously very significant, one example going through at least ten replacements. A sequence of adjacent enclosures is strung out along the machair ridge, but no details are available at present of their chronological inter-relationships. When not on settlement mound sites, non-broch settlement of this date is difficult to detect because of the relative slightness of the structures and because building techniques on some sites are such that robbing would leave the former totally unevidenced.

A roundhouse-type form has been recognised on site VIII at the Brough of Birsay (Hunter 1986, structure 21, ill 17) which is assumed to be LIA II. On site VII at Birsay it is interesting to note that a drain divided two buildings from each other (*ibid*, ill 11), and is perhaps suggestive of further divisions between buildings. Cellular settlements, such as at Pool, may also have continued to be constructed, although the evidence for this is confined to the one site.

On the basis of the pins and combs discussed in part II there was evidently also some activity on broch sites in the LIA II. In Orkney we are perhaps seeing the preference for selective reuse of sites which have both massive outworks and surrounding settlements, sites which may by implication have been of especial importance in the MIA. At present no such pattern emerges from the Caithness evidence. However, it remains to be emphasised that there has been little excavation on late occupied broch-sites.

## 10.2 ANALYSIS OF SPATIAL PATTERNS IN BUILDINGS

Access analysis is a means of investigating the relationship between spatial order and society. As presented below this is a technique based on the *gamma analysis* of Hillier and Hanson (1984), which looks at the patterns of relations between inhabitants and between inhabitants and strangers as they are reflected in the use of interior space, in terms of the patterns created by boundaries and entrances. This approach has received much criticism (see particularly Leach 1978) because of its extreme belief that spatial organisation is a function of the form of social structure. I



believe that, without taking the full Hillier and Hanson line, but by adopting more modest horizons, this formal and vigorous technique can be demonstrated to be of some value to others who believe that spatial order does carry some social information.

There continues to be an increasing trend towards the interpretation of the archaeological remains of buildings, erstwhile architecture, in a social context, by analysis of their interior space (such as J T Smith 1978; Boast and Yiannouli [eds] 1986; Gilchrist 1988). To a certain extent this follows movements in architectural circles (for example Glassie 1975; Markus [ed] 1982, 4 for brief summary), and the work of geographers and social theorists (for example Gregory and Urry [eds] 1985). Two common themes, ultimately derived from *Structuration Theory* (Giddens 1984), seem to lie behind much of this work:

1. The belief that humanly-enclosed space is both produced by, and in turn produces and reproduces social relations. Thus architecture is seen as culturally meaningful, and not just as a response to certain environmental needs. However, wide differences of opinion exist as to if, how, or to what degree social relations might be gauged from archaeological remains. Leach (1978, 400) has argued that the chasm between basic space syntax and real life sociology is wider than Hillier and his colleagues suppose. Others, however, using the techniques of Hillier and Hanson have demonstrated that observed spatial patterns are not coincidental, and can be explained in social terms on the basis of historic and ethnographic evidence (Yiannouli and Mithen 1986). A similar relationship has been claimed on the basis of observed similarities between the plans of 'villas' in Britain and Gaul (Smith 1978).
2. It is recognised that all social interaction is situated within both time and space, thus time is emphasised as an essential component in all social analysis.

The theory and technique of access analysis, and the relevance, if any, of this technique to the elucidation of social structure through the medium of analysis of Fields of Discourse will now be discussed.

### 10.2.1 THE THEORY AND TECHNIQUE

A building is made up of walls which define a series of

enclosed spaces, the boundaries between which may be broken by doorways allowing access from one area to another. The importance of doors is not only that they open, but more importantly that they can close, effectively segregating spaces and controlling the means of access to any particular point. Access analysis is based on syntactic relations, and considers the arrangement of different spaces as a pattern of permeabilities, that is in terms of the interconnections between spaces. There will never be agreement between disciplines as to what constitutes social space (for example compare Fletcher 1977; Piaget and Inhelder 1956; Gregory 1978; Norberg-Schulz 1971), but this technique is important because of its descriptive autonomy, unambiguous rules of application, and its clear exposition of how these relate at the very lowest level to relations between inhabitants, and between inhabitants and strangers. Societies which might vary in their type of physical configuration and in the degree to which the ordering of space appears as a conspicuous dimension of culture, can all be compared on a similar basis.

The technique is best explained with the use of the example of a small modern house, where only the ground floor has been taken into consideration (fig 73A). Each unit of space, including transitional spaces such as a hallway, has been represented as a dot with lines between them where there is *permeability*, that is a doorway giving the ability to move between spaces (fig 73B). The network of dots and connecting lines forms an unjustified access map. This map can be *justified*, in this case from an outside perspective (the *carrier*), the stance of the stranger (fig 73C), although it could equally well have been from any point in the building. By justification is meant that all points of a certain *depth*, that is the minimum number of steps taken to reach them from the carrier, have been positioned on the same horizontal line, subsequent depth values on lines parallel to the first. Given the rules of construction any line will either connect with points on the same level of depth, or two levels separated by only one level of depth. The resultant map is both an aid to visual decipherment of the pattern, and could also in theory be combined with procedures for quantification (an aspect which is not pursued here).

Buildings are easier to study than settlements because open



spaces cannot be so readily separated into analytical elements (Hillier and Hanson 1984, 16), and the richness in differentiation of interior structures means that they carry more social information than exterior relations (*ibid*, 154). So, once spaces are defined, the spatial order of a structure can be represented in part by a diagram showing the interconnections of the enclosed spaces. A prerequisite for analysis is therefore an accurate map with all access points marked. The spatial intentions of architecture are only one of the formal discourses of intention in architecture, therefore as much information and as many ideas about the three dimensional form a building would have taken, and information about its function and the use of its constituent spaces are also needed. *Form* (the formal properties of space and the boundaries which define it - its style) and *function* (the purpose of buildings) must also be embraced. In practice it is virtually impossible to make a distinction between these attributes (Markus [ed] 1982, 4-6; cf Johnson 1988, 117). Hillier and Hanson (1984) minimise the interactive nature of these discourses because of their apparent belief in the analytical autonomy of the spatial dimension. However, these other discourses have to be brought into consideration if the full archaeological value of access analysis is to be appreciated.

The primary data demands of access analysis create some problems for most archaeologists. The success of illuminating and stimulating studies such as those edited by Markus ([ed] 1982) on the period of the Scottish Enlightenment, or by Graves (1989) on the English medieval church, is in no small measure due to the fact that the buildings which they are studying either still stand (albeit possibly with alterations), or full architectural plans exist for those which have been demolished or whose construction was planned but never realised. In addition these are periods for which some of the ideas of society, and the nature of values and relationships are known from documentary sources. One of the main criticisms levelled at Hillier and Hanson is that their technique cannot fully work unless something is already known of the relevant social structure, when it can be seen in retrospect how the observed patterns in the spatial arrangement relate to the known social structure (Leach 1978). Prehistorians do not have historical accounts, nor can they

make ethnographic studies of the populations they are studying, but they do possess a body of primary archaeological data which may provide non-spatial evidence for other aspects of social structure. It will never be possible to 'test' prehistoric social inferences derived from the spatial evidence; one can only explore its promptings from within a clearly defined understanding of the way material culture and social structure are related.

### 10.2.2 SOCIAL INFERENCE FROM ACCESS ANALYSIS

It is suggested that examination of access maps and the application of the techniques of Hillier and Hanson (1984), in combination with other evidence for architectural form and social function, may impart social information at three general levels, the first two of which are considered appropriate here:

1. The variations in spatial arrangements which appear when the complex is looked at from the point of view of its constituent spaces imparts social information about the realities of living in, or visiting, that particular building: where and how frequently physical encounters might be made between occupants and/or between occupants and strangers, and how these encounters might be controlled. The inhabitant-inhabitant and stranger-inhabitant interfaces can be observed/measured in terms of relations of *symmetry/asymmetry* and *patterns* of *distributedness/nondistributedness* (fig 74) because distribution articulates relations of boundary (the means of access to a space) whilst asymmetry reflects the importance of a space in terms of its degree of segregation or integration:

*'In gamma two spaces a and b will be : symmetric if a is to b as b is to a with respect to c, meaning that neither a nor b control permeability to each other; asymmetric if a is not to b as b is to a, in the sense that one controls permeability to the other from some third space c; distributed if there is more than one independent route from a to b including passing through a third space c (i e if a space has more than one locus of control with respect to another); and nondistributed if there is some space c, through which any route from a to b must pass' (ibid, 148).*

This spatial network suggests patterns which need investigating. As a result of labelling space in terms of use or form it is possible



to observe whether particular labels correspond to particular syntactic positions and to investigate these patterns further.

Interior space probably constitutes one of the the most common *locales*, or settings for activity and social interaction, the places where discourse can be sustained. Social analysis should therefore examine the way that architecture and the spatial organisation of a settlement intervene in various fields of discourse acting to structure some part of the cycle of social reproduction (Barrett 1989). At the same time the architecture and spatial organisation have to be considered as the result of social interaction. Access analysis can therefore be a tool for articulating an understanding of this, as knowledge of where, how frequently, and under what architectural circumstances, physical encounters occur are crucial. The information on access maps may be static, and cannot take the temporal frequency of discourse into account in its construction, but yet is of value in the consideration of potential time-space paths, or any cycles of social reproduction.

2. The study of the spatial configuration of a number of patterns may reveal variant properties, a set of which may be thought to constitute the generic rule underlying the space in question, and which can be referred to as the *genotype* (each example will undoubtedly have a different *phenotype*, or actual physical realisation of these rules). Some of the invariant properties which constitute the generic rule are observable and/or measurable in terms of relations of *symmetry/asymmetry* and patterns of *distributedness/nondistributedness* (see above).

The challenge is to explain how these observed topological patterns may relate to social factors if there is not simply a one-to-one relationship between spatial organisation and society. For example, might these expressions of boundary and control of space be reflecting the relations of physical autonomy and dependence between different sectors of a community? What type of social relations (for example gender, age or social status) might induce this spatial order and are these the social relations on which society is organised? Might the occurrence and repetitive nature of patterns be representing the acknowledgement of a code of symbols whereby authority is sustained? If an increased investment of

formality into the ordering of the landscape (cf Boast and Evans 1986) has been detected, this must be explained, and so on.

3. Finally, if one takes the stance of Hillier and Hanson, by recognising the basic syntactic *generator*, or organising principle, behind a human spatial complex, then different forms of social organisation can be recognised (Hillier and Hanson 1984, 82). This is because they believe that although there are many different manifestations of spatial relations, there are only a finite number of organising principles (*ibid*, 54, summary in fig 23). Their rules reflect the notion of social order as suggested by Durkheim (1984), who envisaged two types of social solidarity and located their cause in different spatial variables: an *organic solidarity* which works best when the system is large and integrated; and a *mechanical solidarity* which works best when segments are small and isolated.

This is the aspect of Hillier and Hanson's work which has received most criticism (Leach 1978; Batty 1985), and is of no relevance to a social interpretation involving the use of Structuration. It is not considered in further discussion.

### 10.2.3 ARCHAEOLOGICAL APPLICATION OF ACCESS ANALYSIS

In this study the designation of a space depends on the physical presence of a doorway, or crossing a low kerb or ramparts. It also depends, to a large measure, on the ascribed function of an area; it is obviously important to distinguish an enclosed area where sleeping rather than storage might have taken place. Areas with hearths are especially relevant. The recognition of functional zones, even if only defined by what in another period might have been described as furniture, is an obvious archaeological progression on a technique evolved for upstanding 'historic' structures. It is justifiable to treat stone furniture in terms of the spaces it creates because it is immovable.

If we take as an example the recently excavated EIA house at Bu (Hedges 1987 I) then some of the archaeological peculiarities of this technique can be seen more clearly. In fig 75A we see the permeabilities suggested by the excavator, and in figs 75B-C exactly the same process as adopted for the modern building in fig 73, and described above, is run through. Each space is usually an area which



is enclosed by orthostats, with access either through doorways (as in fig 75Bb x), or over low kerbs (v) where the access lines may therefore appear to be jumping walls. The central 'service area' (y) is defined by a low kerb and gives access to the hearth (z); it is divided into two areas because the smaller north section is partly paved and the distribution of artefacts (*ibid*, fig 1.57) may suggest that the southern half had a different function to the northern half. Area w is treated as a single space because the central orthostat was not designed to break the space into two distinct components, and because of the extent of floor deposits which are more or less specific to this area (*ibid*).

As there may be some uncertainty about whether or not a space was enclosed, the degree to which it was socially relevant, or when access points were valid, there will inevitably be phases in the complex history of even a well-recorded site when it is impossible to produce a totally accurate analysis (or any form of analysis). Yet there will be phases when a clear pattern does emerge, notably when buildings are first laid out on a virgin site. When comparisons are made of these major changes then patterns begin to emerge.

### 10.3 ORKNEY AND CAITHNESS c 600 BC-AD 800

In figs 76-77 various types of settlement have been drawn as justified access maps with an extended vocabulary of symbols to represent the different types of space and means of access. Detailed descriptions of the interior space of these sites is to be found in appendix V. These access maps therefore incorporate information about the spatial properties of the settlements and the potential functions of some areas. Moreover by the use of open and closed symbols different architectural types, where relevant, have also been indicated. The result is an all-embracing consideration of the architecture presented in convenient diagrammatic form.

In the middle of the early first millennium BC the population either lived in thick-walled roundhouses, which tended to be sited in isolation, or in small clusters of thinner walled roundhouses or lobate multi-cellular structures. Gradually the thicker-walled roundhouses developed into increasingly elaborate architectural forms, ultimately the broch, as competition in society led to the local pre-eminence of certain residential groups (Hedges 1987 III).

Both types of roundhouse were clearly domestic buildings, the only difference being in scale and the amount of effort put into their construction, signifying which inhabitants were more powerful. This distinction is almost undoubtedly the result of the ability to manipulate primary agricultural resources, indeed the appearance of earth-houses emphasizes the importance of food storage at this time (Sharples 1984, 121). Thus the potential for social diversification and development would always have been greater in Orkney and Caithness than other areas of the Atlantic Province because the land was fertile enough to maintain large populations and the competitive demands of production and consumption. Elsewhere the piecemeal distribution of natural resources tended to produce discrete social units with less potential for development. Fojut (1985, 63) notes that in Shetland peripheral dwellings seem to be more common upon sites which lie in areas well-endowed with respect to arable farming.

The authority of this new dominating social elite 'would be explicitly stated in the ritual of legitimisation and in the symbols of power displayed, but that authority would also be implicit in, amongst other things, the payment of tribute'. Thus as Barrett (1981, 215) goes on to say, the acceptance of new power might be mobilised in the labour of building the brochs and their enclosing ramparts. Prior to this the distinction in scale between the roundhouses and the adding of extra claddings to the walls may have been equally significant. These buildings were not simply constructed for extra warmth and/or defence and/or status, but in the process of their construction actors were brought together who demonstrated their acceptance of authority whilst at the same time ramifying or creating the basis on which this power was established.

Ultimately the result was the broch, the residence of the social elite which may in some cases have been formed from the amalgamation of certain social groupings, for certainly not all roundhouses/early brochs developed into fully fledged brochs, and it may have been necessary to muster resources in order to gain superiority over rival social units. The secondary double domestic units at Gurness and Midhowe suggest that a couple of domestic units, perhaps kin groups, might have amalgamated. The infilling of the roundhouses at Pierowall and Quanterness may be the result of conflict between competing lineages (Sharples 1984, 121). Factors



such as raiding or land hunger (cf Scott 1947) are not directly responsible for these changes, but could be catalysts for changes in the rules by which discourse was enacted, and society continued to 'become' (in the terminology of Pred, for example 1985). In Caithness a large number of roundhouse sites existing on the ground do not exhibit later development, and there are relatively few brochs in Caithness which appear on the surface to be new foundations. Again this suggests that not all earlier sites maintained the economic and social impetus to allow settlement to continue uninterrupted (Mercer 1985, 10). A similar pattern may exist in Orkney, notably when several broch or roundhouse and/or burnt mound sites occur in close proximity to each other. The general picture is thus of the increasing convergence of land- and societal-control under powerful groupings who symbolised and accumulated their power within the broch. The fact that there was continuity of development on particular sites may suggest maintenance of social networks, land organisation and territorial patterns, and proprietorial rights with antecedent communities (*ibid*, 10).

Turning to the spatial aspects, some general trends can be observed. At the immediate visual level, the development from Early Iron Age single agricultural and domestic units (such as Bu, fig 75) to Middle Iron Age nucleated settlements (fig 76) reveals the introduction of a hierarchical use of space. The maps become considerably deeper (more asymmetric), and the deepest, most segregated area is always the set of spaces which constitute the broch. Upper galleries and upper storeys, features not found in the outbuildings, are the very deepest, least accessible spaces. Their usage may have included storage, extra sleeping facilities and wallheads from which surveillance might be made. Unfortunately these are the parts of the structure about which least is known as they were always the first to collapse or be dismantled, and the total number of original floors is not known. If the majority of activities and functions was in the upper storeys then obviously their exact nature can never be assessed and the ground plans tell us less (although it seems most probable that the ground floor was the main domestic forum).

The larger the access maps, then the more abstract and complicated they become to analyse, and it is helpful to break them

down, for instance by dividing them into distributed ('ringy') and nondistributed ('tree-like') sub-systems (as Gurness, fig 78). On the very outside, globally governing the interior, are earthworks which extend the depth between the inside and outside worlds, even if in some cases they only create abstract rather than real rings, in that their circuit is 'completed' by natural features. Access to the interior proper has to be via the 'guardhouse' or forecourt; this is where the transition from the outside world to an inner environment is sanctioned. From here ingress is made into a long thin passage from which access to both outbuildings and broch can be made. In the cases of Gurness, Howe and Lingro (as suggested by an early section of walling: fig 48) the entrance into the settlement and the broch entrance are aligned, which must have enhanced the processional like qualities of these passages. From here the outbuildings constitute a local, large and almost totally nondistributed area of settlement, spaces in which strangers cannot freely circulate and into which they must be invited. Such branching off thus creates the maximum segregation of spaces with the least expenditure of depth, both between and within domestic units. Entrance to and between the outbuildings is mainly by means of this passage, therefore most movement can be monitored by control of its various sections.

From this first narrow passage access is gained to the next ring, a passageway which encircles the broch (except at Howe). This ring is at the point where ingress can be gained to further nondistributed spaces at a slightly deeper level. Ringy structures interconnect some apartments and outbuildings. Access to the broch interior is from the initial passage, at about the same level as some of the outbuildings, but is deepened by guard cells, an elaborate doorway into a long tunnel, and a series of vestibules. If/when outbuildings do post-date the broch then the addition of guard cells to the broch is an obvious means of extending its depth, heightening its importance and thus distinguishing it from the outbuildings. The form of the architecture is particularly relevant; the monumentality of the broch tower and its elaborate entrance contrast starkly with the less substantial outbuildings, all of which appear very similar in form, serving to heighten the discrepancy between these spaces. Once inside the broch, the final ringy structure is encountered,



which is separated from all the others by several depth levels. This is quite complex in the case of the double domestic units at Midhowe and the later levels at Gurness. The rings connect the main domestic foci (the hearth areas) and the upper levels. Cells and compartments are arranged in non-distributed fashion from these rings, in similar fashion to the outbuildings.

From the point of view of strangers, the overall hierarchical layout and the differences in architectural form have done nothing to encourage their admission to the broch. Therefore, its interior ringy system is unlikely to have had a major role in articulating immediate stranger-inhabitant relations, but was probably a means of articulating the relationships between the different domestic units, where they existed. The ringy sub-systems in the outbuildings would have played a similar role, but here there is a greater emphasis on the non-distributed component.

From the point of view of social structure a number of observations can be made on the basis of this information. Despite some similarities with the outbuildings, the broch obviously stands out as the most important area in the settlement complex because of its spatial importance, its prime location and its monumentality. If it were not for the double domestic units (where these exist), and the spaces associated with the upper levels of the broch, then they would differ little from the earlier roundhouses. This, in combination with the degree of controlled access to the outbuildings and their apartments, which are almost exclusively segregated, may suggest that the social structure on which these new relations were founded required strict control in order to be both established and maintained.

Taking an overview, the observed systems serve to emphasise the social inequalities existing between the broch and outbuilding occupants, and the settlement and the outside, the latter distinction being the strongest. Local relations between the internal cells are basically the same except for the broch; the factor of *noninterchangeability* has been introduced between the broch and all its surrounding units. Thus this is more of a *transpatial* than *spatial* system. In other words the emphasis is on spatial relations which have been determined by genotypic rules and produce the required restrictions of encounter, even though each physical

manifestation of these rules is different. What is more, the genotypic-model is global (as defined by Hillier and Hanson), because it recurs, and as a result transpatial relations and integration can exist between arrangements (settlement complexes) because similarities in layout and comparable positioning may foster a conceptual form of identification (Hillier and Hanson 1984, 238).

In addition the inhabitants of a single settlement may feel a strong sense of identity with each other because they share a structured whole with others. Furthermore, the repetitive nature of these patterns may be representing the acknowledgement of a code of symbols, in this case spatially determined, by which those in the broch sustained their authority over the inhabitants of the outbuildings. The ordered layout of the outbuildings and the comprehensive use of space further suggest that these were laid out as a unity under the authority of the broch inhabitants, rather than being the result of the cumulative construction of outbuildings to a basic structuring principle. Their construction is thus a part of the symbol by which the authority of the broch inhabitants was both accepted and created. The emphasis is on the articulation of these relations at the intra-site level, but as a part of a wider society with similar values. Ptolemy's map, derived from information gathered no later than 80-84 AD would suggest, if correct, that there was a grouping of people in the area of Caithness called the *Cornavii*. He also names the *Orcades Insulae*. Pytheas referred also to the cape facing the Orkneys as Cape Orcas. Jackson (1955, 135) interprets these names as being derived from the name of the *Orci*, a group of people occupying the Orkneys. It thus seems likely that each of these social groupings shared much in common, although their internal structure is still unknown.

Fojut (1982) estimates a carrying capacity of about 100-200 people for the land surrounding a broch in Shetland. Unfortunately it is not possible to measure the size of the populations and the extent to which the carrying capacity of the land was being realised at any stage, but increasingly, and from early days in the history of the brochs in Orkney and possibly also Caithness, a large number of dependents came to live around the brochs. The greater the authority and wealth of the broch inhabitants the larger the number of dependents they could both attract and support. The most powerful



leaders could muster the resources to lay out and build planned, integrated, nucleated villages. Under less formal circumstances, and on a lesser scale, non-radial outbuildings were built. Early brochs are seen as being contemporary with various roundhouse settlements, and not all broch sites were of equal standing. The pace of this development may have varied considerably from area to area, and was not necessarily unilinear. In a time of great change social tensions must have been strong between different groups, and it was in the interests of the social elite to attract more dependents to their fold, and preferably to accommodate them where they could be easily accounted and provided for.

Most brochs were sited with access to cultivable land as the main consideration (Scott 1947, 1948a; Fojut 1982; Mercer 1985). It is presumed that all inhabitants, even craftsmen, would probably have been involved in the production of food.

Ultimately there was a change in the broch system, the result of a renegotiation of relations, which was achieved by extending the authority of certain cultural resources, or by rejecting once current authoritative symbols (cf Barrett 1989). Certainly the broch was no longer occupied, although settlement of some form seems to have continued on many sites. LIA I is the period for which least is known of the settlement record, but there is certainly no indication of structures which can be differentiated on social grounds in Orkney and Caithness. The exact date of this change is not known, but it would be too easy to attempt to relate it to the withdrawal of Roman interests from Scotland. Yet as the prime recorded source of authority in this period, this cannot be ignored. Although the Romans never exercised any control in the area, the classical literature suggests that there was a power base in the Orkneys which was considered worth conquering (Thomson 1987, 2-3), and the archaeology supports this. If the broch aristocracy had become clients of the Romans (Maxwell 1985 casts doubts on traditions that they were conquered), the withdrawal of their patronage might have been sufficient to topple this social system, as is suggested was the case for the Lowland brochs (Macinnes 1984). When local leaders were thus no longer able to satisfy the needs and demands of their dependents, the result was the renegotiation of relations from the local power bases to more distant ones. The only broch sites which

continued were those where the social elite managed to continue to derive power in this new system; presumably certain broch sites were still the major centres.

Fifth century Britain in general was experiencing a time of settlement shift as the result of the withdrawal of the Romans and migrations from both the continent and Ireland. Yet as was the case in post-Roman Wales and north England, there is no reason to believe that the earlier social structure did not survive, albeit in modified form. Note that henceforth the term Pict is applied in this text to the inhabitants of E Scotland and the generic term is applied to social institutions and territory associated with them.

The appearance of forts, such as Burghead, Cullykhan and Portknockie with a coastal distribution from the third century onwards, (Alcock 1980a, 80-81), suggests not only a concentration of resources into fort construction, but is a part of the discontinuity witnessed in the settlement record throughout Pictland. It was pointed out in §3.1.3, on the basis of fig 5B, that the distribution of C-14 dates from the central mainland is different from other areas which are in the Atlantic Province. The data from this area has a peak between about cal AD 250 and 500. The dates for this area come from a multitude of diverse sites, but this peak is largely derived from the evidence for the construction and early occupation of a series of forts in the S of northern Pictland, around the Moray Firth (GU-1822, N-327, N-328, BM-445) and the evidence elsewhere for early burials, such as at the Catstane. There is almost certainly a direct correlation between this *floruit* of northern fort construction, away from Orkney and Caithness, and the breakdown of the system which supported the brochs there (although it cannot be disproved that some of the coastal promontory sites in the study area are not LIA in date). The apparent emphasis on access to the sea, and the use of ships, is reflected in the aggression of the Picts against northern Britain, recorded from the late third century AD onwards, which suggests that components of society were able to produce between them a naval force to be reckoned with.

Very little is known of social stratification, but the term *regulus* was used to describe a sub-king or minor king of Orkney who was visiting the *rex potentissimus* near Inverness in about AD 565 (A O Anderson 1922 i, 56-57). The picture presented is thus of a system



of local kings with one, or possibly two overkings. Certainly the presence of symbol stones throughout Pictland emphasises that there was a certain cultural cohesion throughout the area (A Ritchie 1985, 189).

By the seventh century there is an increasing body of evidence for settlement at this time having been made up of individual, discrete units, such as around the Birsay Bay area (Morris 1983, 132). Only one site, at the Brough of Birsay, can be put forward as a particularly important centre. Even this is on the basis of its finds, location and subsequent importance in the Norse period, rather than any distinguishing structures (C L Curle 1982; Hunter 1986). The current (and presumably also former) lack of farmland on the island renders interpretation as a simple farmstead unsatisfactory (Hunter 1986, 169), and the inhabitants must have been dependent on mainland resources. The settlements around the Birsay Bay may therefore perhaps be interpreted as a series of dependent settlements providing for the needs of this establishment. They may therefore not be totally typical of the settlements we may expect to find elsewhere in Orkney and Caithness. Undoubtedly earlier architectural forms survived in the areas remote from these changing relations. There was some selective reuse of broch sites, but on present evidence this only occurred rarely. In Orkney the selective reuse of sites for secular and ecclesiastical purposes which were probably particularly important in the MIA (§8.3) may be a means of legitimising and enforcing a new social structure (cf Bradley 1987).

In the post-broch period (fig 77) the access maps revert to forms which are very similar to the shallow EIA examples, except that in the LIA II some of the domestic units are enclosed by fences, creating a series of discrete units which are sometimes clustered in space. In other words the basic domestic units remain very similar throughout our period, despite different architectural shells; even in the MIA they do not change, except that they are bound together spatially with strongly prescribed lines of access. In spatial terms the only difference between the thin and thick walled EIA roundhouses is in their degree of association with other structures and their monumentality.

In the LIA the emphasis thus changes from internal to external space, and there is a trend towards more egalitarian, less spatially

prescribed, on-site relations. In terms of social evolution this change corresponds to the shift from a ranked society to the emergent state, from local power bases to more distant sources of authority. By the eighth century there are hints that southern Pictish kings were developing some of the organisational capacity to manage a widespread kingdom, which was gradually acquiring some of the appearance of a state, with a degree of central administration and perhaps more closely-defined boundaries, which could at times be backed by physical violence (cf Mann 1986, 37). In AD 727 there is a reference interpreted as meaning that Nechtan had officers called *exactores*, persons collecting tax or tribute (*Annals of Ulster*, sub anno 728; M O Anderson 1973, 178), and it probable that such officers worked as the king's representatives throughout Pictland. Taxes were also being levied in late sixth to eighth century Ireland and seventh/eighth century Anglo-Saxon England (Charles-Edwards 1972; Wormald 1986, 167), and there are suggestions that the Pictish kings had a treasury (Anderson and Anderson 1961, 402-3). These people lived in isolation from those from whom they were exacting tribute, benefiting considerably from the enhanced powers which they derived from their position as agents of authority (there is thus a dialectic between centralising powers, such as the state, and the decentralising forces of its agents: Mann 1986). Agents such as these might have levied the fleets which carried out several recorded sea-borne attacks in the sixth and seventh centuries (*Tigernach Annals* c 682), and which were wrecked in the eighth (*Tigernach Annals* c 729). The functions of this agent are thus similar to those of the *mormaer* of southern Pictland and the southernmost part of northern Pictland, mentioned from the tenth century onwards. Jackson (1972, 102-110) suggests that these were territorial magnates or royal officials of the highest rank whose duties included collecting revenues and administering a district. Such might have been the role of the main warrior depicted on the famous slab from the Brough of Birsay (C L Curle 1982, 111 59a).

Thus whilst the construction further south of monumental architecture, in this case hillforts, is still a material symbol of the acceptance of authority, this power is now more physically remote to Orkney and Caithness. Whilst there are still regionally based sources of authority, these are seemingly few in number, and their



power is structured and reproduced in a different manner. There is no longer the need for tightly regulated social encounter, the existence and acceptance of physically determined social rules, or indeed the ability to maintain such a network. The relationship of dependency is no longer expressed in such overtly spatial terms. Furthermore, enhanced personal encounter contributes to the working of this extensive social network. In effect this constitutes larger scale controls on access, rather than at an intra-site level (§11.1). That the maintenance of these long-distance relations was difficult is suggested by the fact that king Brude was reputed to have destroyed the Orkneys in AD 682 (*Tigernach Annals: Orcadies delete sunt la Bruidhe*, Skene 18907, 72), which may have resulted from Orcadian dissatisfaction with the choice of overlords, or attempts to exact tributes. Communication by sea, whether for aggressive or simply administrative purposes is likely to have risen in significance as the distances increased over which powers attempted to sway authority.

In a later eighth century or ninth century version of Bede's *Ecclesiastical History* Orkney was considered to be a part of the Pictish kingdom (Dumville 1976), which by the end of the eighth century may have been consolidated under a single king (Davies 1984, 70). The general absence of mention of Caithness in the documentary sources is probably a reflection of the lesser importance of this area in comparison to the Orkney Isles which were both more accessible and strategically placed in the Atlantic seaways.

#### 10.4 CONCLUSIONS

This chapter introduced access analysis, as described above, as a useful tool for furthering an understanding of the relationship between a specific material culture and its social reproduction. The shift from a ranked society where the ultimate authorities were locally based to more remote sources of central authority characterises the development of Orkney and Caithness from the MIA to the arrival of the Norse. In his account of the sources of social power, Mann (1986) distinguishes six different forms of organisational power. Here we are seeing the change from *intensive power*, where there was the ability to organize tightly and command a high level of mobilisation or commitment from the participants, to

*extensive power*, where there was the ability to organise large numbers of people over far-flung territories in order to engage in minimally stable co-operation. This amounts to the development of a 'proto-state', the distinguishing characteristics and necessary preconditions for which Driscoll (1988a, 218-22) has described. It is therefore justifiable to refer in the LIA II to the southern Pictish state or kingdom, an institution whose influence was certainly felt in Orkney and Caithness (chapter 11).

### 10.5 POSTSCRIPT

Subsequent to my formulation of the ideas expressed in this chapter a paper entitled *A room with a view: an examination of roundhouses, with particular reference to Northern Britain* (Reid 1989) has been published in the *Oxford J Archaeol* which incorporates a discussion of some of this same material. Whilst both this, and my own ideas express a firm belief in studying buildings in their social context it is useful to compare very briefly the two approaches and their results. The main differences are that Reid interprets the primary archaeological data in a different fashion, picking up and emphasizing changes in the settlement record which I have played down. Secondly, although believing that access and spatial relationships are related, Reid's paper places more emphasis on the size and shape of the spaces enclosed, and less emphasis on the inter-relationship of spaces and the part space plays in structuring and reproducing society.

Reid examines the width of the peripheral zone between orthostats and the internal face of the main wall to establish when the space thus created has a social function. On this basis he ascribes a domestic function (sleeping) to the radial compartments in brochs. He suggests that roundhouses with similar spatial divisions surrounded the brochs (there is at present no evidence for these). Then, on the basis of the secondary multiple compartments in the brochs at Gurness and Midhowe he recognises a general change from single to multiple compartments. The broch outbuildings, which he considers to have been built at the same time as the multiple compartments (the first to second centuries AD) are rightly observed to consist often of more than one residential unit. This is interpreted as a general move towards less communal, more private



structures. He relates this to the changing socio-economic climate, the result of political and economic contacts with the Romans, which lead to a 'breakdown' in the traditional domestic unit.

I am not convinced that there is enough evidence to document fully such a profound change as this (and I have also invoked alternative reasons for the multiple apartments seen in some brochs: §10.3). The broch at Crosskirk seems to have had two compartments from its early (pre-Roman) inception, at Howe the radially divided broch is contemporary with the multi-apartment outbuildings and there is not sufficient evidence at Burrian to argue that the broch here was originally partitioned and then reorganised to form separate apartments. But, casting aside my doubts on this score, it is more interesting to note how at the very period when Reid sees a breakdown in the traditional domestic units as a result of contacts with the Romans, I see the nucleation of settlement units around (and within) brochs as evidence for the establishment of a new, stronger power within Orcadian society. Reid has failed to recognise and/or emphasise the significance of this phase of nucleation, and of the spatial relationship *between* these units in the one settlement complex. Access analysis permits this, whilst also emphasizing the underlying continuity between all the Atlantic Province settlement units. The difference is thus not so much in the size of the units, but more importantly in their inter-relationship.

\* \* \* \* \*

In this chapter I have presented a model for the social evolution of Orkney and Caithness from the EIA through to the period prior to the arrival of the Norse. In order to amplify our expanding picture of IA Orkney and Caithness, it now remains to examine how other aspects of social reproduction fitted within this framework, and to identify the resources through which this power was exercised. In particular we must examine the means by which the change from local to distant power bases was achieved and maintained, the answer to which undoubtedly lies in changing agricultural practice and land tenure and the introduction of Christianity.



## CHAPTER 11: TRANSFORMATIONS IN EXTENDED SOCIAL SPACE



## CHAPTER 11: TRANSFORMATIONS IN EXTENDED SOCIAL SPACE

Chapter 10 charted the transition from locally based power sources to more centralised, and in relation to Orkney and Caithness more distant, sources of authority. Evidence for this may be appearing as early as the LIA I, but is conclusive by the LIA II. The aim of this chapter is to develop a further discussion of some of the means in which this transformation might have been achieved and maintained. It is concerned with the relationship between Orkney and Caithness and the centres of Pictish authority based in either southern Pictland (Perth/Angus) or more probably northern Pictland (Moray). Bede made a distinction between the northern Picts who 'are separated from those of the southern Picts by a range of steep and desolate mountains' (HE III, 4), but the southern province was dominant by the late seventh century, and both areas were subsumed into a single kingdom by the late eighth century. Thus in the sixth and seventh centuries Orkney and Caithness were closer to the political and cultural centre of Pictland than in later times (A Ritchie 1985, 185-86).

Much of this chapter is, perforce, speculative. With the notable exception of the evidence for craft specialisation and its organisation, I briefly introduce most of the available evidence upon which an attempt can be made to write a history of Orkney and Caithness. But this evidence is so limited, and the constitution of society so complex, that recourse must be made to informed speculation if study is to progress beyond catalogues of pins and discussion of individual sites. The basis for speculation is the contemporary situations elsewhere in the British Isles, not unreasonable if the Picts are to be seen as 'a typical northwest European barbarian society, with wide connections and parallels' (Alcock 1987a, 90). Future research by new scholars will hopefully modify, refute or build upon the suggestions made here.

Mann (1986) recognises four principal sources of power, namely the control over economic, ideological, military and political resources. These are overlapping networks of social interaction, as well as organisations, that is institutional means of attaining human goals (*ibid*, 2). The recognition of the principal sources of power is

a means of understanding large-scale social and historical processes, which is the aim of this thesis. The last chapter touched a little on each of these sources of power, but the aim here is to discuss the introduction of the Roman church and changing patterns of agriculture and land tenure, the significance of both of which has been alluded to. These developments encompass changes which affected the networks of economic, ideological and political resources which were instrumental in the transformations seen here. Such evidence as is available for military activity was incorporated into §10.3. There is no reason (archaeological or historical) to believe that the use of military power was the main manner in which distant sources of authority were either established or maintained, but there were obviously occasions when recourse had to be made to such violence.

### 11.1. ORDERING OF THE LANDSCAPE

Throughout this period changing agricultural practice (§11.2) and land tenure are inter-related factors which will have remained central to the creation, maintenance and reproduction of social relations. Evidence for the part which the ordering of the landscape of Orkney and Caithness played in structuring its social relations and their transformations is not easy to chart because evidence is so limited. But by examining similar contemporary situations it is possible to suggest ways in which the man-made landscape may have operated to structure LIA society.

Driscoll (1987) has studied the Early Historic landscape of Strathearn (Southern Pictland) and puts forward an argument that as the polities in the east grew more state-like the importance of kin-based social relations diminished and quasi-feudal bonds became increasingly important. Society was constantly structured by kinship, but the part which clientship played in its regulation had increased and produced a powerful model for organizing large-scale entities (at the extreme limit of which was Orkney and Caithness). Clientship, as defined by students of early Ireland, consists of a voluntary tie of personal dependence in which the social superior provides military protection, legal support and productive goods, such as cattle, in return for attendance in his retinue or warband, and a flow of goods or labour services from the inferior (Gerriets 1983, 43). Whilst it is little more than speculation, similar



changes as in Strathearn might perhaps be expected in Orkney and Caithness, as the changing networks of social relations initiated in the south expanded to the north, from the late seventh century AD, if not before.

It may be that the social changes in Orkney and Caithness from the MIA to the LIA are the result of the emergence of expanding ties of clientship or authority which usurp or work in conjunction with the ultimate power of more local leaders. However, it is still locally based leaders who administer the regions and in whose hands the effective authority lies, but the growth of clientship extends both geographically and socially the limits within which relations of authority can operate. A major change such as this could have come into effect as the result of the introduction of proprietary rights over the land, whether to the church (§11.3) or to individuals. A similar patterns of events is suggested for both Wales (Davies 1978) and Mercia in the eighth century AD. Biddick (1984, 111) has noted:

*In granting perpetual rights to land the chiefs accrued a new source of symbolic and material power over the base of the economy, which reinforced their overlordship ... By assuming the right to make grants of land outside their own Mercian territories, Aethelbald and Offa underscored their radical, complex lordship ... As Anglo-Saxon social systems shifted from chiefly hegemonies to simple-state systems, and the non-ecclesiastical elite gained access to tenure, the structure of the estates themselves, as can be traced through documents and archaeology, changed.*

Gifts of land such as these went in one direction only, resulting in a permanent obligation to the giver, and could only be answered by counter-gifts in moveable wealth and services but never discharged (Charles-Edwards 1979, 104). The territorial extent of an authority can only expand if it assumes and ultimately acquires the right to make grants of land outside its own territories. For example, as power accumulated in the hands of a dynastic family in early Ireland this also lead to increasing social stratification (Ó Corráin 1972, 42-44) because 'inequality' becomes stable and legitimate as a result of the establishment of landed property (Rousseau 1964, 193, quoted in Bloch 1975, 204). In Anglo-Saxon England the effect of these land grants was to divorce the tenorial structure from the territorial one (Biddick 1984, 111) as land was no longer retained in the hands of

locally-based families or individuals, but land rights were extended to outsiders with no former authority in the region. The local units were now subsumed within the central authority by new administrative means independent of territoriality. At the local level these units were administered and regulated by a new form of authority. In Pictland these were probably the officials recorded in later times as the *mormaer*, literally a 'great officer, High Steward' and the *toiseach*. The first recorded mention of the *mormaer* in Scottish documents shows them to be restricted to the Pictish part of Scotland (specifically southern Pictland and southernmost northern Pictland), and it is reasonable to conclude that this was a Pictish system of administration taken over by the Scots in the middle of the ninth century. Early Scottish sources indicate that he was a territorial magnate who held his position by hereditary right. In effect he was the king's deputy in an area and had the duty of collecting royal revenues (Jackson 1972, 102-110), possibly a similar if not identical role to that of the *exactores* (M O Anderson 1973, 178) which may also have been hereditary positions. *Toiseach* is used in the context of the leader of a ruling family group (*clainne*), but its occurrence in early Scottish texts also suggests another distinct meaning, namely some form of officer with dues payable to him from the land, similar if inferior to the *mormaer*. The officer was identified in early terminology with the *thane*:

*The Scottish thane was a subordinate officer of (usually) the king, or of an earl, set over a stated territory of his lord's lands, holding his position hereditarily and charged with duties in connection with the administration of his thanedom and with its military organisation, the collection of its taxes, and the administration of justice there. Like the mormaer, he was entitled to his share of the dues collected (Jackson 1972, 110-14),*

a definition which more or less matches the view of Barrow (1973, 64-65). A similar system can be seen in the Swedish *husabyar* of c AD 600-800 which were planned by central power in order to exercise administrative and economic control, and to link and develop the scattered settlement area to form a more unified state (Larsson 1986, quoted in NAA 1986/297). Steinnes (1969) has suggested a similar arrangement for Norse Orkney. In return for their loyalty, the locally-based church and elite derived benefit from the grant of land



and dues, whilst striving to uphold the system from which their source of wealth derived and which it was in their interest to succour. If those without land rights gained access to tenure this might have led to a further restructuring and definition of individual units of land. When relations of authority are no longer being defined and structured at the household level, it is a fair assumption that one by-product of these changes might have been a more formalised, spatially prescribed agricultural landscape.

What then are the archaeological and historical correlates which one might expect to accompany changing relationships of land ownership? The settlement component with its evidence for discrete settlement units, but independent local/regional centres of administration was discussed in §10.3. In archaeological terms the expectation might be for the vestiges of estate and field boundaries, and in historical terms evidence for the estates, by means of charters and/or place-names. Evidence for aspects of these is now investigated.

#### 11.1.1 Documentary Evidence

The written word produced a stable means of communication beyond face-to-face relations and was a new means of conceiving of transactions of property, as well as a means of instituting and legitimising the new transactions over both time and space, thus increasing time-space distanciation (Goody 1977; Giddens 1984, 258-59). In addition the establishment of wider relationships and structures could result in the transcending and weakening of those created and maintained through non-written discourse (Moreland 1988). In the early Middle Ages the church had a monopoly on the production of the written word, thus it controlled an administrative tool which was of use to the aspiring secular authorities, and which was one source of their symbiotic relationship (§11.3). Literacy was a resource accessible only to the political elite and ecclesiastics; the inhabitants of Orkney and Caithness lived 'on the margins of literacy', that is in a culture which was 'influenced in some degree by the circulation of the written word, by the presence of groups or individuals who could read and write' (Goody ed 1968, 4-5). The spatial and hierarchical location of literacy is crucial to the reproduction of any particular social system; a good example of this

process can be seen in the mid to late tenth and early eleventh century *incastellamento* movement of Italy (Moreland 1988). Literacy therefore undoubtedly played an important role in structuring the transformation of society suggested for Orkney and Caithness.

Whilst the potential ramifications of literacy in Orkney and Caithness can therefore be recognised, there are no surviving charters. However, *The Book of Deer* records details of systems in Buchan and Moray (northern Pictland) which may be this early (Jackson 1972; Driscoll 1987, 360-73). The Gaelic notes were written in the 1130s to 1150s, and indicate that at this late date 'the mechanics of the political situation were still those structured by kinship and regulated by clientship' (Driscoll 1987, 373). The land is described in units of either davochs or petts (§11.1.3), to which a Pictish origin is ascribed (Barrow 1973), and it is on this basis that the circumstances described in the Book of Deer may be similar to those pertaining in the LIA. There are several reasons why so few documents survive from this period, independent of the ravages of time, including a Reformation and political connivance (Hughes 1980). Possibly documents were dispersed and the native scribal tradition interrupted by king Nechtan's expulsion of Columban monks in the eighth century AD, but most probably Pictish scriptoria were never very active (Hughes 1970, 4). This is contrary to an alternative view (Brown 1972, 243) which sees the production of so noteworthy a manuscript as the Book of Kells in 'a great insular centre ... subject to Northumbrian influence ... in eastern Scotland'. However it is possible that on the whole the Picts did not totally appreciate writing as an important expressive medium but instead used symbol stones for their authoritative statements, and these *do* survive (Driscoll 1988a, 222). Driscoll sees a connection between the development of royal administration and aristocracy with the invention and control of a standardized symbolic system, the Pictish symbols. His reasoning is that the growth of the kingdom and the phenomenon of symbols appear synchronous, and he assumes that such a symbolic system must have been under the control of a religious or political elite by virtue of their superior access to material and cultural resources. Moreover he is inclined to believe that the inspiration for the display of such symbols was first encountered in inscriptions. Some scholars, such as Thomas (1963) would place the



emergence of symbols several centuries earlier. If so then the symbolic system may have been adopted and/or amplified rather than invented in the seventh century. Whatever their date, as with literacy, knowledge of the use of these symbols was thus restricted to a few. Class I stones seem to have been burial markers. By their erection the heirs combined different sources of legitimacy in a permanent testimonial: their right to inheritance through descent; ideological sanction of this represented by their control of the symbols; and a *de facto* right represented by their control of the material resources (*ibid*, 228). They may have erected stones because their position was not firmly established or radically new, and in need of some ideological reinforcement. Thus in effect these stones may have been acting like charters, recording property transactions. Symbol stones are found, rarely, in both Orkney and Caithness (figs 56, 65). In Orkney 5 out of 11 and in Caithness 2 out of 11 find spots of sculpted are loosely associated with broch sites. If, as I have suggested, there was a change in the sources of overlordship and resultant changes in land tenure, these stones are plausible as stone charters. Their association with brochs would suggest that some of these were still recognised as, or associated with, a recognised unit of land and population.

#### 11.1.2 Archaeological Evidence

Field evidence for the formal organisation of the LIA landscape is similarly lacking. Early field systems occur in Caithness and Sutherland, but none have been detected in Orkney, and it is difficult to associate the known field systems with settlement of proven IA date (Halliday *et al* 1981, 60, 62). There are notable exceptions at Kilphedir (Fairhurst and Taylor 1971) and at the Borg Broch complex, Forsinain in Sutherland (Mercer 1980, fig 12), and possibly also at Bighouse (*ibid*, 59) and Fiscary (Mercer 1981, fig 10). At Cnoc Stanger possible field boundaries consisting of upright Caithness flags have also been found in association with ard marks (Mercer *forth*), but these are pre-IA, and their full extent is not known. In Orkney there are no pre-Norse field systems as such, but early land divisions/boundaries do survive. The treb dykes, long, linear earthen banks define territories, each of which is an economic unit with access to the shore and to the full range of

available soil resources. Their size suggests that they relate to political systems rather than to private ownership, and their non-relationship to the historically-known administrative divisions is an important indication of their early date (Lamb 1983b, 177). Their exact date is unknown, but they are presumed to pre-date the IA because one underlies a settlement mound. In addition their alignment seems to bear no relationship to Norse systems of land allotment, the basis of which is probably IA (*ibid*, 177-78).

There are several reasons for the general absence of IA, particularly LIA land divisions, notably that Scottish field systems best survive in upland areas. These tend to be the least agriculturally favoured zones, so the extent of IA land use may never have been great; the advantage is that subsequent land use has favoured the survival of such early features as existed. Subsequent development will have destroyed many lowland sites; aerial photography has had little success at noticing crop marks in this area, but it has not been much applied. The subsequent growth of peat has obscured many areas of IA land surface. In addition, such boundaries as existed may never have been substantial; peat walls do not endure forever. Moreover, the difficulties of distinguishing between prehistoric and more recent field-systems should not be under-estimated (Halliday<sup>#</sup><sub>et al</sub> 1981, 60).

### 11.1.3 Place-name evidence

The main evidence for the form of LIA land organization is derived from the Orkney place-names which provide a picture of the Norse administrative system. This is unlike any divisions known in the Norwegian homeland, so it may be that the LIA arrangement was taken over, adopted and adapted. It is suggested that the Norse *ounceland*, a taxation district, was related to the measure of land called a *davoch*, known primarily from eastern Scotland (Marwick 1952, 208; Barrow 1973; Bannerman 1974, 141; B Crawford 1987, 89). The *ounceland* was also the basis of early church organisation, and may have involved the revitalisation of an older pre-Norse system of district chapels (Lamb 1983a, 178). *Davochs* are the smallest unit of land which magnates made grants in. Further, it looks perhaps as if the *pett*, the basic socio-economic unit (equivalent of an estate), consisted of at least one *davoch* (Bannerman 1974, 59-60, 269). Pit



names, if they ever existed in Orkney and Caithness, were obliterated by Norse names (few Celtic names of any nature survived). A *davoch* may have been the nominal area necessary for a free commoner, an expression of agricultural capacity analogous to the English *hide* and the Scottish *tech*. When Bede referred to Iona as being 'an island of about five hides according to English reckoning' (HE 111, 4) he was probably translating an equivalent term and/or his source was an Englishman (Duncan 1981, 23 suggests Egbert). Evidence for LIA estates is otherwise scarce; it is suggested that the distribution of Norse *boer* names, placed 'highest in the scale of ancestral dignity' (Marwick 1952, 249), marked LIA estates taken over in entirety and renamed by the Norse (Thomson 1987, 27-28). If units of land apportionment and taxation such as these did exist in Orkney and Caithness, and were well administered, they could constitute a means of levying tax and service, such as the provision of ships for a navy. Such a scheme for Dalriada is described in the *Senchus Fer nAlban* where units of 20 houses were grouped together for the purpose of furnishing two vessels (Bannerman 1974). Such a system for the collection of all forms of tribute is essential for an hierarchical system to maintain itself.

There are thus some suggestions of LIA land organisation on the basis of estates. A system of levy related to this may have been administered at the local level by secular and/or ecclesiastical representatives of the southerly Pictish kings. The size of these local territories, some of which may have been multiple estates, is not known. A multiple estate, which may have been matched in the north by the shire, is a hierarchy of estates subject to the authority of the overlord or his representative, an arrangement known since early medieval times in Wales and England (Glanville-Jones 1979, 18). It is thus possible that southerly Pictish kings had extended their power and authority into Orkney and Caithness by assuming the right to grant property. These new transactions may have been recorded in stone and or writing which thus enabled and structured the production and reproduction of social relations over longer distances. At the local level the political elite undoubtedly might have granted some of this land to their inferiors, and thus the transformation of relations was extended.

## 11.2 TRANSFORMATIONS IN AGRICULTURAL PRACTICE

Driscoll (1987) has discussed the general nature of agricultural practice and its relationship to the structuring of relations of both kinship and clientship in Early Historic (LIA) Southern Pictland. I shall argue here the belief that changes in agricultural practice and intensity of production are concomitant with a move towards more extended systems of clientship. Certainly there must have been a shift towards the importance of controlling allocative rather than authoritative resources, that is to the direct control of material goods and commodities rather than people. Study of domestic space (chapter 10) has already charted this transformation between the MIA and LIA. None the less, whilst one's power or status might be measured in terms of the people under one's control the means of effecting that control was ultimately through manipulation of physical resources. It was still necessary for the ultimate authorities to control people, but not at the face-to-face daily level. Society became increasingly structured by management of the resources which each individual had at his or her disposal at the local, intra-regional, but more particularly regional level. At the inter-regional level I propose that society was largely structured by changing relations of land tenure and its attendant ties of clientship, but at the local and intra-regional level the nature of clientship would also have intensified, but in this case such a change would have most probably been explicit in changing agricultural practice. Within each region relations of clientship would primarily have revolved around non-durable goods (such as food-stuffs) and services, whereas over long distances durable tribute would have been most important, whether in the form of goods (such as hides or metal), loyalty or simply administrative or military might. Effectively the ultimate authorities delegated responsibility for the regions to their local representatives whose reward was the tribute from the land, but whose duty was to administer these areas effectively, providing such loyalty, manpower and other services as their superiors might at any time demand. As outlined in chapter 10, I support arguments that the Brough of Birsay was the establishment of one local representative (cf for example A Ritchie 1983, 52) and that further centres may have been established on broch sites (Lamb 1988).



It is possible that Orkney and Caithness could have been made up of a number of individual estates, each of which was independent, but regulated by ties of obligation to king and/or regional overlord. Whilst each unit need not have been specialised these are the very circumstances in which developments in the organisation of agricultural production might be expected, with a variable degree of specialisation and intensification within each unit.

In a paper entitled *Agrarian development, settlement history and social organisation in southwest Norway in the Iron Age*, Myhre (1978) has related three major changes in the settlement record to developing agricultural practices, and suggests manners in which these may be recognised. With further elaboration on his scheme, factors to examine in Orkney and Caithness would include:

1. The degree of stability in the settlement pattern; this relates in part to the quantity of unsettled land and the availability of alternative sources of food.
2. The analysis of pollen, seeds and faunal remains. Seed analysis, for example, allows the possibility of distinguishing between producer and consumer settlements, ard and mould board ploughing, what time of year a crop was sown (Hillman 1981) and stages in food processing (Dennell 1974). Pollen and faunal analysis can be similarly revealing;
3. Changes in agricultural technology, such as the introduction of mould boards, determine the amount of land which can be taken into cultivation and its productivity.
4. Changes in field layout may reflect differing practices. For example, the absence of integrated boundaries might indicate a relatively unsystematic shifting between fields and meadows, which would leave few or no permanent boundaries. Well-defined boundaries may suggest by their configuration the introduction of an infield/outfield system, perhaps with the use of fallow as a stabilising factor in the regime.
5. Changes in manuring practice might allow more intensive forms of agriculture, perhaps leading to the formation of lynchets. Different manuring practices, and their degree of intensity are detectable from phosphate survey and the analysis of snails. For example *Littorina littoralis*, a sea snail, lives on the frond of a seaweed and its inland presence either denotes the use of seaweed as manure (Evans

1977, 22) or its use as food for sheep (Fairhurst 1984, 170). The introduction of byres to settlements may also suggest that manure was required for crops, and in some quantity;

6. Changes in processing may be seen from environmental data, but archaeologically in the structures for storage (such as earth-houses), and of course in milling equipment and grain-drying kilns.

It is not as yet possible to identify any of these trends in LIA Orkney and Caithness. So little is known of the settlement pattern that it is impossible to assess the quantity of unsettled land and degree of shifting in the settlement pattern. The limitations of the evidence for field systems were discussed in §11.1.3. It is not yet possible to recognise a prehistoric infield/outfield system in any part of Scotland, although the combination of smaller and larger enclosures at some places may relate to this (Halliday<sup>#</sup> et al 1981, 62):

*Our understanding of the structure and development of early systems of agriculture ... awaits more concentrated and coordinated programmes of fieldwork, aerial survey and excavation (ibid, 63).*

Environmental data are scant, but usually have an increasingly important part in modern archaeological research designs. Differences between settlements cannot be gauged until there is more information. There is no evidence in Scotland for the use of the mouldboard plough at this period, although Manning (1964, 65) argues on the basis of asymmetrical shares that it was in use in England in late Roman times. In the meantime the ard could be a very effective ploughing tool, whether pulled by man (as suggested for Cnoc Stanger: Mercer forth b) or beast. If early evidence for the mouldboard plough is found its significance will not be so much in its effectiveness as a tool, but in the degree of cooperation needed between people in order to supply the team of animals to draw it. Knowledge of manuring practice is vague, not least because IA fields are so rarely excavated or sampled. Recognition of byres is also limited. It has been suggested that the wags of Caithness, and by implication some of the rectangular buildings elsewhere, are byres. These are presumed to be LIA in date, and may suggest a movement towards the seasonal enclosure of cattle during this period, a trend which may be related to a postulated decline in climate at the period



towards the end of the Roman Empire (Parry 1978, 64-65; H H Lamb 1982, 31). Whilst some of the yards on brochs sites may have been for the enclosure of animals there are no associated structures which could be described as byres. General changes in storage and processing cannot be associated with the MIA/LIA transition, except that there may have been a move from underground to more above ground storage facilities. Albeit that few earth-houses are dated, none have produced evidence for a LIA II date. It can be suggested that upstanding stones at Howmae (fig 57) represent the posts for above ground storage units.

In conclusion, there is little evidence for the agricultural changes which one might expect to have accompanied major transformations in the pattern of land-holding. This is largely due to a limited data base; future excavation with a significant environmental input can be expected to shed some light on this issue. A programme of aerial photography could produce evidence for field systems, if they exist, as will future fieldwork. It also remains to investigate the relationship of some of the known field systems and associated settlements which are of presumed IA date: to collect material for environmental analysis; to undertake phosphate survey to indicate where certain activities were taking place; and to excavate the interior of plots to determine if they were used for cultivation and what sort of implements were being used.

### 11.3 INTRODUCTION OF THE ROMAN CHURCH

Bede relates how in about 715 AD the southern Pictish king, Nechtan, sent messengers to Abbot Ceolfrith of Monkwearmouth seeking advice in changing the Pictish church from Celtic to Roman observance, and for architects to build a church in the Roman style. Ceolfrith complied, which was fortunate for Nechtan who, in a position of political insecurity, was 'seeking political backing in the form of a non-aggression treaty on his vulnerable southern border' (Smyth 1984, 138). On receipt of his instructions Nechtan enforced the Catholic Easter, and 'the reformed nation was glad to be placed under the direction of Peter, the most blessed prince of the apostles' (HE V, 21). Subsequently, in 717, the 'familia of Iona', those who had not converted to the Roman ways, was expelled (A O

Anderson 1922 i, 217). Before discussing the evidence for the introduction of this Roman church to Pictland and its bearing on Orkney and Caithness, some mention must be made of the evidence for an earlier Columban presence in this area, because Bede asserts that St Columba converted the northern Picts.

Neither the Columban nor the early medieval Roman church left any records in Scotland, save possibly an unprovenanced king list. Evidence for the Columban church is thus confined to a few uninformative details in the *Historia Ecclesiastica Gentis Anglorum*, Adomnán's *Life of the Saint* (Anderson and Anderson 1961), Irish sources about Scotland, some of which are believed to derive from an inferred annalistic record at Iona (Bannerman 1974, 9-26) and archaeological evidence, which in Orkney consists of three iron bells. Bourke (1983, 466) attributes the iron bells from Birsay, Saevar Howe and Burrian 1 to the interest of the Columban church in this part of Scotland. But none of the known Christian sites need pre-date the eighth century, and these bells are not reliable witnesses for an earlier church. Although very loosely associated with an eighth century cross slab, the Burrian example is possibly a cow-bell (*ibid*, 464). Morris (1983, 141) suggests that the Saevar Howe long-cist cemetery from which the bell came may be late-Norse. Thus with the possible exception of these bells, there is no pre-eighth century archaeological evidence for Christianity in this area. Stack sites which were once probably the locations of eremitic communities, sometimes substantial, may date from the eighth to tenth or eleventh century, although it cannot be excluded that they are in part a result of the expansion of Irish anchorites into the northern Atlantic (R G Lamb 1973, 78-86). Several dedications in Caithness are to Irish Saints and may be early foundations: St Maddan (Freswick); St Trustan (Brabster); St Cuthbert (Hauster); St Tears (Ackergill); St Duthoc (Kirk of Moss, Skitten) and St Fergus (Kirk of Wick) (*The New Statistical Account*, 1845). A dedication to St Ninian (Head of Wick) probably relates to a twelfth century revival of interest in this saint. At least four of these <sup>possible</sup> early dedications are in close proximity to broch sites, or to areas of attested multi-phase occupation.

There are several reasons for believing that the impact of the Columban church in this area may not have been strong. Adomnán



refers to Columba's visits to the East of the Spine of Britain, describing his miracles there, 'but it is suprisingly little for one who was supposed to have converted the northern Picts' (Hughes 1970, 12). Certainly there is little suggestion that Columba succeeded in making widespread conversions among the Pictish aristocracy. Yet Adomnán does state that there were monasteries in Pictland by the seventh century (*ibid*, 12), and the inference must be that within fifty years of his death the Columban church was established to some extent to the East of the Spine of Britain (Smyth 1984, 112). But whilst there were undoubtedly some Christians and some Christian communities in seventh century Pictland, the first evidence that Christianity was exerting any influence on society comes with the activities of Nechtan in southern Pictland and the appearance of Class II symbol stones (Hughes 1979, 15). In documentary and archaeological terms this is the first time that conclusive evidence for Christianity is seen in Caithness and Orkney. When Columba was visiting king Bridei mac Maelchon at his court in about 561 AD, he had to request safe conduct for his people in Orkney (A O Anderson 1922 1, 56-57), but the evidence for their presence, save the aforementioned bells and a few dedications is slight. Another reason for doubting the significance of the Columban church throughout Pictland has been expressed by Duncan (1981, 27). He argues that Bede exaggerated the importance of the Columban church in Pictland because he was being fed propaganda by one of his sources, Egbert. Egbert was an influential English monk who wished to emphasize the rights which the Picts had to deal in the affairs of Iona, and thereby to impose Roman doctrine upon it. He personally was probably instrumental in effecting the introduction of the Roman church by Nechtan. Prior to this he probably did the same in Iona (HE III, 4; Duncan 1981; Lamb 1988).

In conclusion, whilst there may have been some Columban activity in Pictland, including Caithness and Orkney, as possibly suggested by some of the early dedications in Caithness, 'among the Picts east of the spine of Britain we should not think of a king and aristocracy giving Christianity their active support ... until the beginning of the eighth century' (Hughes 1970, 16). With the exception of Iona and Maelrubai's foundation at Applecross, the seventh century Columban foundations were minor cells, established

without royal patronage and exercising little influence on society (*ibid*, 15). Further, the Irish church of the late sixth/seventh century was not totally adjusted to secular law, so in this period it need not be expected that the aristocracy gave the church their support (*ibid*, 15-16). In the eighth century all this changed.

Recent unpublished research by Lamb suggests the existence of a network of St Peter dedications dating to the eighth century, which are a product of the contacts between the Picts and Northumbria in the early eighth century, as described above. Legend credits St Boniface with building one hundred and fifty churches in Pictland. The St Peter dedications in Orkney symbolise conformity with Rome. Whilst traditions of a St Boniface and St Curitan are obviously conflated, there does seem to have somebody called Curitan who was instrumental in the introduction of the Roman church to the North. The confusion with a St Boniface is not surprising; a Devonian saint of the same name led a famous mission to central Germany, a mission which appears to share some similarity with the Scottish scenario. Lamb (1988) contends that Egbert was involved in both missions, which might thus explain these parallels.

Lamb (1988) identifies an even geographical distribution of definite and possible Peterkirks over the Orkneys (in Evie, Westray, Sanday and Stronsay). Each of these have kirk rather than chapel appellations, are grander than might have been expected, and are sited on the top of broch mounds. Lamb suggests a parallel with the Irish practice where IA or Early Christian defensive sites were gifted by the secular ruler to the church, or the pattern of missionary activity in central Germany, where again we see how monasteries were established in strategic, elevated places, pre-existing settlements, but in areas under royal ownership or control (Parsons 1983). In Ireland, for example, the rath at *Ardmacha* was donated to Patrick by the local king, according to the Tripartite Life of the Saint, and several monasteries, notably Nendrum and Downpatrick are sited in earlier cashels, hill-forts or raths (Thomas 1971, 32-34).

The St Boniface and Tredwell dedications on Papa Westray again intimate an awareness of the Roman church. It is here that Lamb suggests the bishopric for the Northern Isles was intended, on an island fairly central for both Orkney and Shetland. At the time of



its foundation (?in the mid-eighth century) the martyrdom of St Boniface in Frisia may have been well known. The juxtaposition of a St Tredwell (otherwise Triduana or Trolla) and St Boniface dedication is highly relevant. According to the legend of St Boniface's large and successful mission to Pictland, a holy virgin, St Tredwell, accompanied the saint. Whilst the legend contains no association with Orkney, there are also dedications to this saint in Sutherland and Caithness (Thomson 1987, 10-11). Whilst there was a twelfth century revival in interest in St Tredwell, the association of these two saints on Papa Westray may be presumed to be early.

At St Tredwell's there may be a broch at the core of the settlement mound on which the site is situated. At St Boniface's the name Munkerhoose applies to structures buried under the churchyard, and to the west of it. Here, in the opinion of Lamb, the present field-evidence suggests an IA settlement, very likely centered on a broch, with occupation continuing into the LIA period. A Norse hog-back and early Christian cross-slabs are associated with the area. The name Binna's Kirk is sometimes applied to the farm mound to the N of the churchyard, and this may be a recollection of a church other than the parish church, and which was specifically associated with the mound.

The *papay* name element (fig 79) can be better seen as representing pastoral clergy rather than eremetics, as the juxtaposition of *papay* places with fertile land may confirm (Lamb 1988). The term 'pastoral' is used here to draw a distinction between the Irish and Columban church with their emphasis on the monastic life and the prime authority of the abbot in contrast to the Roman church where bishops held most power, and the church was structured around dioceses, with a heavy emphasis on administering and preaching amongst the people. Some of the north British dioceses may have been a legacy from the Roman period, lasting into the seventh century (Thomas 1971, 20), and new dioceses continued to be formed, but nothing is known of any of their further sub-divisions. All in all the Orcadian evidence points to the introduction of a Roman church with a pastoral structure in the eighth century. The only possible evidence for sub-divisions is the Peterkirks, and the potential episcopal centre at St Boniface's. The Orkney system may share some similarities with the system of territorial parishes

served by secular priests which was otherwise introduced to Scotland in the early twelfth century (Donaldson 1985, 23).

Peter dedications in Caithness are not so common. At Crosskirk the earliest structural remains are of a twelfth century chapel, originally dedicated to St Peter. This is the only known Peter dedication which can be associated with a broch. Other known dedications are at Thurso (RCAHMS 1911a, item no 418) and Olgrimbeg Burn (*ibid*), item no 154), but their date is unknown.

It now remains to review the rest of the evidence for pre-Norse Christianity in Orkney and Caithness. In chapter 8 the evidence for LIA burial practice, some of which may be associated with Christianity was reviewed, and it was noted that this can often be associated with broch sites. Abandoned broch sites were also reused for non-burial ecclesiastical purposes. The broch at Stromness or Warebeth (SMR no 1461) is in an area also known as Monker-house, or Monkers Green, a name pointing to an older ecclesiastical association. There is a local tradition of a religious establishment in this area, but the only physical evidence for this is the long cist cemetery already discussed (§8.3) and two pieces of Insular metalwork. The metalwork, which was recovered from the area in the nineteenth century, is very fine and possibly of an ecclesiastical origin (appendix VI). The presence of Insular metalwork in this area could thus reflect the contacts between Scotland and Northumbria. Bakka (1963, 61), however, makes the interesting suggestion that they might come from Norse graves, because a surprisingly large number of contemporary late Saxon and Insular objects have been found in Norwegian graves. If this is the case, then there is only the place-name and un-dated graves to suggest an early Christian presence at this site. Alternatively these objects might have come from a Christian but secular context. Additional broch sites with ecclesiastical associations are Overbrough, Harray where a possible broch site has a church and cemetery on top of it (RCAHMS 1946 II, item no 139) and St Mary's Kirk, Isbister (*ibid*, item no 300; SMR no 667).

Class I symbol stones tend to indicate burial, and the idea for them probably derived from contact with literacy via the intermediary of the church. There is no reason to assume that the Orkney and Caithness examples post-date the establishment of the Roman church;



the idea for them probably stems from earlier southern contact with literacy, the idea for their erection then diffusing north. However, class II stones which combine a cross with symbols are dated from the eighth century and are not solely burial markers. In their design they reflect artistic inspiration from Northumbria, and are a patent indicator of the closer relationships which existed between Pictland and Northumbria. Examples have been found at the Brough of Birsay (§8.1.1), Skinnet (Allen and Anderson 1903, 30-33), Ulbster (RCAHMS 1911a, item no 444) and Latheron (*ibid*, item no 299; Stevenson 1959, 40), but never in direct association with a broch. It is interesting to observe the larger number of Class II stones in Caithness, despite the paucity of evidence for the contemporary church. None the less, Hughes (1970, 11) would argue that if the number of Class II stones is taken as a gauge of the extent of influence of the Northumbrian church, it was obviously less apparent in the north.

So far I have documented the evidence for the introduction of a Roman-style church to Orkney, and possibly to Caithness, and have noted that the evidence for this is often associated with broch sites. I therefore suggest (after Lamb 1988) that the church was being granted land by the king, in return for which clerics effectively acted as secular lords. The king thus extended his power into this area in a number of ways: the church acted as agents or representatives of the king; its pastoral system was a means of extending and establishing an ideology which was pro-state; and because the church had a monopoly over the resource of the written word (see §11.2) it may even may have been involved in administrative matters. Níeke (1988) suggests that the *Senchus fer nAlban* may have been written by Dalriadan clerics (Bannerman and others appear to evade stating this). Even if, as Driscoll (1988a and b) suggests, writing did not play such an important role in the establishment of new relations in Pictland as elsewhere, the inspiration for the symbol stones may have come from the church, and by the time of the class II stones the relationship between the two is manifested in stone. Class II stones

*mark the point at which the royal administrative system has been established and the church has become a political arena where power disputes are contested through the patronage of royal*

*establishments. (Driscoll 1988a, 230)*

The church, state and secular nobility were mutually interdependent, a relationship which is expressed in the physical proximity of some of their establishments. The Brough of Birsay is the classic site, where it is impossible to describe it as either secular or ecclesiastical, and it is most probable that a rich secular establishment also encapsulated an ecclesiastical one. Other sites, such as the Broch of Burrian juxtapose confusing elements of former secular and ecclesiastical activity. Sites such as these may have been the nucleus of estates with their own churches or chapels, or former domestic sites donated to the church. Ecclesiastics were effectively ideologically endowed nobility, men who derived their authority from their control of access to Christianity, enjoying much of the life-style and advantages of their secular equivalents, from whom many ultimately stemmed. Some of the ornamentation on class I and II stones draws upon the repertoire of design common to both secular and ecclesiastical metalwork (Henderson 1967). It seems that some brochs sites may have been donated to the church, and the secular reuse of important MIA sites, which may still have been important centres of estates or territories, may in part be an attempt to legitimise and enforce the new far-flung network of authority. Similarly the introduction of the Roman church with its pastoral organisation can be interpreted as a conscious effort to consolidate secular power through the church. Christianity was a form of ideological power whose authority resided in the correspondence between its doctrine and the motivations and needs of the converted (Mann 1986, 302). Whilst the appeal and influence of Christianity was universal, yet at the same time it reinforced the standing of the extant secular authority and hence the obvious appeal of the Roman church to a king such as Nechtan, who wished to extend and ramify his authority. The distribution of symbol stones and evidence for the ecclesiastical reuse of sites thus points to those sites where the interests of the social elite were closely tied up with the developing Pictish church and state. The extension of the church to Orkney, and possibly Caithness, within a few years of AD 715 may effectively date the extension of southern Pictish royal power, in real terms, to this area (Lamb 1988), although the class I stones suggest that moves were already being made to realign the



organisation of land and society. In 878 when new Scottish king Giric, nephew of Kenneth MacAlpin 'was the first to give liberty to the Scottish church, which was in servitude up to that time after the custom and fashion of the Picts (king list, after Smyth 1984, 188) he may also have been undermining the ecclesiastical structure which had worked symbiotically with the former Pictish leaders (Lamb 1988).

\* \* \* \* \*

This chapter has investigated some of the many means by which the Pictish proto-state or kingdom extended its authority into Orkney and Caithness. The final chapter presents an overview of these conclusions. By the time the Norse arrived Orkney and Caithness were both thoroughly Pictish, but far removed from the prime sources of authority. The regional infra-structure was thus not adequate enough to make a stand against a Norse takeover, particularly at a period when the powers of the Pictish state were diminishing. It was however a well-oiled system of administration, both secular and ecclesiastical, onto which the Norse grafted themselves (as in Ireland, England and Normandy: B Crawford 1987, 168).



## CHAPTER 12: OVERVIEW AND COMMENTS



## CHAPTER 12: OVERVIEW AND COMMENTS

The stated aims of this thesis were ambitious, namely to write a social synthesis for IA Orkney and Caithness from a defined theoretical stance. To what extent has this been achieved, and if not why not? In presenting an overview of this topic and its findings, then its failings can be seen to stem largely from the inadequacies of the archaeological record. These will be examined here briefly.

A considerable part of these volumes, and of the time occupied in their preparation, has been spent on empirical examination of the settlement record of the Atlantic Province, more particularly Orkney and Caithness. Much of this stems from an up-dating and re-examination of a substantial and important data base of pins and combs. This, and original analysis of the C-14 record for IA Scotland, unfortunately does little to document the period between the MIA and LIA II, which was one of my original aspirations. On the basis of what could be extracted from the records of several centuries of previous research, the settlement evidence was examined in an attempt to understand the way in which architecture structured the reproduction of society. The resultant model is as good as its data, and will need emendation, if not rejection, with time. To date, it documents the shift from the MIA where society was ranked and the ultimate authorities were locally based to the LIA II when there were more remote sources of ultimate authority, whilst local devolved authority continued on a new footing. This model is undoubtedly over-generalised, and does not satisfactorily address the issue of the extent to which these changes were the norm and how large a part of the population was affected by them. It is not yet possible to assess this. Throughout Scotland there is little evidence to chart the chronological and physical transition between these two models, but some suggestions have been made as to how the transition from intensive to extensive forms of power was achieved. To a large extent I have had to draw on evidence and models used by other scholars to chart and understand similar, broadly contemporary changes which were occurring throughout Europe. Notably I have drawn on the work of Driscoll (1987, 1988, forth) which examines Pictish

society and the evolution of the Pictish proto-state from a similar theoretical stance to my own. I like to think that our work may be complementary in so far as he discusses the evolution and structure of society in the Pictish heartland, whereas I am looking at the effect of these changes from the point of view of Orkney and Caithness, areas at the northern, if not effectively northernmost extremes of Pictish authority. My task has therefore been to explain how authority was extended to these areas, and how it was maintained and reproduced. I do not assume that the developments seen elsewhere were exactly replicated in the study area, but something along these lines might have happened.

The penultimate chapters have discussed the ways in which changing agricultural practice, land tenure and the introduction of a Roman pastoral church brought about, or could have brought about, the changes which I posit. Military, political, economic and ideological resources have all been alluded to as instrumental in this, although I have not broken down my discussion under these sub-headings because the degree of overlap between each is too great. However, in fig 80 an attempt is made to present graphically the potential relationship between these resources and the practicalities of their utilisation. There are three principles underlying this model:

1. control of literacy = control of political and administrative resources
2. control of ideology)  
control of land) = control of people  
control of political and  
administrative resources)
3. control of people = control of economic and military resources.

Once this is accepted then the workings of this model can be understood, as can the manner in which the evidence presented in chapters 10 and 11 fitted into this.

Essentially, I suggest that long-distance relations are maintained by intermediate sources of authority, via either the locally-based church or nobility. Both the ecclesiastics and



nobility may be loyal natives or implanted outsiders. Whilst the church and nobility to some measure probably check each others' excesses, there is no doubt that both gain enormous power and wealth under this system. Such is the dialectic to which Mann (1986) refers between centralising forces, such as a state, and the decentralising force of its agent. This may be the source of some of the conflict alluded to in the early historic sources. Within this network of relations the church, with its monopoly of literacy and ideology, was probably the most important component. Aside from this, whether at the local or long-distance level, society continued to revolve around the reproduction of social relations which were structured by the inter-relationship between land, people and economic resources.

However, whilst I have presented a model for the social synthesis of Orkney and Caithness, more particularly the transition from the MIA to the LIA, this simple model is one which is based on limited evidence. Future work must investigate closely the relationship between the church and society (for example by the excavation of a Peterkirk), and amplify our picture of IA land organisation and changing agricultural practices. In particular, efforts should be made to detect and investigate the nature of late MIA/LIA settlement. One issue I have not addressed here is the extent to which the subsequent Norse history of this part of the world, in contrast to southern Pictland, will have coloured our archaeological record and subsequent perceptions of these relative areas. Effectively LIA Orkney and Caithness will remain an enigma for a long while to come, but it is important that the potential sophistication of its society and its similarities with other more southerly areas should not be overlooked.

Finally, it is worth considering the suitability of Orkney and Caithness as a study area. Despite the fact that they are topographically similar, and separated by only a short stretch of water, their archaeology is not identical. Whilst they share more in common than other areas of the Atlantic Province, the fact is that because more is known of the Orkney evidence, the model which I have presented may be too specific to fit Caithness exactly. Orkney would seem always to have been pre-eminent because of its focal position in the Atlantic seaways, and it may therefore have had a different development. Today, when long distance communications are easy, is

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the time for future scholars to rectify this imbalance and poverty in our understanding and knowledge of these areas.



#### PART IV: APPENDICES

##### APPENDIX I: A CATALOGUE OF SCOTTISH IRON AGE AND EARLY NORSE RADIOCARBON DETERMINATIONS



APPENDIX I: A CATALOGUE OF SCOTTISH IRON AGE AND EARLY NORSE  
RADIOCARBON DETERMINATIONS.

The following list of Scottish Iron Age and early Norse C-14 determinations has been compiled from those collected by Ralston (not published), and enhanced by further details from respective site reports and complementary unpublished data. Presentation is largely based on that suggested by Lavell (*CBA Newsletter*, 2:7 [1987], 66).

Appendix Ia lists all dates in order of laboratory number. It is followed by a list of weighted means (a-v), calculated using the technique of Ward and Wilson (1978). The information included in each field of data base is as follows: the determination BP; standard deviation at one sigma ( $1-\sigma$ ) level; isotopic fractionation value ( $d^{13}C^{\circ}/\text{‰}$ ); calibrated date ranges at the  $1-\sigma$  and  $2-\sigma$  levels respectively; site name; the event dated; the nature of the sample; its context; and finally references. Note that all  $d^{13}C^{\circ}/\text{‰}$  readings have a negative value unless indicated otherwise; where a value of 0 is indicated then the value is unknown. The standard of entries is a reflection of the available published information. The event dated is as given by the excavators, and often relates only to a structural phase; further critical analysis of the relationship between the sample taken and the event dated must be undertaken by all those extracting data from this list. A concordance of laboratory numbers with sites is found in Appendix Ib.

All the dates, whether routine or high-precision have been calibrated to both the  $1-\sigma$  and  $2-\sigma$  levels using the Trondheim calibration curve (Stuiver and Pearson 1986; Pearson and Stuiver 1986) in the 20 year atmospheric record using the high precision calibration curve programme (Revision 2.0, 1987). No laboratory 'error multipliers' have been included in these calculations. Stuiver and Pearson (1986, 807) would argue against the necessity of calibrating dates to the  $2-\sigma$  level because the original sigma value is not a properly defined standard deviation in many circumstances. However, in the absence of knowledge of individual laboratory error



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multipliers all quoted dates have been subjected to exactly the same treatment. Most archaeologists tend to prefer to use  $2-\sigma$  (95% certainty) values, which should always be used if serious misinterpretations are to be avoided (Baillie and Pilcher 1983, 60).

Further discussion of these C-14 dates and the problems of calibration are found throughout the main body of text, specifically §3.1.3 and §7.2.2-3.

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
B-397	2101	050	0.0	cal BC 97-cal AD 29	cal BC 161-137 130-cal AD 80	Loch Bharabhat		charcoal	secondary levels	
	2100	050	0.0	cal BC 193-91	cal BC 354-301 240-cal AD 1	Loch Bharabhat		charcoal	secondary contexts	
	2550	050	0.0	cal BC 801-764 763-667 615-607	cal BC 814-751 710-530	Loch Bharabhat			?primary contexts/pre-dun	
B-397	2100	110	0.0	cal BC 358-288 250-cal AD 10	cal BC 400-cal AD 120	Skaill	occupation of IA site			Gelling 1984, 1985
B-413	2210	120	0.0	cal BC 400-110	cal BC 752-708 530-cal AD 20	Skaill	occupation of IA site			Gelling 1984, 1985
B-762	1350	100	0.0	cal AD 610-770	cal AD 530-890	Skaill	tag for rhse		layer preceding paving of abandoned rhse	Gelling 1984, 1985
B-763	1420	100	0.0	cal AD 550-670	cal AD 420-790	Skaill	tag for rhse			Gelling 1984, 1985
B-764	2020	100	0.0	cal BC 170-cal AD 80	cal BC 362-282 260-cal AD 210	Skaill	occupation of rhse		primary context in rhse	Gelling 1984, 1985
BM-445	1633	040	0.0	cal AD 386-434	cal AD 266-279 334-535	Cullykhan		wooden object	from interior	Grieg 1971-72
GU-101	1908	060	0.0	cal AD 22-136	cal BC 40-cal AD 240	Kilphedir	open settlement, house 5	roof-pole		Fairhurst and Taylor 1971
GU-1039A	1335	040	0.0	cal AD 655-684	cal AD 637-772	Dunrobin Dairy Park		bone: human	rectangular cairn	Close-Brooks 1980
GU-1039B	1135	100	0.0	cal AD 780-1000	cal AD 670-1040	Dunrobin Dairy Park		bone: human	rectangular cairn	Close-Brooks 1980
GU-1040	1330	60	27.7	cal AD 644-768	cal AD 600-854	Dundurn	phase 3B: reinforcement of terrace wall	charcoal: mixed	DN406	Alcock et al forth
GU-1041	1365	065	0.0	cal AD 613-685	cal AD 556-654	Dundurn	HE 2 Destruction of citadel 1	mixed charcoal including twigs	DN415	Alcock and Driscoll 1985
GU-1042	1510	60	28.5	cal AD 434-635	cal AD 420-640	Dundurn	phase 2A: activity on terrace	unburnt hazel twigs as HAR-2519	DN426	Alcock et al forth



Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1043	1435	065	0.0	cal AD 556-654	cal AD 432-680	Dundurn	phase 1: midden bones: animal behind palisade 1	animal	DN427	Alcock and Driscoll 1985
GU-1066	1695	060	0.0	cal AD 256-413	cal AD 175-530	Rossinish			midden layers	Ritchie & Welfare 1983, 321
GU-11	2064	055	0.0	cal BC 168-8	cal BC 336-325 200-cal AD 60	Kilphedir	rhse occupation phase 2	roof-pole	hut 5	Fairhurst and Taylor 1971
GU-1114	1170	070	0.0	cal AD 773-978	cal AD 670-1000	Machrins, Colonsay	Norse inhumation	human bone		Ritchie 1981
GU-1115	1150	070	0.0	cal AD 777-982	cal AD 680-931	Machrins, Colonsay	use of site			Ritchie 1981
GU-1138	2255	070	0.0	cal BC 398-348 319-307 304-228 223-209	cal BC 410-170 141-124	Broxmouth	burials in cemetery outside fort			Hill 1979 Comrie 1979
GU-1139	2155	060	0.0	cal BC 356-116	cal BC 390-90 81-69 58-43 7-4	Broxmouth	burials in cemetery outside fort			Hill 1979 Comrie 1979
GU-1140	2270	065	0.0	cal BC 400-212	cal BC 478-173	Broxmouth	burials within fort			Hill 1979 Comrie 1979
GU-1141	2160	060	0.0	cal BC 357-118	cal BC 390-45	Broxmouth	burials in cemetery outside fort			Hill 1979 Comrie 1979
GU-1142	1670	060	0.0	cal AD 259-427	cal AD 230-540	Broxmouth	burials within fort			Hill 1979 Comrie 1979
GU-1143	2020	065	0.0	cal BC 157-52	cal BC 337-cal AD 126	Broxmouth	burials in cemetery outside fort			Hill 1979 Comrie 1979
GU-1144	2200	065	0.0	cal BC 386-173	cal BC 400-74	Broxmouth	burials within fort			Hill 1979 Comrie 1979
GU-1145	2060	060	0.0	cal BC 171-cal AD 1	cal BC 349-cal AD 60	Broxmouth	burials in cemetery outside fort			Hill 1979 Comrie 1979
GU-1146	2145	060	0.0	cal BC 354-95	cal BC 390-2	Broxmouth	burials in cemetery outside fort			Hill 1979 Comrie 1979

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1149	2210	070	0.0	cal BC 389-173	cal BC 400-74	Dryburn Bridge,	burials	bone: human		Triscott 1982
GU-1152	2440	065	21.1	cal BC 766-404	cal BC 800-390	Bu	immediate post-roundhouse abandonment, ph I Ib	bone: cow's skull	very bottom of rubble fill of rhse, L2a	Hedges 1987 I
GU-1153	2545	065	21.4	cal BC 803-759 684-656 639-591 588-549	cal BC 830-450 449-414	Bu	earthhouse occupation, ph IIIa	bone: cattle, pig & deer bone	floor deposit inside earthhouse, L65	Hedges 1987 I
GU-1154	2460	080	21.5	cal BC 787-405	cal BC 810-390	Bu	roundhouse occupation, phase IIa	bone: sheep, cattle & pig	floor deposits inside house, L51	Hedges 1987 I
GU-1155	1520	070	0.0	cal AD 429-637	cal AD 390-650	The Cat_stane	burials in long cists	bone: human		Cowie 1978
GU-1156	1595	085	0.0	cal AD 357-545	cal AD 240-640	The Cat_stane	burials in long cists	bone:human		Cowie 1978
GU-1157	1365	080	0.0	cal AD 604-762	cal AD 540-856	The Cat_stane	burials in long cists	bone:human		Cowie 1978
GU-1158	1550	070	0.0	cal AD 419-595	cal AD 343-640	The Cat_stane	burials in long cists	bone:human		Cowie 1978
GU-1159	1335	120	0.0	cal AD 601-800	cal AD 431-980	The Cat_stane	burials in long cists	bone:human		Cowie 1978
GU-1191	940	055	0.0	cal AD 1019-1165	cal AD 990-1220	Beachview Studio	tpq rectangular house	charcoal: barley and pine	midden post-dating house	Morris 1983
GU-1193	955	060	0.0	cal AD 1013-1161	cal AD 980-1220	Brough of Birsay	ph 3a	charcoal: salix		Hunter and Morris 1982
GU-1228	2470	095	25.0	cal BC 794-404	cal BC 820-390	Bu	roundhouse occupation, ph IIa	charcoal, including salix	floor deposits inside house, L46	Hedges 1987 I
GU-1229	1305	055	0.0	cal AD 660-773	cal AD 640-830 833-858	Brough of Birsay	ph 2b	charcoal: salix		Hunter and Morris 1982
GU-1243	1365	055	0.0	cal AD 636-678	cal AD 600-770	Iona		peat	23/447 Group 1, ditch 1	Barber 1981
GU-1245	1260	055	0.0	cal AD 675-802	cal AD 660-890	Iona		peat	ditch 1, top of lower peat block	Barber 1981



Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1246	1335 055	0.0	cal AD 651-690	cal AD 610-780	Iona	stratigraphically highest leather found	leather	23/449	Barber 1981
GU-1247	1345 055	0.0	cal AD 647-686	cal AD 610-780	Iona	insertion of boulder wall foundation		23/489. Group 1: ditch 1	Barber 1981
GU-1248	1315 055	0.0	cal AD 657-726 734-767	cal AD 630-810	Iona		peat	ditch 1, peat formed over foot of boulder wall	Barber 1981
GU-1251	1337 055	0.0	cal AD 650-689	cal AD 610-780	Brough of Birsay				Hunter 1986 passim
GU-1262	1355 055	0.0	cal AD 641-682	cal AD 600-780	Iona	charcoal layer in pit 156	charcoal	23/108 Group 3, pit 156	Barber 1981
GU-1273	1570 065	20.0	cal AD 411-558	cal AD 263-638	Ardnave, Colonsay		antler	deposit 3 in OGS in which hearth 2 occurs	Ritchie & Welfare 1983
GU-1281	1480 055	0.0	cal AD 541-635	cal AD 430-660	Iona	top silt layer, ditch 2		23/64 Group 2, ditch 2	Barber 1981
GU-1282	1380 060	0.0	cal AD 619-673	cal AD 560-730 733-768	Iona	second lowest silt layer, ditch 2		23/114 Group 2, ditch 2	Barber 1981
GU-1291	1065 075	0.0			Sandwick, Unst	date of skeleton	bone: human	kerbed cairn, cist cemetery	Bigelow 1985
GU-1313	1570 060	0.0	cal AD 415-555	cal AD 350-610	Mote of Mark		substantial charred timbers	incorporated in tumble at face of north rampart	Longley 1982
GU-1314	1525 050	0.0	cal AD 443-599	cal AD 420-640	Mote of Mark	occupation rear of S rampart	substantial charred timbers	backfilled by Curle in 1913	Longley 1982
GU-1315	1595 050	0.0	cal AD 407-538	cal AD 340-570 585-591	Mote of Mark		split charred timbers	base of north rampart	Longley 1982
GU-1316	1525 050	0.0	cal AD 443-599	cal AD 420-640	Mote of Mark		split charred timber	base of north rampart	Longley 1982
GU-1320	1035 060	0.0	cal AD 964-1026	cal AD 890-1050 1083-1122 1139-1155	Red Craig	tag for building	carbonised grain	rubble and debris from inside building	Morris 1983

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1369	955	070	0.0	cal AD 1010-1164	cal AD 960-1230	Jonathan's Cave	occupation level of cave	charcoal	lower floor level, trench 2	Mackie and Glaister 1981
GU-1370	1870	070	0.0	cal AD 65-228	cal BC 30-cal AD 260 287-329	Leckie	ph 1, pre-broch, wooden hut			Mackie 1982
GU-1370	1270	060	0.0	cal AD 669-790	cal AD 650-890	Dunollie	ph 1	animal bone : Sus and Ovis	DH 117	Alcock and Alcock 1987
GU-1390	1115	060	27.8	cal AD 881-988	cal AD 780-1020	Brough of Birsay	phase 2.2	charcoal: salix	BB 800312, F 225, site VIII	Hunter 1986
GU-1391	915	095	24.4	cal AD 1015-1225	cal AD 960-1270	Brough of Birsay	phase 3	charcoal: salix	BB 800098, F 230, site VIII	Hunter 1986
GU-1392	1425	060	0.0	cal AD 593-659	cal AD 540-680	Dunollie	ph 1	charcoal: Quercus	DH 117	Alcock and Alcock 1987
GU-1394	975	060	27.6	cal AD 1003-1050 1084-1122 1139-1155	cal AD 960-1200	Brough of Birsay	phase 3	charcoal: salix	BB 800265, F 191, site VIII	Hunter 1986
GU-1395	1210	060	22.1	cal AD 715-744 756-889	cal AD 670-970	Dunollie	ph 1	animal bone : Bos	DH 117	Alcock and Alcock 1987
GU-1396	1360	060	24.7	cal AD 636-682	cal AD 590-780	Dunollie	ph 1	animal bone : Bos	DH 117: duplicate of GU-1395	Alcock and Alcock 1987
GU-1397 - see GU-1379	1040	065	26.0	cal AD 956-1026	cal AD 880-1060 1070-1125 1135-1157	Brough of Birsay	phase 3	charcoal: salix	BB 800298, F 237, site VIII	Hunter 1986
GU-1400	1200	090	28.1	cal AD 685-900 901-953	cal AD 650-1010	Saear Howe	ph IIb	charcoal: salix	SH 77.165, trench A, L99 (285)	Hedges 1983
GU-1401	1395	060	1.2	cal AD 606-668	cal AD 550-710 746-754	Saear Howe	ph IIc	mixed faunal remains: shells & animal bone	SH 77.82, trench A, L59	Hedges 1983
GU-1402	1260	060	23.1	cal AD 673-813 846-852	cal AD 650-890	Saear Howe	ph IIa	charcoal including picea	Trench A, L84 (281)	Hedges 1983
GU-1404	2400	100	0.0	cal BC 763-390	cal BC 800-211	Dryburn Bridge,	burials	bone: human		Triscott 1982
GU-1405	2665	165	0.0	cal BC 1007-595	cal BC 1291-400	Dryburn Bridge,	burials	bone: human		Triscott 1982
GU-1410	2415	080	0.0	cal BC 763-399	cal BC 790-364	Dryburn Bridge,	burials	bone: human		Triscott 1982



Scottish Iron Age and early Norse C-14 determinations

number	det	BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1412	2300	125	0.0	cal BC 512-207	cal BC 790-72		Dryburn Bridge,	burials	bone: human		Triscott 1982
GU-1414	2040	180	0.0	cal BC 356-cal AD 384	cal BC 410-cal AD 384		Dryburn Bridge,	burials	bone: human		Triscott 1982
GU-1443	1755	060	24.4	cal AD 176-379	cal AD 83-410		Ardnave, Colonsay		mixed charcoal, hearth 2 predominantly willow		Ritchie & Welfare 1983
GU-1457	1245	070	0.0	cal AD 675-882	cal AD 650-960		Kildonan	period I or II	charcoal	below hearth 2	Peltenburg 1982
GU-1458	1210	060	0.0	cal AD 715-744 756-889	cal AD 670-970		Kildonan	period I or II	charcoal	below hearth 2	Peltenburg 1982
GU-1461	1265	055	0.0	cal AD 671-801	cal AD 650-890		Kirk Hill, St Andrews	burials in dug graves	bone: human		Wordsworth 1981
GU-1462	1200	055	0.0	cal AD 729-935	cal AD 670-980		Kirk Hill, St Andrews	burials in dug graves	bone: human		Wordsworth 1981
GU-1570	1075	060	25.0	cal AD 893-1014	cal AD 818-841 850-1030		Brough of Birsay	phase 2.2	charcoal: ?picea	BB 810390 ,F 308, site IX	Hunter 1986
GU-1571	1045	080	25.0	cal AD 895-1029	cal AD 800-1160		Brough of Birsay	phase 2.1	charcoal: salix	BB 810520, F 270, site IX	Hunter 1986
GU-1572	1050	060	25.0	cal AD 900-904 951-1021	cal AD 880-1040 1103-1113		Brough of Birsay	phase 2.2	charcoal: ?picea	BB 810512 ,F 301, site IX	Hunter 1986
GU-1573	995	060	25.0	cal AD 987-1041	cal AD 898-917 940-1170		Brough of Birsay	phase 2.2	charcoal: ?picea	BB 810373, F 308, site IX	Hunter 1986
GU-1580	2510	080	20.0	cal BC 799-515	cal BC 820-400		Pierowall	tag for roundhouse	bone: cattle	hollow(s) filled with occupation soil	Sharples 1984
GU-1581	2425	060	20.0	cal BC 761-680 660-632 596-576 563-403	cal BC 790-390		Pierowall	occupation of roundhouse	bone: cattle	in situ occupation layer outside rhse	Sharples 1984
GU-1593	1360	060	0.0	cal AD 640-685	cal AD 560-796		Lundin Links, Fife	burial	bone: human		Close-Brooks 1984
GU-1594	1475	060	0.0	cal AD 537-642	cal AD 430-660		Lundin Links, Fife	burial	bone: human		Close-Brooks 1984
GU-1598	1250	090	25.0	cal AD 666-886	cal AD 630-980		Brough of Birsay	phase 1	charcoal: salix	BB 820605, F 258, site IX	Hunter 1986

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1599	1280	060	25.0	cal AD 666-786	cal AD 650-890	Brough of Birsay	phase 1	charcoal: salix	BB 820615, F 253, site IX	Hunter 1986
GU-1624	1120	065	0.0	cal AD 781-989	cal AD 729-1020	Kintra, Islay	burial	human collagen	unaccompanied burial in pit covered by slabs	Ritchie & Welfare 1983, 322
GU-1641	1465	060	0.0	cal AD 539-643	cal AD 430-670	Traig nam Barc, Garvard	hearth	charcoal		Ritchie 1981, 268
GU-1662	1995	065	0.0	cal BC 93-cal AD 66	cal BC 172-cal AD 130	Dun Flodigarry	tpq for dun	charcoal: hazel	context 4	Martlew 1985
GU-1749	1565	045	0.0	cal AD 424-549	cal AD 399-600	Howe	ph 8		stalled building	Carter et al 1984
GU-1750	2070	050	0.0	cal BC 169-35	cal BC 332-328 200-cal AD 20	Howe	end of main broch village, ph 7			Carter et al 1984
GU-1756	2220	070	0.0	cal BC 391-192	cal BC 400-100	Howe	reuse of ph 7 east building in ph 8			Carter et al 1984
GU-1757	1450	050	0.0	cal AD 560-648	cal AD 530-660	Howe	final reuse of ph 7 east building in ph 8			Carter et al 1984
GU-1758	2255	095	0.0	cal BC 400-196	cal BC 751-718 530-100	Howe	rampart on east, ph 5/6			Carter et al 1984
GU-1759	1940	060	0.0	cal BC 2-cal AD 119	cal BC 100-cal AD 210	Howe	ditch filling and rebuilding, ph 5/6			Carter et al 1984
GU-1760	2405	075	0.0	cal BC 760-683 657-637 592-585 552-397	cal BC 790-380	Howe	earliest post-Neolithic structure		lowest silting in well	Carter et al 1984
GU-1768	1465	050	0.0	cal AD 550-640	cal AD 450-660	Urquhart	destruction of fort	charcoal: includes Betula	overlying floor and hearths, trench 200	Foster, Driscoll & Alcock 1985
GU-1769	1225	055	0.0	cal AD 689-883	cal AD 670-900 910-948	Urquhart	destruction of fort	charcoal: includes Betula as GU-1768	overlying floor and hearths, trench 200	Foster, Driscoll & Alcock 1985



Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1786	1975	055	0.0	cal BC 44-cal AD 78	cal BC 110-cal AD 130	Howe	late burning in broch tower, ph 7			Carter et al 1984
GU-1787	1670	065	0.0	cal AD 259-293 323-427	cal AD 230-540	Howe	ph 7		workshop floor, NE building	Carter et al 1984
GU-1788	1935	055	0.0	cal AD 7-119	cal BC 90-cal AD 150 151-212	Howe	early burning in broch tower, ph 7			Carter et al 1984
GU-1789	2405	070	0.0	cal BC 759-686 654-642 547-398	cal BC 790-380	Howe	construction of rhse rampart, ph 5			Carter et al 1984
GU-1794	1560	055	24.4	cal AD 422-559	cal AD 390-610	Clatchard Craig	rampart 1	charcoal: Quercus	trench B, level 6, sample 5	Close-Brooks 1986
GU-1795	1350	075	25.5	cal AD 634-713 747-754	cal AD 560-820 843-853	Clatchard Craig	rampart 1	charcoal: Quercus	trench B, level 6, sample 6	Close-Brooks 1986
GU-1796	1475	055	23.8	cal AD 543-638	cal AD 440-660	Clatchard Craig	rampart 2	charcoal: Quercus	trench A, level 7, sample 3	Close-Brooks 1986
GU-1797	1470	060	25.9	cal AD 543-643	cal AD 430-660	Clatchard Craig	rampart 3	charcoal: Quercus, Alnus glutinosa	trench D, level 3	Close-Brooks 1986
GU-1798	1400	055	24.4	cal AD 606-665	cal AD 550-690	Clatchard Craig	rampart 3	charcoal: Quercus	trench H, level 27, sample 4	Close-Brooks 1986
GU-1799	2380	050	0.0	cal BC 517-397	cal BC 760-682 658-635 594-581 560-390	Howe	phase 5	bone: human	roundhouse drain	Carter et al 1984
GU-1804	2420	55	0.0	cal BC 759-686 654-642 547-402	cal BC 780-390	Howe	phase 3, pre-settlement midden		pre-settlement midden	Carter et al 1984
GU-1805	2305	060	0.0	cal BC 403-372	cal BC 510-340 320-200	Howe	phase 4		first settlement floor	Carter et al 1984
GU-1806	975	050	0.0	cal AD 1010-1046 1097-1116 1146-1152	cal AD 980-1170	Pool	ph 5d	mixed animal bone	PL 83 0066	pers comm J Hunter
GU-1807	1105	070	0.0	cal AD 882-1004	cal AD 770-1030	Pool	ph 5a/b	mixed animal bone	PL 83 0044	pers comm J Hunter

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-1808	930 050	0.0	cal AD 1024-1166	cal AD 1010-1220	Pool	ph 6bi1	mixed animal bone	PL 83 0022	pers comm J Hunter
GU-1809	1330 055	0.0	cal AD 653-713 746-754	cal AD 620-790	Pool	ph 4g	bone: Bos species only	PL 83 0095	pers comm J Hunter
GU-1810	1270 050	0.0	cal AD 673-786	cal AD 660-880	Pool	Ph 5d	dung	PL 83 0080	pers comm J Hunter
GU-1814	2290 065	0.0	cal BC 404-233	cal BC 512-200	Eilean an Duin	tpq for dun	charcoal	beneath wall of dun	RCAHMS 1988, item no 258
GU-1815	2160 055	0.0	cal BC 356-120	cal BC 390-71	Eilean an Duin	tpq for dun	charcoal	beneath wall of dun	RCAHMS 1988, item no 258
GU-1816	1155 050	0.0	cal AD 796-958	cal AD 727-733 770-990	Portknockie			PK-80-RC10	Ralston 1987
GU-1817	1115 050	0.0	cal AD 884-983	cal AD 790-1010	Portknockie			PK-79-RC2	Ralston 1987
GU-1822	1620 115	0.0	cal AD 259-293 320-560	cal AD 130-650	Portknockie	fence-line preceding timber-framed wall		PK-81-RC7	Ralston 1987
GU-1835	985 050	0.0	cal AD 1003-1041	cal AD 970-1160	Urquhart	destruction of fort	charcoal: includes Betula as GU-1768	overlying floor Foster, and hearths, trench 200	Driscoll & Alcock 1985
GU-1836	1085 100	0.0	cal AD 870-1020	cal AD 690-1160	Urquhart	destruction of fort	charcoal: includes Betula as GU-1768	overlying floor Foster, and hearths, trench 200	Driscoll & Alcock 1985
GU-1837	1210 090	0.0	cal AD 681-897	cal AD 650-1010	Urquhart	destruction of fort	charcoal: includes Betula as GU-1768	overlying floor Foster, and hearths, trench 200	Driscoll & Alcock 1985
GU-1997	1345 050	0.0	cal AD 649-684	cal AD 610-780	Pool	? ph 4a (probably later)	bone: Bos, Ovis, Equus	PL 84 0409	pers comm J Hunter
GU-1998	1505 050	0.0	cal AD 531-606	cal AD 430-650	Pool	ph 5b	bone: Bos	PL 84 0300	pers comm J Hunter
GU-1999	1520 050	0.0	cal AD 446-601	cal AD 420-640	Pool	ph 4f	bone: Bos, Ovis	PL 84 0559	pers comm J Hunter



Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-2000	1480	050	0.0	cal AD 543-633	cal AD 440-660	Pool	ph 5b	bone: Bos/Ovis	PL 84 0468	pers comm J Hunter
GU-2001	1320	055	0.0	cal AD 655-722 738-763	cal AD 630-800	Pool	ph 4g	bone: Bos	PL 84 0420	pers comm J Hunter
GU-2002	1250	050	0.0	cal AD 681-813 845-852	cal AD 660-890	Pool	ph 4g	charcoal: Salix, Alnus, Corylus	PL 84 0551	pers comm J Hunter
GU-2003	1185	050	0.0	cal AD 778-893	cal AD 690-970	Pool	ph 6a	bone: Bos, Ovis	PL 84 0381	pers comm J Hunter
GU-2004	1270	055	0.0	cal AD 671-788	cal AD 650-890	Pool	ph 5a	charcoal: Salix	PL 84 0517	pers comm J Hunter
GU-2005	1090	050	0.0	cal AD 891-1000	cal AD 828-831 860-1020	Pool	ph 5d	bone: Bos, Ovis	PL 84 0278	pers comm J Hunter
GU-2006	1160	050	0.0	cal AD 789-954	cal AD 722-737 760-990	Pool	ph 5d	bone: Bos, Ovis	PL 84 0353	pers comm J Hunter
GU-2102	1060	050	21.7	cal AD 899-904 951-1015	cal AD 890-1030	Dunollie	ph 3	bone: Bos, Sus, Ovis	DH 112	Alcock and Alcock 1987
GU-2103	1080	050	23.2	cal AD 894-1008	cal AD 880-1020	Dunollie	ph 3 duplicate of GU-2102	bone: Bos, Sus, Ovis	DH 112	Alcock and Alcock 1987
GU-2138	2230	050	0.8	cal BC 388-338 323-203	cal BC 400-170	Jonathan's Cave	seaward extension of layer 5	shell		Mackie and Glaister 1981
GU-2326	2010	050	0.0	cal BC 97-cal AD 29,41-51	cal BC 161-137 130-cal AD 80	Eilean Olabhat	immediately pre-dates metalworking debris, ph 1	charcoal	024: charcoal spread, possibly from hearth	pers comm I Armit
GU-2327	1800	050	0.0	cal AD 133-254 303-316	cal AD 90-340	Eilean Olabhat	deposition of metalworking debris, tpq ph 2	charcoal	019: uppermost layers in corbelled cell	pers comm I Armit
GU-2342	1790	050	0.0	cal AD 139-258 295-322	cal AD 110-350 359-373	Howe	3rd workshop floor in broch, late phase 7	bone: animal		pers comm B Smith
GU-2343	2130	080	0.0	cal BC 358-288 252-91	cal BC 390-cal AD 20	Howe	E workshop floor in E building, late phase 7	bone: animal		pers comm B Smith

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GU-2344	1810	050	0.0	cal AD 128-250	cal AD 80-270 271-339	Howe	S workshop, late phase 7	bone: animal		pers comm B Smith
GU-2345	1750	050	0.0	cal AD 226-343	cal AD 130-410	Howe	4th workshop floor in broch, late phase 7	bone: animal		pers comm B Smith
GU-2346	1750	050	0.0	cal AD 226-343	cal AD 130-410	Howe	SE workshop, late phase 7	bone: animal		pers comm B Smith
GU-2347	1170	050	0.0	cal AD 785-897 932-941	cal AD 714-746 750-980	Howe	earth floor in reuse of phase 7 building,late ph 8	bone: animal	stage 5 of phase 8	pers comm B Smith
GU-2348	2280	050	0.0	cal BC 397-365 277-264	cal BC 405-337 320-200	Howe	clay sealing of earth-house roof, phase 5	bone: animal		pers comm B Smith
GU-2349	1790	050	0.0	cal AD 139-258 295-322	cal AD 110-350 359-373	Howe	2nd workshop floor in broch, late phase 7	bone: animal		pers comm B Smith
GU-2351	1850	050	0.0	cal AD 87-228	cal AD 60-250 302-316	Howe	1st workshop floor in broch, late phase 7	bone: animal		pers comm B Smith
GU-2353	1770	050	0.0	cal AD 213-265 280-334	cal AD 120-390	Howe	E building,early (not earliest) use, phase 7	bone: animal		pers comm B Smith
GU-2355	1930	120	0.0	cal BC 90-cal AD 220	cal BC 332-329 200-cal AD 350 363-372	Howe	rubble construction of W rampart,phase 5/6	bone: animal		pers comm B Smith
GU-299	2370	040	0.0	cal BC 411-397	cal BC 753-705 532-390	Kilphedir	house 3	charcoal		Fairhurst and Taylor 1971
GU-514	2225	060	0.0	cal BC 390-197	cal BC 400-150 146-119	Kilphedir	house 5, ph 2	charcoal		Fairhurst and Taylor 1971
GU-515	2045	095	0.0	cal BC 187-cal AD 59	cal BC 368-272 270-cal AD 130	Kilphedir	hut 5, ph 2	charcoal		Fairhurst and Taylor 1971
GU-67	1922	060	0.0	cal AD 13-128	cal BC 80-cal AD 230	Kilphedir	house 5, ph 2	charcoal		Fairhurst and Taylor 1971
GX-1120	2005	105	0.0	cal BC 160-138 120-cal AD 90	cal BC 360-285 260-cal AD 230	Dun Ardtreck		charcoal	scraps from rubble foundation	Mackie 1965c



Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GX-1121	2440	080	0.0	cal BC 770-402	cal BC 800-390	Dun Lagaidh		charcoal	under fort wall	Mackie 1969a
GX-1998	2340	110	0.0	cal BC 753-235	cal BC 790-129	Lundin Links, Fife	burial	bone: human		Close-Brooks 1984
GX-2241	2130	110	0.0	cal BC 370-40	cal BC 400-cal AD 80	Craig Phadraig	tpq inner rampart	charcoal	beneath inner rampart	Small and Cottam 1972
GX-2779	1905	120	0.0	cal BC 40-cal AD 240	cal BC 190-cal AD 400	Leckie	ph 3, destruction of broch, end of primary use			Mackie 1982
GX-2780	1840	150	0.0	cal AD 10-350 365-371	cal BC 190-cal AD 540	Leckie	post-broch, end of secondary occupation, ph 5			Mackie 1982
GX-3426	1145	155	0.0	cal AD 680-1020	cal AD 610-1220	Dun Mor Vault		bone: human	burial in centre of broch, ?assoc with Norse comb	Mackie 1974
GaK-1092	2350	110	0.0	cal BC 755-698 540-370	cal BC 800-180	Dun Mor Vault	phase 1A, just before primary settlement	roots	OCS, context epsilon-2	Mackie 1974
GaK-1096	3145	090	0.0	cal BC 1518-1378 1344-1319	cal BC 1630-1250 1243-1218	Dun Mor Vault	phase 2A	charcoal (4gms)	primary floor in broch wall gallery	Mackie 1974
GaK-1097	1890	090	0.0	cal AD 15-228	cal BC 100-cal AD 270 272-339	Dun Mor Vault	phase 2B, use of chamber of broch	charcoal	primary clay floor in broch wall gallery	Mackie 1974
GaK-1098	2395	090	0.0	cal BC 761-680 660-632 596-576 563-393	cal BC 800-360 287-254	Dun Mor Vault	phase 1A, burning of ph 1A wooden hut	charred grain	pre-broch levels	Mackie 1974
GaK-1099	1790	090	0.0	cal AD 118-343	cal AD 20-430	Dun Mor Vault	phase 6, latest occupation of site		rubble in wall gallery	Mackie 1974
GaK-1225	2230	100	0.0	cal BC 400-180	cal BC 520-40	Dun Mor Vault	phase 1B	bone	midden under outer wall	Mackie 1974
GaK-1520	1460	200	0.0	cal AD 400-730 735-766	cal AD 130-990	Dun Mor Vault	Norse occupation	bone: bovine jaw: but NB little organic material	under Norse comb	Mackie 1974

Scottish Iron Age and early Norse C-14 determinations

number	det	BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
GaK-1521	2240	080	0.0	cal BC 396-196	cal BC 410-100		Dun Mor Vaul	end of ph 4: Mackie suggest sample too old	charocal or ?peat	top soil in outer court	Mackie 1974
GaK-1947	1110	090	0.0	cal AD 811-847 851-1012	cal AD 680-1040 1103-1113		Dun Lagaidh		charred beams	on dun floor	Mackie 1969a
GaK-1948	2830	090	0.0	cal BC 1125-1113 1108-901	cal BC 1270-810		Dun Lagaidh		charcoal	on subsoil under dun	Mackie 1969a
GaK-1949	770	080	0.0	cal AD 1207-1281	cal AD 1043-1105 1110-1310 1353-1384		Dun Lagaidh		charocal	spread on late floor in dun guard cell	Mackie 1969a
HAR-1229	1260	130	22.7	cal AD 650-890	cal AD 550-1020		Iona		bone	Quest House (top burning level)	Reece 1981
HAR-1241	1190	070	22.8	cal AD 724-736 765-897	cal AD 670-990		Iona		bone	Quest House (below burning level)	Reece 1981
HAR-1276	1130	080	25.8	cal AD 789-992	cal AD 680-1030		Iona		charcoal	Quest House (below burning level)	Reece 1981
HAR-1597	1195	060	25.0	cal AD 728-731 769-893	cal AD 670-980		Brough of Birsay	phase 1	charcoal: salix	BB 820550, F 283, site IX	Hunter 1986
HAR-1903	2270	080	26.6	cal BC 400-348 316-207	cal BC 520-160 140-123		Balloch			initial occupation deposits sealed by rampart 2	Peltenberg 1982
HAR-1904	2240	120	25.0	cal BC 400-170	cal BC 760-683 657-637 592-585 500-cal AD 1		Balloch	collapse of rampart superstructure	charcoal, mainly Corylus	immediately underlying ext collapse of rampart 2	Peltenberg 1982
HAR-1905	2240	070	26.4	cal BC 394-199	cal BC 410-120		Balloch	occupation of fort		base of post-fort occupation level	Peltenberg 1982
HAR-1907	2120	070	25.7	cal BC 349-315 207-91	cal BC 380-AD 20		Balloch		charcoal	open area and gully associated with pit	Peltenberg 1982
HAR-2000	1190	70	26.6	cal AD 694-943	cal AD 670-990		Dundurn	phase 2B: building of citadel 1	charcoal: hazel twigs	hazel DN012	Alcock et al forth



Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
HAR-2001	1260	70	26.9	cal AD 668-863	cal AD 640-943	Dundurn	phase 2	charcoal: twigs	DN012, 014, 017a, 017b	Alcock et al forth
HAR-2002	1310	70	26.0	cal AD 646-775	cal AD 601-635	Dundurn	phase 2B: building of citadel 1	charcoal: oak beams	DN013	Alcock et al forth
HAR-2003	1220	70	27.2	cal AD 686-890	cal AD 650-980	Dundurn	phase 3B: reinforcement of terrace wall	charcoal: twigs	DN106	Alcock et al forth
HAR-2043	2130	090	26.7	cal BC 362-282 259-50	cal BC 390-cal AD 60	Balloch	suggests external material belongs to later period		surface onto which rampart 2 collapsed	Peltenberg 1982
HAR-2078	1040	070	26.9	cal AD 900-904 952-1027	cal AD 880-1160	Brough of Birsay	phase 2.2	charcoal: salix	BB 760665, F 116, site VII	Hunter 1986
HAR-2079	1020	070	26.6	cal AD 968-1035	cal AD 890-1170	Brough of Birsay	phase 2.2	charcoal: salix	BB 760725, F 116, site VII	Hunter 1986
HAR-2083	1000	070	26.9	cal AD 979-1043 1104-1113	cal AD 890-1180	Brough of Birsay	phase 2.2	charcoal: salix	BB 760712, F 118, site VII	Hunter 1986
HAR-2518	1190	60	26.2	cal AD 733-896	cal AD 670-989	Dundurn	phase 3B: reinforcement of terrace wall	charcoal: mixed	DN106	Alcock et al forth
HAR-2519	1390	60	28.9	cal AD 602-670	cal AD 540-769	Dundurn	phase 2A: activity on terrace	unburnt hazel twigs as GU-1042	DN426	Alcock et al forth
HAR-2742	1150	070	27.8	cal AD 785-975	cal AD 680-1020	Brough of Birsay	phase 1	charcoal: salix	BB 770822, F 87, site VII	Hunter 1986
HAR-2743	1140	070	26.7	cal AD 789-980	cal AD 690-1020	Brough of Birsay	phase 1	charcoal: salix	BB 771095, F 35, site VII	Hunter 1986
HAR-2744	1020	070	27.4	cal AD 968-1035	cal AD 890-1170	Brough of Birsay	phase 2.2	charcoal: salix	BB 771090, F 113, site VII	Hunter 1986
HAR-2751	1350	060	27.9	cal AD 641-686	cal AD 600-780	Brough of Birsay	phase 1	charcoal: salix	BB 771055, F3, site VII	Hunter 1986
HAR-2755	1150	080	26.8	cal AD 780-980	cal AD 680-1020	Brough of Birsay	phase 1	charcoal: salix	BB 771111, F 80, site VII	Hunter 1986
HAR-807	1480	070	0.0	cal AD 534-643	cal AD 420-670	Iona		wood	lime clamp trench	Reece 1981

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
HAR-808	1150	070	0.0	cal AD 785-975	cal AD 680-1020	Iona		charcoal	south transept (upper)	Reece 1981
HAR-809	990	080	0.0	cal AD 979-1059 1077-1125 1136-1157	cal AD 890-1220	Iona		charcoal	East end of church	Reece 1981
HAR-810	1340	060	0.0	cal AD 647-690	cal AD 600-790	Iona		charcoal	south transept (lower)	Reece 1981
HAR-811	1300	070	0.0	cal AD 657-781	cal AD 620-890	Iona		charcoal	Chapter House	Reece 1981
HAR-812	1330	080	0.0	cal AD 642-773	cal AD 567-586 590-880	Iona		charcoal	Guest House (top)	Reece 1981
HAR-813	1630	060	0.0	cal AD 347-448	cal AD 252-307 310-560	Iona		charcoal	Guest House (middle)	Reece 1981
HAR-814	1420	090	0.0	cal AD 554-669	cal AD 430-780	Iona		charcoal	Guest House (lower)	Reece 1981
HAR-815	1610	070	0.0	cal AD 380-540	cal AD 252-306 310-600	Iona		charcoal	Carpenter's Shed (upper)	Reece 1981
HAR-816	1550	060	0.0	cal AD 424-569 575-592	cal AD 390-630	Iona		charcoal	Carpenter's Shed (lower)	Reece 1981
L-1061	2100	080	0.0	cal BC 340-322 204-35	cal BC 380-cal AD 70	Kilphedir	hut 5, ph 2	roof-pole		Fairhurst and Taylor 1971
N-1118	2030	100	0.0	cal BC 180-cal AD 70	cal BC 366-275 260-cal AD 150 162-194	Craig Phadraig	taq upper horizon, tpg lower occupation horizon	charcoal	isolated frag from sterile horizon between layers	Small and Cottam 1972
N-1119	1540	085	0.0	cal AD 418-607	cal AD 268-275 340-660	Craig Phadraig	upper occupation horizon		level also producing E-ware & escutcheon mould	Small and Cottam 1972
N-1120	2250	100	0.0	cal BC 400-190	cal BC 752-708 530-60	Craig Phadraig	?first inner rampart	charcoal	timber lies horizontally across outer rampart?	Small and Cottam 1972
N-1122	2280	100	0.0	cal BC 405-339 320-200	cal BC 760-683 657-637 593-584 550-100	Craig Phadraig		carbonised horizontal beam	below rubble of Small and Cottam 1972 rampart, close to inner face	Small and Cottam 1972



Scottish Iron Age and early Norse C-14 determinations

number	det	BP	SD	d13(‰)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
N-1123	2220	100	0.0	cal BC 400-170	cal BC 488-435	430-30	Craig Phadraig		charcoal	hearth beneath base of inner face of rampart	Small and Cottam 1972
N-1590	1090	100	0.0	cal AD 781-1020	cal AD 690-1160		Lundin Links, Fife	burial	bone: human		Close-Brooks 1984
N-1591	1630	095	0.0	cal AD 260-539	cal AD 135-638		Lundin Links, Fife	burial	bone: human		Close-Brooks 1984
N-327	1560	110	0.0	cal AD 390-610	cal AD 240-670		Burghead		charred oak	associated with Small defensive wall	Small 1969
N-328	1560	115	0.0	cal AD 390-610	cal AD 230-670		Burghead		charred oak	associated with Small defensive wall	Small 1969
N-329	1340	105	0.0	cal AD 610-780	cal AD 530-890		Burghead		charred oak	associated with Small defensive wall	Small 1969
Q-1131	1610	120	0.0	cal AD 261-289 330-570 578-592	cal AD 130-660		The Udal	level XIV	bone: whale vertebra	site N	Crawford and Switsur 1977
Q-1132	1355	115	0.0	cal AD 600-780	cal AD 440-900		The Udal	level XII	bone: lamb and calf	site N	Crawford and Switsur 1977
Q-1135	960	100	0.0	cal AD 980-1180	cal AD 890-1260		The Udal	level IXc	wood charcoal	site N	Crawford and Switsur 1977
Q-1136	1090	040	0.0	cal AD 894-991	cal AD 883-1015		The Udal	level X	bone: whalebone	site N	Crawford and Switsur 1977
Q-1137	1500	080	0.0	cal AD 440-637	cal AD 400-670		The Udal	level XIII	bone: whale vertebra	site N	Crawford and Switsur 1977
Q-1138	850	040	0.0	cal AD 1162-1231	cal AD 1042-1109 1110-1263		The Udal	level IXc	wood charcoal	site N	Crawford and Switsur 1977
Q-1139	1275	115	0.0	cal AD 650-890	cal AD 560-1000		The Udal	level XI	wood charcoal	site N	Crawford and Switsur 1977
Q-1463	2130	060	0.0	cal BC 349-315 207-100	cal BC 380-10		Quanterness	activity subsequent to construction wall J	soil rich in organic material	square M7, layer 5	Renfrew 1979
Q-1464	2440	085	0.0	cal BC 774-401	cal BC 800-380		Quanterness	primary occupation of rhse prior to wall F	soil rich in organic material	square L7, layer 8	Renfrew 1979

Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
Q-1465	2570	085	0.0	cal BC 816-761 681-659 634-595 579-559	cal BC 900-410	Quanterness	primary occupation of rhse prior to wall F	soil rich in organic material	square L7, layer 8	Renfrew 1979
SRR-266	2380	045	26.8	cal BC 513-398	cal BC 758-687 653-645 545-390	Crosskirk	? associated with earlier promontory fort	organic detritus	under flagstones of primary floor in broch	Fairhurst 1984
SRR-267	1880	070	28.0	cal AD 57-221	cal BC 40-cal AD 260 295-322	Crosskirk	period 4	charcoal	reconstruction hearth of broch	Fairhurst 1984
SRR-268	2120	050	26.1	cal BC 332-328 200-100	cal BC 363-281 260-30	Crosskirk	early period 3	charcoal	hearth in ramp	Fairhurst 1984
SRR-269	2770	100	27.1	cal BC 1040-820	cal BC 1256-1239 1220-790	Crosskirk	?activity in first millennium BC	charcoal	floor of enclosure VII	Fairhurst 1984
SRR-270	2100	100	22.0	cal BC 354-305 240-cal AD 1	cal BC 390-cal AD 90	Crosskirk	late period 3	protein fraction of human rib bone	seated burial, grave III	Fairhurst 1984
SRR-271	2070	080	27.8	cal BC 192-cal AD 9	cal BC 366-275 270-cal AD 80	Crosskirk	late period 3	charcoal	floor of enclosure 1 adjacent to broch entrance	Fairhurst 1984
SRR-272	2050	050	26.8	cal BC 152-148 117-cal AD 1	cal BC 190-cal AD 60	Crosskirk	late period 3	charcoal	occupation deposit on broch floor	Fairhurst 1984
SRR-3	2100	050	0.0	cal BC 193-91	cal BC 354-301 240-cal AD 1	Kilphedir	house 5, ph 1	roof pole		Fairhurst and Taylor 1971
SRR-321	1491	042	0.0	cal AD 541-612	cal AD 441-646	Mote of Mark		substantial charred timbers	backfilled by Curle in 1913	Longley 1982
SRR-525	2908	045	0.0	cal BC 1251-1249 1213-1176 1167-1025	cal BC 1263-991	Liddle	tag for site	peat	flag-lined gully	Hedges 1975
SRR-701	2826	075	0.0	cal BC 1094-905	cal BC 1257-1236 1220-830	Liddle	relevant to final use of site	organic material	burnt mound trough	Hedges 1975
UB-2083	1085	040	0.0	cal AD 895-996	cal AD 884-1017	Burghead		charcoal	associated with Small rampart	Small 1969



Scottish Iron Age and early Norse C-14 determinations

number	det BP	SD d13(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
UB-2149	1265	040	0.0	cal AD 679-783	cal AD 664-874	Portknockie	charred timber rampart		Ralston 1987
UB-2150	1210	045	0.0	cal AD 728-732 769-885	cal AD 680-897 920-941	Portknockie	carbonised timber rampart		Ralston 1987
UB-2208	1690	040	0.0	cal AD 260-290 326-406	cal AD 242-426	Burghead	pre-defence levels	upper organic horizon	Small 1969
UB-606	1255	065	0.0	cal AD 673-860	cal AD 650-900	Iona	bone	Martyr's Bay (lot 6)	Reece 1981
a	2626	044	0.0	cal BC 824-797	cal BC 891-887 846-782	Howe	ph 3: GU-1760, GU-1804		Carter et al 1984
b	2389	041	0.0	cal BC 517-400	cal BC 758-687 653-644 546-393	Howe	ph 5: GU-1799, GU-1789		Carter et al 1984
c	1954	039	0.0	cal AD 4-80	cal BC 46-cal AD 121	Howe	ph 7: GU-1786, GU-1788		Carter et al 1984
d	1315	042	0.0	cal AD 661-715 744-756	cal AD 646-782	Brough of Birsay	primary structures GU-1599 HAR-2751	charcoal: salix primary structures sites VII & IX	Hunter 1986
e	1240	040	0.0	cal AD 689-814 845-852	cal AD 672-886	Brough of Birsay	duration of ph 1: GU-1597-9	charcoal: salix	Hunter 1986
f	1150	040	0.0	cal AD 827-833 858-954	cal AD 779-982	Brough of Birsay	ph 1: HAR-2742-3, HAR 2755	charcoal: salix late contexts	Hunter 1986
g	1020	035	0.0	cal AD 987-1023	cal AD 966-1036	Brough of Birsay	terminus of ph 2.2: HAR-2078-9, HAR-2083, HAR-2744	charcoal: salix	Hunter 1986
h	1040	034	0.0	cal AD 977-1017	cal AD 900-904 952-1027	Brough of Birsay	GU-1570, GU-1573	charcoal: pine late contexts in structure 17	Hunter 1986
i	1025	030	0.0	cal AD 987-1020	cal AD 970-1030	Brough of Birsay	terminus ph 2.2: as g with GU-1570, GU-1573	charcoal: salix	Hunter 1986

Scottish Iron Age and early Norse C-14 determinations

number	det	BP	SD	dl3(-)	1-sigma calibration	2-sigma calibration	site	event	sample	context	reference
j	958	050	0.0	cal AD 1015-1064 1074-1126 1134-1157	cal AD 990-1190	Brough of Birsay	ph 3: GU-1391, GU-1394	charcoal: salix early contexts			Hunter 1986
k	1296	031	0.0	cal AD 669-723 737-764	cal AD 659-782	Pool	ph 4g: GU-1809, GU-2001-2				pers comm J Hunter
l	1492	035	0.0	cal AD 544-607	cal AD 449-639	Pool	ph 5b: GU-1998, GU-2000				pers comm J Hunter
m	1325	030	0.0	cal AD 661-684	cal AD 651-725 734-766	Dunollie	ph 1: GU-1395-6, GU-1379, GU-1398				Alcock and Alcock 1987
n	1070	035	0.0	cal AD 955-1004	cal AD 891-1019	Dunollie	ph 3: GU-2102-3				Alcock and Alcock 1987
o	1279	037	0.0	cal AD 674-777	cal AD 661-811 847-851	Dundurn	phase 3B: reinforcement of terrace wall	charcoal	DN 106, 406		Alcock and Driscoll 1985
q	1464	042	0.0	cal AD 555-637	cal AD 533-656	Dundurn	HE 1: demolition palisade 1 laying of wattle floor	charcoal: mixed	DN 426: GU-1042, HAR-2519		Alcock and Driscoll 1985
r	2082	032	0.0	cal BC 164-133 128-91	cal BC 192-32	Crosskirk	ph 3, excluding SRR-270				Fairhurst 1984
s	0	0	0.0		cal AD 437-653	Clatchard Craig	rampart 1: GU-1794-5				Close-Brooks 1986
t	0	0	0.0		cal AD 548-651	Clatchard Craig	rampart 1 and 3: as s with GU-1797-8				Close-Brooks 1986
u	1790	020	0.0	cal AD 175-197 216-255 305-316	cal AD 132-260 281-291 298-324	Howe	late ph 7, GU-2342, 2344-46, 2349, 2351				Carter et al 1984 Smith p c
v	1953	030	0.0	cal BC 17-14 cal AD 2-73	cal BC 90-79 71-56 50-cal AD 129	Howe	ph 7: GU-1786, 1788				Carter et al 1984



Concordance of Scottish C-14 dates with sites

site	lab no	NGR	site	lab no	NGR	site	lab no	NGR
Ardnave, Colonsay	GU-1443	NR 288 745	Burghead	UB-2083	NJ 10 69	Dundurn	q	NN 70 23
Ardnave, Colonsay	GU-1273	NR 288 745	Burghead	UB-2208	NJ 10 69	Dundurn	GU-1043	NN 70 23
Balloch	HAR-1903	NR 677 176	Burghead	N-329	NJ 10 69	Dundurn	HAR-2000	NN 70 23
Balloch	HAR-1904	NR 677 176	Burghead	N-327	NJ 10 69	Dundurn	HAR-2001	NN 70 23
Balloch	HAR-1905	NR 677 176	Burghead	N-328	NJ 10 69	Dundurn	HAR-2002	NN 70 23
Balloch	HAR-1907	NR 677 176	Clatchard Craig	GU-1794	NO 24 17	Dundurn	HAR-2003	NN 70 23
Balloch	HAR-2043	NR 677 176	Clatchard Craig	GU-1795	NO 24 17	Dundurn	HAR-2518	NN 70 23
Beachview Studio	GU-1191	HY 24 27	Clatchard Craig	GU-1796	NO 24 17	Dundurn	HAR-2519	NN 70 23
Brough of Birsay	GU-1391	HY 239 285	Clatchard Craig	GU-1797	NO 24 17	Dundurn	GU-1040	NN 70 23
Brough of Birsay	GU-1394	HY 239 285	Clatchard Craig	GU-1798	NO 24 17	Dundurn	GU-1042	NN 70 23
Brough of Birsay	GU-1573	HY 239 285	Clatchard Craig	s	NO 24 17	Dunollie	GU-1395	NM 85 31
Brough of Birsay	HAR-2083	HY 239 285	Clatchard Craig	t	NO 24 17	Dunollie	GU-1396	NM 85 31
Brough of Birsay	HAR-2079	HY 239 285	Craig Phadraig	N-1119	NH 640 453	Dunollie	GU-1396	NM 85 31
Brough of Birsay	HAR-2744	HY 239 285	Craig Phadraig	N-1122	NH 640 453	Dunollie	GU-1392	NM 85 31
Brough of Birsay	HAR-2078	HY 239 285	Craig Phadraig	N-1123	NH 640 453	Dunollie	GU-2102	NM 85 31
Brough of Birsay	GU-1398	HY 239 285	Craig Phadraig	GX-2241	NH 640 453	Dunollie	GU-2103	NM 85 31
Brough of Birsay	GU-1571	HY 239 285	Craig Phadraig	N-1120	NH 640 453	Dunollie	m	NM 85 31
Brough of Birsay	GU-1572	HY 239 285	Craig Phadraig	N-1118	NH 640 453	Dunollie	n	NM 85 31
Brough of Birsay	GU-1570	HY 239 285	Crosskirk	SRR-266	ND 025 701	Dunrobin Dairy Park	GU-1039B	NC 847 003
Brough of Birsay	GU-1390	HY 239 285	Crosskirk	SRR-267	ND 025 701	Dunrobin Dairy Park	GU-1039A	NC 847 003
Brough of Birsay	HAR-2743	HY 239 285	Crosskirk	SRR-268	ND 025 701	Eilean Olabhat	GU-2326	NB 750 753
Brough of Birsay	HAR-2755	HY 239 285	Crosskirk	SRR-269	ND 025 701	Eilean Olabhat	GU-2327	NB 750 753
Brough of Birsay	HAR-2742	HY 239 285	Crosskirk	SRR-270	ND 025 701	Eilean an Duin	GU-1814	NM 792 079
Brough of Birsay	HAR-1597	HY 239 285	Crosskirk	SRR-271	ND 025 701	Eilean an Duin	GU-1815	NM 792 079
Brough of Birsay	GU-1598	HY 239 285	Crosskirk	SRR-272	ND 025 701	Howe	GU-1760	HY 275 109
Brough of Birsay	GU-1599	HY 239 285	Crosskirk	r	ND 025 701	Howe	GU-1804	HY 275 109
Brough of Birsay	HAR-2751	HY 239 285	Cullykhan	BM-445	NJ 82 67	Howe	GU-1805	HY 275 109
Brough of Birsay	d	HY 239 285	Dryburn Bridge,	GU-1149	NT 724 755	Howe	GU-1799	HY 275 109
Brough of Birsay	e	HY 239 285	Dryburn Bridge,	GU-1404	NT 724 755	Howe	GU-1789	HY 275 109
Brough of Birsay	f	HY 239 285	Dryburn Bridge,	GU-1405	NT 724 755	Howe	GU-1759	HY 275 109
Brough of Birsay	g	HY 239 285	Dryburn Bridge,	GU-1410	NT 724 755	Howe	GU-1758	HY 275 109
Brough of Birsay	h	HY 239 285	Dryburn Bridge,	GU-1412	NT 724 755	Howe	GU-1750	HY 275 109
Brough of Birsay	i	HY 239 285	Dryburn Bridge,	GU-1414	NT 724 755	Howe	GU-1788	HY 275 109
Brough of Birsay	j	HY 239 285	Dun Ardtreck	GX-1120	NG 335 357	Howe	GU-1786	HY 275 109
Brough of Birsay	GU-1229	HY 239 285	Dun Flodigarry	GU-1662	NG 463 719	Howe	GU-1787	HY 275 109
Brough of Birsay	GU-1193	HY 239 285	Dun Lagaidh	GX-1121	NH 143 914	Howe	GU-1749	HY 275 109
Brough of Birsay	GU-1251	HY 239 285	Dun Lagaidh	GaK-1948	NH 143 914	Howe	GU-1756	HY 275 109
Broxmouth	GU-1138	NT 700 774	Dun Lagaidh	GaK-1947	NH 143 914	Howe	GU-1757	HY 275 109
Broxmouth	GU-1139	NT 700 774	Dun Lagaidh	GaK-1949	NH 143 914	Howe	a	HY 275 109
Broxmouth	GU-1141	NT 700 774	Dun Mor Vaul	GaK-1092	NM 042 493	Howe	b	HY 275 109
Broxmouth	GU-1143	NT 700 774	Dun Mor Vaul	GaK-1098	NM 042 493	Howe	c	HY 275 109
Broxmouth	GU-1145	NT 700 774	Dun Mor Vaul	GaK-1225	NM 042 493	Howe	GU-2348	HY 275 109
Broxmouth	GU-1146	NT 700 774	Dun Mor Vaul	GaK-1096	NM 042 493	Howe	GU-2355	HY 275 109
Broxmouth	GU-1140	NT 700 774	Dun Mor Vaul	GaK-1097	NM 042 493	Howe	GU-2353	HY 275 109
Broxmouth	GU-1142	NT 700 774	Dun Mor Vaul	GaK-1099	NM 042 493	Howe	GU-2351	HY 275 109
Broxmouth	GU-1144	NT 700 774	Dun Mor Vaul	GaK-1521	NM 042 493	Howe	GU-2349	HY 275 109
Bu	GU-1228	HY 269 093	Dun Mor Vaul	GaK-1520	NM 042 493	Howe	GU-2342	HY 275 109
Bu	GU-1154	HY 269 093	Dun Mor Vaul	GX-3426	NM 042 493	Howe	GU-2345	HY 275 109
Bu	GU-1152	HY 269 093	Dundurn	o	NN 70 23	Howe	GU-2343	HY 275 109
Bu	GU-1153	HY 269 093	Dundurn	GU-1041	NN 70 23	Howe	GU-2347	HY 275 109

Concordance of Scottish C-14 dates with sites

site	lab no	NGR	site	lab no	NGR	site	lab no	NGR
Howe	GU-2344	HY 275 109	Loch Bharabhat		NB 098 353	Skaill	B-762	HY 589 064
Howe	GU-2346	HY 275 109	Lundin Links, Fife	GX-1998	NO 40 02	The Cat, stane	GU-1155	NT 148 743
Howe	u	HY 275 109	Lundin Links, Fife	N-1591	NO 40 02	The Cat, stane	GU-1156	NT 148 743
Howe	v	HY 275 109	Lundin Links, Fife	N-1590	NO 40 02	The Cat, stane	GU-1157	NT 148 743
Iona	UB-606	NM 27 23	Lundin Links, Fife	GU-1593	NO 40 02	The Cat, stane	GU-1158	NT 148 743
Iona	HAR-815	NM 27 23	Lundin Links, Fife	GU-1594	NO 40 02	The Cat, stane	GU-1159	NT 148 743
Iona	HAR-816	NM 27 23	Machrins, Colonsay	GU-1115	NR 35 93	The Udal	Q-1136	NF 825 783
Iona	HAR-813	NM 27 23	Machrins, Colonsay	GU-1114	NR 35 93	The Udal	Q-1139	NF 825 783
Iona	HAR-814	NM 27 23	Mote of Mark	GU-1316	NX 84 54	The Udal	Q-1138	NF 825 783
Iona	HAR-811	NM 27 23	Mote of Mark	SRR-321	NX 84 54	The Udal	Q-1135	NF 825 783
Iona	HAR-812	NM 27 23	Mote of Mark	GU-1313	NX 84 54	The Udal	Q-1132	NF 825 783
Iona	HAR-809	NM 27 23	Mote of Mark	GU-1314	NX 84 54	The Udal	Q-1137	NF 825 783
Iona	HAR-810	NM 27 23	Mote of Mark	GU-1315	NX 84 54	The Udal	Q-1131	NF 825 783
Iona	HAR-807	NM 27 23	Pierowall	GU-1580	HY 438 440	Traig nam Barc,	GU-1641	NR 360-914
Iona	HAR-808	NM 27 23	Pierowall	GU-1581	HY 438 440	Garvard		
Iona	GU-1245	NM 27 23	Pool	GU-1806	HY 619 378	Urquhart	GU-1768	NH 53 28
Iona	GU-1248	NM 27 23	Pool	GU-1807	HY 619 378	Urquhart	GU-1769	NH 53 28
Iona	GU-1247	NM 27 23	Pool	GU-1808	HY 619 378	Urquhart	GU-1835	NH 53 28
Iona	GU-1246	NM 27 23	Pool	GU-1809	HY 619 378	Urquhart	GU-1836	NH 53 28
Iona	GU-1243	NM 27 23	Pool	GU-2000	HY 619 378	Urquhart	GU-1837	NH 53 28
Iona	GU-1281	NM 27 23	Pool	GU-2001	HY 619 378	Urquhart		
Iona	GU-1282	NM 27 23	Pool	GU-2002	HY 619 378			
Iona	GU-1262	NM 27 23	Pool	GU-2003	HY 619 378			
Iona	HAR-1229	NM 27 23	Pool	GU-2004	HY 619 378			
Iona	HAR-1276	NM 27 23	Pool	GU-2005	HY 619 378			
Iona	HAR-1241	NM 27 23	Pool	GU-2006	HY 619 378			
Jonathan's Cave	GU-1369	NT 345 972	Pool	k	HY 619 378			
Jonathan's Cave	GU-2138	NT 345 972	Pool	1	HY 619 378			
Kildonan	GU-1457	NR 780 278	Pool	GU-1810	HY 619 378			
Kildonan	GU-1458	NR 780 278	Pool	GU-1997	HY 619 378			
Kilphedir	SRR-3	NC 99 19	Pool	GU-1998	HY 619 378			
Kilphedir	GU-514	NC 99 19	Pool	GU-1999	HY 619 378			
Kilphedir	GU-299	NC 99 19	Portknockie	GU-1822	NJ 48 68			
Kilphedir	GU-67	NC 99 19	Portknockie	GU-1817	NJ 48 68			
Kilphedir	GU-515	NC 99 19	Portknockie	GU-1816	NJ 48 68			
Kilphedir	GU-11	NC 99 19	Portknockie	UB-2150	NJ 48 68			
Kilphedir	L-1061	NC 99 19	Portknockie	UB-2149	NJ 48 68			
Kilphedir	GU-101	NC 99 19	Quanterness	Q-1465	HY 36 12			
Kintra, Islay	GU-1624	NR 321 485	Quanterness	Q-1464	HY 36 12			
Kirk Hill, St	GU-1461	NO 515 166	Quanterness	Q-1463	HY 36 12			
Andrews			Red Craig	GU-1320	HY 28 24			
Kirk Hill, St	GU-1462	NO 515 166	Rossinish	GU-1066	NF 873 537			
Andrews			Saear Howe	GU-1400	HY 246 270			
Leckie	GX-2780	NS 693 940	Saear Howe	GU-1401	HY 246 270			
Leckie	GX-2779	NS 693 940	Saear Howe	GU-1402	HY 246 270			
Leckie	GU-1370	NS 693 940	Sandwick, Unst	GU-1291	HP 61 02			
Liddle	SRR-525	HY 45 83	Skaill	B-413	HY 589 064			
Liddle	SRR-701	HY 45 83	Skaill	B-397	HY 589 064			
Loch Bharabhat		NB 098 353	Skaill	B-764	HY 589 064			
Loch Bharabhat		NB 098 353	Skaill	B-763	HY 589 064			



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)



## APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

Appendix II contains details of most Scottish Iron Age pins and combs. Its format and the general nature of the contents of each field is described in §4.2.1-2 and figure 9. In the first appendix each artefact is listed in order of its record number and details can be found here of its form. Unless otherwise stated, all measurements are cited in mm. Cross referencing between appendices II and III is done by using the site and record number.

To recapitulate on §4.2.1-2 and figure 9, the object may be made of either metal, skeletal material, organic material, stone or ceramic (MATERIAL), which are further recognised as being either silver, copper alloy, iron, antler, bone, cetacean, wood, jet, a mould, or pottery (CATEGORY). The objects themselves are either a comb blank, comb case, comb, pin or pin-impressed pottery (OBJECT). The qualifier field records whether a comb is composite or single-piece (QUALIFIER 1), single-sided or double-sided (QUALIFIER 2), the difference in thickness of the teeth on each side (QUALIFIER 3), general details of the decoration (QUALIFIER 4) and details of decoration on the connecting plates (QUALIFIER 5). In the case of pins, the qualifier fields record the classification of the head (QUALIFIER 1), the classification of the shaft (QUALIFIER 2), the width of the shaft in comparison to the width of the shaft (in mm) (QUALIFIER 3), the details of decoration on the head (QUALIFIER 4) and details of the decoration on the shaft (QUALIFIER 5). There are some exceptions to these contents of qualifier fields, for example for loose ring-head pins or projecting ring-heads (QUALIFIER 1), where the type of ring-head is recorded under QUALIFIER 2. Where the object is pin-impressed pottery, the type of pin used is recorded in QUALIFIER 1.

The classification of the combs, and the overall groupings of the pins are recorded under CLASS.



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1	Broch of Borwick	comb	ant	comp	d-s			frag e-pl, susp hole, t grad, 1 x Fe rivet	20+	472+	3	04	
2	Broch of Borwick	comb	ant	s-p	s-s	miniature		shaped back, coarse teeth	43	52	5	03	
3	Howe	pin	bone	-	b?			tip only, cylindrical section	32+	3			
4	Howe	pin	bone	08A?	a			thick shaft	89	11:			A C E
5	Howe	pin	bone	-	b?			mid-shaft, slightly flat	65				
6	Howe	pin	bone	-	b			section	56+	4	4	3	
7	Howe	pin	bone	-	b?			mid shaft	37+	5	5	4	
8	Howe	pin	bone	12A?	b			tip only, pig fib	127+	17:			A C E
9	Howe	pin	bone	01B?	-			badly weathered	68+	4:			A C
10	Howe	pin	bone	12A	a				92	13:			A C E
11	Howe	pin	bone	-	b?			tip shank	43+				
12	Howe	pin	bone	01B	a			rough head end, presumed intentional	69				A C
13	Howe	pin	bone	12F	-				45+				A C E
14	Howe	pin	bone	12E	a			head slightly shaped	133	13:	13	7	A C E
15	Howe	pin	bone	01B	c		irregular width shaft,		114	8:	8		A C
16	Howe	pin	bone	-	b				56+			4	
17	Howe	pin	bone	-	b?				40+	6:	6	4	
18	Howe	pin	bone	-	b				49+	4:	4	3	
19	Howe	pin	bone	-	e?			pig fib Smith states no hippped pins at Howe	42+				A C?
20	Howe	pin	bone	12C	a			?needle, perf diam 2mm	79+	13:	13	4	A C E
21	Howe	pin	bone	01B	a		slight curve		40	4:	4		A C
22	Howe	pin	bone	-	b				23+	3	3		
23	Howe	pin	bone	-	b?			irregular width mid shank	56+	5	5		
24	Howe	pin	bone	12B	b				87	8:	8	4	A C E
25	Howe	pin	bone	12A	e?		end of sh shaped into flat foot		95+	12:6		5	A C E
26	Howe	pin	bone	12B	-				45+	8:			A C E
27	Howe	pin	bone	12A	a				872+	13:	13	3	A C E
28	Howe	pin	bone	-	b				74+				
29	Howe	pin	bone	12B	a	5:			56		5		A C E
30	Howe	pin	bone	16A	a				79	10:	10		E
31	Howe	pin	bone	12A	-								A C E
32	Howe	pin	bone	15B	-			cattle metatarsus, pin head only	27+	19:	19		D
33	Howe	pin	bone	15B	-			cattle metatarsus, head only	27+		13		D

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
34	Howe	pin	bone	15D	-			?pin head (only), distal end deer metacarpal	28		36	25	D
35	Brough of Birsay	pin	bone	03D	b			ani head w collar, set at right angles to shank	60				C?
36	Brough of Birsay	pin	bone/?ant	14A	b			1 segment	39				C
37	Brough of Birsay	pin	bone	05*	e	decorated overall with dots overall dot decoration			28				C
38	Brough of Birsay	pin	bone	03B*	e			fits a mould	55				C
39	Brough of Birsay	pin	bone	06C	e				45	5:			C
40	Brough of Birsay	pin	bone	06B	e				45				C
41	Brough of Birsay	pin	bone	06A	c			constricted neck	41				C
42	Brough of Birsay	pin	bone	03A	e				33+	5:			C
43	Brough of Birsay	pin	bone	08B	e				47	8:			C
44	Brough of Birsay	pin	bone	06D	e				46	6:			C
45	Brough of Birsay	pin	bone	19D	b			flattened half-ball	37	4:			C
46	Brough of Birsay	pin	bone	19D	b	flat straight head		from long bone,	52	6:			C
47	Brough of Birsay	pin	bone	16A	b	outlined by single inc line and hatching			106	12:			E
48	Brough of Birsay	pin	bone	16A	-		sh incomplete		49+	16:			E
49	Brough of Birsay	pin	bone	16	-				35+	11:			E
50	Brough of Birsay	pin	bone	16	-			long bone	60+	13:			E
51	Brough of Birsay	pin	bone	16	-			long bone, head set at angle, perf 5 x 3 mm	74	9:			E
52	Brough of Birsay	pin	bone	16	a			long bone	98+				E
53	Brough of Birsay	pin	bone	16	-		straight, such as exists	carved hd w large perf, 4mm diam.	87+	9:			E
54	Brough of Birsay	pin	bone	15B	-			Fe shank missing	20	18:	18	30	D
55	Brough of Birsay	pin	bone	15B	-			Fe shank incomplete	40+				D
56	Brough of Birsay	comb	ant	comp	d-s			t grad, c-pl w raised panels, 5 x rivets	96				05
57	Brough of Birsay	comb	ant	comp	d-s			convex c-pl, 7 x Fe riv, t slightly grad	150				06
58	Brough of Birsay	comb	ant	comp	d-s			rtd and faint inc lines on e-pl, rtd x Fe rivet on c-pl	136				06
59	Brough of Birsay	comb	ant	comp	s-s			round-back, 3 dec groups 4 punched holes at junction pl	76				



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
60	Brough of Birsay	comb	ant	comp	s-s			c-pl outlined by 5 x Fe rivets, double grooved curved back, t line, recumbent S grad slightly in centre					07 - A2
61	Brough of Birsay	Ccase	ant	-	-	upper c-pl w panel incomplete w bands cross-hatching		2 susp holes, 3 Fe riv	120				
62	Brough of Birsay	pin	bone	08B	b								C
63	Brough of Birsay	Cblank	ant	-	-	2 grooves on front rect pl from outer cortex, back fl, front conv			?	?	29	8	
64	Brough of Birsay	pin	mould	24A	b								C
65	Brough of Birsay	pin	mould	24A & 26	-								C
66	Buckquoy	pin	bone	16	a			fl section	85				E
67	Buckquoy	skewer	bone	17A?	b			assoc w small flint	94				E
68	Buckquoy	pin	bone	12A	b				69				A C E
69	Buckquoy	pin	bone	-	a			flattish section, ?originally perf flat section	91+	8:			
70	Buckquoy	pin	bone	17A	-				50+	6:			E
71	Buckquoy	pin	bone	09F	e				29+				C
72	Buckquoy	pin	bone	09A	b				70				C
73	Buckquoy	pin	bone	09C	c				47				C
74	Buckquoy	pin	bone	17A*	a	oval in section, w 2 dec oval dots			40				E
75	Buckquoy	pin	bone	06A	e	dec overall w dots			29				C
76	Buckquoy	pin	bone	11A*	e				40				C
77	Buckquoy	pin	bone	06B	-			crude head	32+	8:			C
78	Buckquoy	pin	bone	-	c/e				40+				C
79	Buckquoy	pin	bone	06B*	e				41				C
80	Buckquoy	pin	bone	03B*	-				20+	4:			C
81	Buckquoy	pin	bone	11A*	c*	? dec overall w dots bands of cross-hatch cross-hatching ing			57				C
82	Buckquoy	pin	bone	08B	b				40				C
83	Buckquoy	pin	bone	06B	e				33				C
84	Buckquoy	pin	bone	08B	e				48				C
85	Buckquoy	pin	bone	04	e				55+				C
86	Buckquoy	pin	bone	05	c			1 reel above & below	48+				C
87	Buckquoy	pin	bone	06D	-				30+	6:			C
88	Buckquoy	pin	bone	03E	e				50				C
89	Buckquoy	pin	bone	14A	e	ant head set on small ball-head, facing perp to sh			37				C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
90	Buckquoy	pin	bone	14A	b*		4 bands cross-hatching inc on sh	head at right angle to sh	47				C
91	Buckquoy	pin	bone	14A	-				20+				C
92	Buckquoy	pin	bone	-	c				26+				
93	Buckquoy	pin	bone	-	-			unfinished head	21+	11:			
94	Buckquoy	pin	bone	-	c			highly polished	41+				
95	Buckquoy	pin	bone	-	-				18+				
96	Buckquoy	pin	bone	-	e				18+				C
97	Buckquoy	pin	bone	-	e				38+				C
98	Buckquoy	pin?	bone	-	-			?upper part unfinished	39+				
99	Buckquoy	comb	ant	comp	s-s		double r&d over c-pl and back	4 t-pl, 2 susp holes, 3 x Fe rivets	70				
100	Buckquoy	comb	ant	comp	s-s		r&d	1 x Fe rivet, e-pl	23+				04
101	Buckquoy	comb	ant	comp	s-s			e-pl, 1x Fe riv, high back, slightly grad teeth	20+		40		04?
102	Buckquoy	comb	ant	comp	d-s	c-pl: incised outline and dots		3 t-pl, slight grad t, 2 susp holes, 3 x Fe riv	74?+				
103	Buckquoy	comb	ant	comp	d-s		c-pl: incised outline and dots	t grad, Fe riv, space at end e-pl	19+				05/06
104	Buckquoy	comb	ant	comp	d-s			Fe riv	44+		26+		?
105	Buckquoy	comb	ant	comp	d-s		c-pl w incised crosses, e-pl shaped	6 t-pl, 1 susp hole, 4 Fe rivets, conv c-pl	116+				05
106	Buckquoy	comb	ant	comp	d-s			t-pl, 1 x rivet hole	17+		45+	3	05
107	Buckquoy	comb	ant	comp	d-s		c-pl	c-pl w pairs of inc lines	95+				06
108	Buckquoy	comb	ant	comp	d-s		c-pl w inc diagonal lines	e-pl, Fe riv, joins w 1976.109, slight grad t	21+				05
109	Buckquoy	comb	ant	comp	d-s			see record 109 = 1976.116	23+				05
110	Buckquoy	comb	ant	comp	d-s			e-pl, 1 x Fe rivet, t grad	20+		53	4	05
111	Buckquoy	comb	ant	comp	d-s?			t-pl only, v poss s-s:top edge cut to curve, riv h	9+		22+	3	04
112	Buckquoy	comb	ant	comp	d-s			c-pl	21+		27+	3+	05/06
113	Buckquoy	comb	ant	comp	?		r&d, see record no 107 = 1976.112	c-pl, 1 x Fe rivet	44+				?
114	Buckquoy	comb	ant	comp	?		r&d	c-pl, riv hole	22+		8+	3+	
115	Buckquoy	comb	ant	comp	d-s			t-pl (b:21)	21+		28+	3+	



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
116	Buckquoy	comb?	ant	comp	?			?c-pl, conv, for comb. 2x Fe riv. Possible mount	45+		9+	3+	
117	Buckquoy	pin	Cu-alloy	loose r-hd plain-poly	dec w quatrefoil interlace & saltire pattern			small ring deeply grooved	166				E
118	Calf of Eday	pin?	bone	-	-			'point of bone imple much rubbed,' ?pin					
119	Gurness	pin	bone	-	a			burnt shaft w knife marks, oval section sh.	96+ :6				
120	Gurness	pin	bone	-	-				52+				
121	Gurness	pin	bone	12B	a			much polished	59+ :6				A C E
122	Gurness	pin	bone	12F?	a			?12A	59 :8			5	A C E
123	Gurness	pin	bone	12F	b			ovicaprid 'ulna', but possibly fibula	79 :11		11	4	A C E
124	Gurness	pin	bone	12B	a			immature fib	47		12	4	A C E
125	Gurness	pin	bone	-	a?				30+				
126	Gurness	pin	bone	-	b?			unfinished, squarish sect & chiselled point	33+		5		
127	Gurness	pin	bone	08B?	c			distal end preserved, v rough sh	43 4:		4		C
128	Gurness	pin	bone	12?	a				37 7:		7	4	A C E
129	Gurness	pin	bone	15A	-			semi-circ remains Fe pin sh cross-secti on	20		12	9	D
130	Gurness	pin	bone	15	-			hemispheric stump of bone pin al	13+		15		D
131	Gurness	pin	bone	-	-			v crude point w fl	36+		4	3	
132	Gurness	pin	bone	12A	b			sect, but polished thick fl sh, but much polished	74 11+: 11				A C E
133	Gurness	pin	bone	-	-			crude, polished bone point	28		4		
134	Gurness	pin	bone	12A	b?				83 14:7				A C E
135	Gurness	pin	bone	12B	a			much polished sh	71 11:6				A C E
136	Gurness	pin	bone	-	-			sh much polished hollow sh of longbone, not examined	31+ 4:				D
137	Lingro	pin	bone	15	-			flattish sect	67+ :5				E
138	Drimore	pin	ant	-	b								

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
139 Drimore		pin	ant	08A	-			flattish section	29+	7:3.5			E
140 Drimore		pin	ant	33	-			hd broken. V good polish all over.	60+	9:8			E
141 Drimore		pin	bone	?	a			MacLaren suggests ivory	87+	9:6.5			
142 Drimore		pin	bone	01A	b			splintered long bone. Sh curves	95	:4			C E
143 Howe		pin	Cu-alloy	proj r-hd	corrug?	divided by incisions into raised buns			50	17:2			A
144 Howe		pin	Cu-alloy	proj r-hd	beaded			bent, sh tapers to a point	72+		4		A C?
145 Gurness		pin?	bone	-	-	-		unlikely pin, polished length of metatarsus	-	-			
146 Gurness		pin	bone	12A	b			?120 v fine, poss fib, much polished, fl sect	70	7:3			A C E
147 Gurness		pin	bone	-	a				54+	:4			
148 Gurness		pin	bone	01C	-			circ sect sh w almost conical end	44	6:			A E
149 Gurness		pin	bone	06C*	e	lge dot in top (?inset), 5 dots around circumference		constricted neck	39	6:3			C
150 Gurness		pin	bone	01A	a	thick tapering sh		?peg, eroded therefore wear difficult to gauge curved point, fine	77	12 12	12		C E
151 Gurness		pin	bone	01A?	b								
152 Gurness		pin	bone	-	-								
153 Howe		pin	Cu-alloy	r-hd	misc								
154 Gurness		pin	Cu-alloy	proj r-hd	semi-corr	face dec w fine radiating l			68	14:3			D A
155 Gurness		pin	Cu-alloy	proj r-hd	wire								
156 Gurness		pin	Cu-alloy	-	-			bent sh and point of pin, poss complete	65 86?+	15:3 :3.5			A C?
157 Gurness		pin	Cu-alloy	-	-			sh and point of pin, poss complete	76?+	:2.5			
158 Gurness		pin?	Cu-alloy	-	-			length of Cu alloy, poss part of a pin					
159 Howe		pin	Cu-alloy	-	-			sq sect, hollow-sheet bent round, sh bent					



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
160	Howe	comb	ant	comp	d-s			strat last comb on 50+ site, 1 conv c-pl, 2 lge riv	50+		42	2+	05
161	Howe	comb	ant	comp	d-s			frag t-pl, t 15 mm					05/06
162	Howe	comb	ant	comp	d-s			L, 1 riv					05/06
163	Howe	comb	ant	comp	d-s	?Curle B	c-pl & e-pl w 2 parallel rows r&d	frag e-pl, 2 riv					? 06
164	Howe	comb	ant	comp	d-s	Curle B		Fe riv, single perf centre of e-pl, ?grad perf both ends, 6 Fe riv, t grad, conc c-pl undiagnostic frag c-pl	115+		48		06
165	Howe	comb	ant	?	?		row of r&d	bent sh, corrosion on head suggests pin					
166	Howe	pin?	Cu-alloy	-	-			sq-hdd nail or pin w rounded, pointed sh					
167	Howe	pin	Cu-alloy	-	b								
168	Howe	pin	Cu-alloy	misc	-								C?
169	Howe	pin	Cu-alloy	19A	-								C
170	Howe	pin?	iron	-	-			frag needle, pin or needle	42+				
171	Howe	pin	iron	-	-			rounded pin sh	21+		2		A C?
172	Howe	pin	Cu-alloy	proj r-hd	-	plain, but central raised ridge running round circle			91	18:	4		
173	Howe	pin	Cu-alloy	proj r-hd	-			sq sectioned wire 3 pieces		12:2.5			A C?
174	Howe	pin?	Cu-alloy	proj disc	-			unconserved metal					
175	Howe	pin	Cu-alloy	proj r-hd	-			possibly unfinished-only	79	10.5:3			A C?
176	Midhowe	pin	bone	12B	a			one side cut	92	13:			A C E
177	Howe	pin	Cu-alloy	misc	-	splayed at bent end		sq section, formed metal sheeting and not cast	41		2	1	
178	Howe	pin	Cu-alloy	misc*	-	notched to take decorative terminal		long, thin, bent, gently tapers to point	248		4		A
179	Midhowe	pin	bone	-	b			marginally modified pig's fib	94				
180	Midhowe	pin	bone	-	-			length of curving pin sh, rect sect at top	62+			4.5	

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
181	Midhowe	pin	bone	-	b			bird leg bone, 71 10: ?tibia, unmodified					
182	Midhowe	pin	bone	-	-				34+				
183	Midhowe	pin	bone	-	b			rect sect at top :5 of sh	85+		3+		
184	Midhowe	pin	bone	-	b?			?gnawed sh curves	99+	:4			
185	Midhowe	pin	Cu-alloy	prof r-hd	wire				67	14:			A C?
186	Midhowe	pin	Cu-alloy	prof r-hd	wire				64	11:			A C?
187	Midhowe	pin	Cu-alloy	prof r-hd	wire				57	11:			A C?
188	Midhowe	comb	ant	comp	s-s			conv c-pl w 2 rows r&d	34+	21/34	22+		05/06 ?
189	Saevar Howe	pin	bone	08A	b?			Fe rivets Hedges lists	41+				C
190	Saevar Howe	pin	bone	06C	c			parallels Hedges lists	152				C
191	Saevar Howe	pin	bone	06D	c/b			paring marks on sh	49				C
192	Saevar Howe	pin	bone	07	b			Hedges lists parallels	125	5			C
193	Saevar Howe	pin	bone	06B	b			?stylus head shows usage in profile head almost	98	5.5:			C
194	Saevar Howe	pin	bone	-	a			straight-sided ?tool	48+		7+		
195	Saevar Howe	pin	bone	-	a			mammal bone					
196	Saevar Howe	pin	bone	14B?	a			mammal bone transversely flattened sh, Hedges lists parallels	46+ 22+		4.5+		E
197	Saevar Howe	pin	bone	08A*	b		random dots	horiz encirc l below neck & lge criss-cross v rough shaft -?unfinished ring head cf Clifford St, York (Waterman 1959, fig 14.15,84)					
198	Saevar Howe	pin	bone	-	-								
199	Saevar Howe	pin	ant	23	-						25	4.5	E
200	Saevar Howe	comb	ant	-	-	r&d		part of bevelled c-pl	26+		10+	2+	04?
201	Saevar Howe	comb	ant	comp	d-s?			2 joining frag. Fe ?40 riv. Hedges lists parallels	?		715	?3	04/05 /06?
202	Saevar Howe	comb	ant	comp	d-s	cross-hatch ing on c-pl		ant & Fe riv, susp hole, sub-rect wide c-pl, t grad, esp	135		53	3+	05/06



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
203	Saevar Howe	comb	ant	comp	s-s			t-pl frag w expanding ?high back. T grad - ?end of comb t very long. Unlikely made in Orkney (Hedges 1983, 86) high-back, susp hole at top. Rect conv c-pl	12		32	3	04?
204	Saevar Howe	comb	ant	comp	s-s	stylised zoo terminal			34		42		07 = A3
205	Saevar Howe	comb	ant	comp	s-s	single l r&d on c-pl, and on top of high back single l r&d along c-pl and along top of back orn back w r&d			78		46	2	04
206	Saevar Howe	comb	ant	comp	s-s			high back, susp hole at top. Rect shallow conv c-pl	73		50	2+	04
207	Saevar Howe	comb	ant	comp	s-s			orn high back, e-pl & frag c-pl (conv), t grad, e sp	16		44	2.5+	04
208	Saevar Howe	comb	ant	comp	s-s	stylised zoo terminal, slit for mouth, r&d for eye no evidence		frag e-pl, no grad, e-sp, short t	17+		45	3+	04
209	Saevar Howe	comb	ant	comp	d-s			2 x t-pl from middle of comb	66+		42	3+	05/06 ?
210	Saevar Howe	comb	ant	comp	d-s			t-pl from middle of comb, ?originally bone rivet	15+		49	3+	05/06 ?
211	Saevar Howe	comb	ant	comp	d-s			t-pl from middle of comb, Fe riv well-worked tooth from ?comb- see also under pin expanding c-pl w conv sect, t grad, sp on end, Fe riv	14+		33?+	3	05/06 ?
212	Saevar Howe	comb?	ant	-	-								05
213	Saevar Howe	comb	ant	comp	d-s	2 rows widely spaced r&d on c-pl, 2 r&d on e-pl							
214	Saevar Howe	comb	ant	comp	s-s			single t-pl, high back, susp hole on edge of pl, top of back					04
215	Ghegan Rock, Seacliff	comb	bone	s-p	s-s	back dec w arcs and oval panels, filled w stippling		sturdy, round-backed. Oval susp hole at top. No grad or e sp	55		52		02

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
216	Skaill	pin	ant	17	b			curved sh	100	8:			E
217	Skaill	pin	bone	08A	a				120	8:			C
218	Skaill	pin	ant	08A	a				84	9:			E
219	Skaill	pin	bone	25	-			crude knob-shaped head	44+	11:			C
220	Skaill	pin	ant	19A	-				56	12:			E
221	Skaill	pin	bone	-	a				108+				
222	Skaill	pin	bone	08A	a				106	7:			C
223	Skaill	pin	bone	21	a			cross-headed	147	15:			E
224	Skaill	pin	bone	21	-			cross-headed	128	11:			E
225	Skaill	pin	bone	21	-			cross-head	101	11:			E
226	Skaill	pin	bone	-	-			cross-head w sq ends, fl sect, poss unfinished	46?+	13:			
227	Skaill	pin	bone	06B	e*		band inc lines just above hip						C
228	Skaill	pin	bone	17C	b			?antler	111	7:			E
229	Skaill	pin	bone	16A	b			3 circ perf in fan shaped hd	124	16:			E
230	Skaill	pin	bone	19B	a			fl sect, conc back, spatulate hd, ?unfinished oval sect	66	8:			C
231	Skaill	pin	bone	08B	b				111	8:			C E
232	Skaill	pin	bone	08A	-				37+				C
233	Skaill	pin	bone	08A	-			splayed head	127	13:			C
234	Skaill	pin	bone	16D	b			sh has fl sect	97+	12:			E
235	Skaill	pin	bone	17B	b			rect head	142	13:			E
236	Skaill	pin	bone	17B	b			rect head	138	12:			E
237	Drimore	pin	bone	08A	b/c			long thin peg, irreg head. Slight swelling at waist	94+	5:4			C E
238	Burley Hawkin	pin	?	r-hd	-			?shank of pin					D
239	Skaill	comb	ant	comp	s-s			Ambrosiani type B2 teeth grad, Fe rivets, conv c-pl, vert inc 1 dec totally undiagnostic misc fragments					08 =
240	Skaill	comb	ant	comp?	-								
241	Skaill	comb	ant	comp	s-s			4 longit grooves on c-pl, r&d on e-pl					05
242	Skaill	comb	ant	comp				double inc lines	68+		28		07
243	Skaill	comb	ant	comp	s-s			conv c-pl, thick teeth	120		33+		07 = A
244	Skaill	comb	ant	comp	s-s			c-pl: diamond patt conv c-pl double inc 1 in centre, interlace at ends single row r&d along length of c-pl	55?+		15	4+	07



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
245 Skaill		comb	ant	comp	s-s		double inc lines	5 x Fe riv	104+	31		07	
246 Skaill		comb	ant	comp	s-s			t grad, thick conv c-pl, perf	83+	32			
247 Skaill		comb	ant	comp	s-s		r&d on back & c-pl	high-backed, Fe riv	96+	34	3+	04	
248 Skaill		comb	ant	comp	d-s		cross of double inc lines on c-pl	perf at one end, 5 x Fe riv	127	50		04	
249 Skaill		comb	ant	comp	d-s		c-pl dec w double inc lines	5 x Fe riv	135+	49	3+	06	
250 Skaill		comb	ant	comp	d-s		c-pl dec w 2 irreg spaced rows r&d, w few intersect inc line	Fe riv	95+	34		06?	
251 Skaill		comb	ant	comp	-		r&d on e-pl	some r&d perf for susp?	23+	45		06	
252 Skaill		comb	ant	comp	d-s			t grad, Fe riv	32+	46		06	
253 Skaill		comb	ant	comp	d-s		r&d on c-pl	Fe riv, t grad	95+	34	2+		
254 Skaill		comb	ant	comp	d-s		r&d at end of e-pl	Fe riv	23+	53		05	
255 Skaill		comb	ant	comp	s-s		V shaped notch cut out of back across a r&d	high-backed, Fe riv	23+	43		04	
256 Skaill		comb	ant	s-p	d-s	miniature		11	45	42		03	
257 Skaill		comb	ant	comp	s-s		r&d on back	high back, Fe riv	19+	27	2.5+	04	
258 Skaill		comb	ant	comp	s-s			high back, Fe riv	31+	39+		04	
259 Skaill		comb	ant	comp	s-s		r&d	high back, perf for susp, 7open backed or s-s mini t grad. V	24+	24+	1.5	04	
260 Skaill		comb	ant	-	-			t grad. V	10+	23	2.5+		
261 St Boniface's		comb	ant	comp	s-s		r&d on end and high back	straight, sq t slight grad t				04	
262 St Boniface's		comb	ant	-	-		r&d on c-pl w double inc	Fe riv, conv sect c-pl				07	
263 St Boniface's		comb	ant	comp	s-s		intersect lines	high back				04	
264 Farm of Galilee		comb	ant	comp	d-s		r&d on high back	Fe riv, shallow conv c-pl	75+	22+	2.5+	07	
265 Ivar's Knowe, Sanday		comb	ant	comp	s-s			t grad, perf for susp, Or-alloy riv	20+	25	3+	08?	
266 N Ronaldsay		comb	ant	comp	d-s		c-pl w inc longitudinal parallel grooves	diff thickness t, 2 rows Or-alloy riv, cf Salties fine	21+	26	3.5+	09	
267 Cnoc a'Comhdhalach		pin	bone	08A	e		10mm below head 2 latitudinal lines, numerous dots above		35	4.5:3		C	
268 Knap, Lewis		pin	bone	04	b*				58	5:4		C	
269 Colonsay		pin	Or-alloy	loose r-hd plain-loop					120	20:4		E	
270 Colonsay		pin	Or-alloy	loose r-hd stir-crut	cf dec on GT 976: 3				101	10:3.5		E	

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
271	Heisker	pin	Cu-alloy	loose r-hd kid-poly	bramble orn orn joint w trans grooves			heavy form. Close fitting ring has traces of grooving	87	17:4.5			E
272	Bachda-Mor, Vallay	pin	bone	01B	a				83	6:			A C
273	Bachda-Mor, Vallay	pin	bone	-	b				57+	:4.5			
274	Bachda-Mor, Vallay	pin	bone	12B	b			squared off fibula	85	7.5:			A C E
275	Bachda-Mor, Vallay	pin	bone	09I?	b				101	6.5:5			C E
276	Bachda-Mor, Vallay	pin	bone	01C?	a				61	6.5:5			A E
277	Bachda-Mor, Vallay	comb	ant	comp	d-s			groups of 2 diagonal slashes on c-pl	49+		27	13	11?
278	Sithean Mor	pin	bone	01A?	a			flattish sect	82	6			C E
279	Sithean Mor	pin	bone	09A	b				55	6:3			C
280	Sithean Mor	pin	bone	01B	a			coarse	73	8.5			A C
281	Udal	pin	bone	-	-			small ulna (?rabbit), perf transversely	58	6:4			
282	Udal	pin	bone	16B?	a*			5 groups of 4 inc fl, wide, tapering 1 spaced in groups of 2	98	13:			E
283	Udal	pin	bone	08B	c			v cancellous head	62	6.5:3			C
284	Udal	pin	bone	01A	a			flattish sect	77	6			C E
285	Udal	pin	bone	09	c?			head only partial, but definitely trans flattened	142	9:5.5			C
286	Udal	pin	bone	01C	a			conical top roughly facettted	84	5.5			A E
287	Udal	comb	ant	comp	d-s			cancellous tissue t grad, perf susp holes each end, Fe riv	88	39/79	48	14	05?
288	Vallay, N Uist	pin	bone	01C?	a			v thick at top, tapering to point	106	10			A E
289	Vallay, N Uist	pin	bone	01B*	a			rough incision just below top of sh	106	6.5:			A C
290	Vallay, N Uist	pin	bone	01C	a				71	5			A E
291	Vallay, N Uist	pin	bone	01A	b				67	5.5:5			C E
292	Vallay, N Uist	pin	bone	01B?	a			NB crooked top more oval than disc-shaped	51	3.5:2.5			A C
293	Vallay, N Uist	pin	bone	09A	a				65	7.5:3			C
294	Vallay, N Uist	pin	bone	09A	a				55	5:4.5			C
295	Old Cattlefld,Vallay	pin?	bone	34	-			?scoop	27	10:2			C
296	Tota Dunaig, Vallay	pin	bone	09 oval	b				70	5:2.5			C E
297	Tota Dunaig, Vallay	pin	bone	01A	a				59	:4			C
298	Tota Dunaig, Vallay	pin	bone	09A	b			oval sect sh	65	8:3.5			C E
299	Vallay, N Uist	pin	bone	09A	b				80	7:4			C E
300	Bealach Ban, Vallay	pin	ant	23	-			open disc	55+	15:4			E
301	Vallay, N Uist	pin	bone	01C	b			very finely smoothed	92	6.5:			A E



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
302	Valley, N Uist	pin	bone	06D	b			flattish section	88	5.5:3			C
303	Valley, N Uist	pin	bone	09A	c			flattish section	68	8:4			C
304	Old Cattlefld,Vallay	pin	bone	01B?	b			fl sect, sh curves	68	5:4			A C
305	Old Cattlefld,Vallay	pin	bone	09A?	b			semi-circular section, scoop like end	53	5.5:3.5			C
306	Old Cattlefld,Vallay	pin	bone	08B	b?			large head, much polished	96	7:5			C
307	Old Cattlefld,Vallay	pin	bone	01C?	a			fl sect	57	4.5:3.5			A E
308	Bachda Mor, Vallay	pin	bone	12B	a			fl sect	85	8:			A C E
309	Bachda Mor, Vallay	pin	bone	09A	b				54	7.5:3.5			C
310	Old Cattlefld,Vallay	pin	bone	-	a			slightly flattened sh	86+	:5?+		3	
311	Old Cattlefld,Vallay	pin	bone	01A	-			coarse, thick pin/peg. Sub-triangular sect	38+	6			C E
312	Valley	pin?	bone	-	a			slightly irregular width sh, sh curves	45+	:5			
313	Sithean Mor	pin	bone	01A?	-			irreg but polished sliver, pointed one end, fl sect	66	5			C E
314	Old Cattlefld,Vallay	pin	bone	01B	a				91	10			C E
315	Old Cattlefld,Vallay	pin	bone	01A	a				89	7.5			A C
316	Old Cattlefld,Vallay	pin	bone	01A	-			very long, thick 'skewer'	172	6.5			C E
317	Old Cattlefld,Vallay	pin	bone	09I	c				34+	7:3			C
318	Valley, N Uist	pin	Or-alloy	loose r-hd	plain-loop	vertical grooving	upper sh has punched dots & transverse grooves in middle		103	20:7			E
319	Valley, N Uist	pin	Or-alloy	mush	c				96	7.5:4			E
320	Old Cattlefld,Vallay	pin	Or-alloy	lobed	c				81	5:3.5			E
321	Old Cattlefld,Vallay	pin	Or-alloy	07*	c*				100	5:3.5			E
322	Lismore	pin	Or-alloy	30	c			stippling along hatching on facets of sh each of polygonal faces. Traces red enamel	104	5.5:4		4	E
323	Lismore	pin	Or-alloy	30	c			frustrum head w fillet	102	5.5:3.5			E
324	Lismore	pin	Or-alloy	27*	c*			frustrum head w lines on stippling radiate from centre in a swirl	97	6:3.5			E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
325	Ardkinish, Colonsay	pin	Cu-alloy	loose r-hd plain-loop				sh oval sect, becoming rect near tip	181	30:4.5			E
326	Knap, Lewis	pin	Cu-alloy	28* inset c		hole for inset at end of each arm of T			101	8.5:4			E
327	Knap, Lewis	pin	Cu-alloy	astrag	c			astragaloid w fillet	112	5:4			E
328	Knap, Lewis	pin	Cu-alloy	astrag	c			frustrum head w fillet	97	5.5:3.5			E
329	The Duns, Berneray	pin	Cu-alloy	discfillet c		roughly triangular arrangement zig-zag lines on each face			104	7.5:4			E
330	Carn nan Bharraich	pin	Cu-alloy	discfillet -									
331	Berie Sands, Valtos	pin	Cu-alloy	kid r skeu b		crude quatrefoil interlace		ring cast w hd. False step design in relief on ring	101 71	9:4 8:3			E E
332	Berneray Sands	pin	Cu-alloy	08B* inset c/e*		2 transverse milling below, 4 and trans 1 & hatching intermediat round swell e milling around edge			64	6.5:3.5			C
333	Colonsay	pin	Cu-alloy	-	-								
334	N Uist	pin	ant?	06C	b?			circ sect sh	42+	7:3.5			C
335	N Uist	pin	ant	09H	c			transversely flattened	45	8:3			E
336	N Uist	pin	ant?	14A	e	bird's head, hooked beak & drilled eye			56	8:4			C
337	N Uist	pin	bone	07	e			faceted cuboid	61	6:3			C
338	N Uist	pin	bone	11B	c?			v eroded, long, thin thistle head w collar under thick sh	62	7:4			C
339	N Uist	pin	bone	06C	c				66	8:4			C
340	N Uist	pin	bone	28?	-				27+	8:4			C
341	N Uist	pin	bone	08A	e			flattish sect, obvious paring marks	69	6:3			C
342	N Uist	pin	bone	09I	c			fl ?inverted bucket, thick sh					C
343	N Uist	comb	ant	comp	d-s			Fe riv	15+	4/8	27+	5+	
344	N Uist	comb	ant	comp	d-s			frag t-pl	12+	7/12	28+	3+	
345	a Cheardach Mhor	pin?	bone	01A	c			crude pin or point, much polished, fl sect	96	5			C E



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
346 a	Cheardach Mhor	pin	bone	01B	a			irreg width sh,	100	6			A C
347 a	Cheardach Mhor	pin	bone	01B	a			curved	80	4			A C
348 a	Cheardach Mhor	pin	bone	01A	a			much polished	56	4			C E
349 a	Cheardach Mhor	pin	bone	06B	-			approx ball-head w 21+ top cut off	21+	7:3			C
350 a	Cheardach Mhor	pin	bone	33	-			roughly pin-shaped, knife marks all over	49+	7:5			
351 a	Cheardach Mhor	pin?	bone	16B	f			?needle - perf in one end	97	7			E
352 a	Cheardach Mhor	pin	bone	08A*	b	irregular arrangement of dots on top		long pin	125	7			C
353 a	Cheardach Mhor	pin	bone	16A	b			?flat 8A, nail head in plan, but fl sect, circ sh sect	42	6:4			E
354 a	Cheardach Mhor	pin	bone	08B	c			short pin w fl sh, circ sect	42	6:3			C
355 a	Cheardach Mhor	pin	bone	06A	c			wide, gently swelling sh	55	6:4			C
356 a	Cheardach Mhor	pin	bone	06A	a			thick pin	63	8:4			C
357 a	Cheardach Mhor	pin	bone	12B	b				80	9:4			A C E
358 a	Cheardach Mhor	pin	bone	30	b/c			rect head w rect sect, fl sh	103	8:5			C
359 a	Cheardach Mhor	pin?	bone	33	-			roughly squared off length of bone, neck beginning					
360 a	Cheardach Mhor	pin?	bone	33	-			as for GSA.319, but no beginnings of neck					
361 a	Cheardach Mhor	pin	bone	12B	a					9:5			A C E
362 a	Cheardach Mhor	pin?	ant	33	-			roughly squared length of antler, ?base for pin					E
363 a	Cheardach Mhor	pin	ant	06D	-			large pin w thick sh, sub-circ sect	51+	9:6			
364 a	Cheardach Mhor	pin	bone	-	a			curved length of much polished bone					
365 a	Cheardach Mhor	pin	bone	01A	f			rect sect, curved profile - ?rib	69	4		2	C E
366 a	Cheardach Mhor	comb	ant	comp	d-s		diag nicks on one t-pl, c-pl cross-hatched	Fe riv, deep conv dec c-pl, t do not grad	80+	35/56	34+	3+	06
367 a	Cheardach Mhor	pin	bone	-	a			fl sect	73+	:6		4	
368 a	Cheardach Mhor	pin	Cr-alloy	loose r-hd spiral-bal				sh only	73+		6	4	D
369 a	Cheardach Mhor	pin	bone	12A	-			end polished but not pointed - ?point not pin	102				A C E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
370 a	Cheardach Mhor	pin	bone	12B	-			very rusty	118				A C E
371	Bruathach a Tuath	pin	iron	crook-hd	-			3 projecting lobes on stalks	40+	14:			A
372	Bruathach a Tuath	pin	Cu-alloy	proj r-hd	degen ibex			crudely fashioned w transversely fl sub-tri head	53				D
373	Dun Cuier	pin	bone	09	a?			?12B, pig's fib modified to transversely fl tri	43	7:4			C
374	Dun Cuier	pin	bone	09A	a			as for GU 285. Fl	57	8:4			C
375	Dun Cuier	pin	bone	09F	c			sect	61+	8:4			
376	Dun Cuier	pin	bone	12B	c			narrow neck	67	4.5:3.5		3	A C E
377	Dun Cuier	pin	ant?	06E	c			v pronounced swelling	65+	8:4			C
378	Dun Cuier	pin	ant?	06C	c?			rough and thick approx nail head					C
379	Dun Cuier	pin	ant?	09C	c/e			approx nail head swelling more than half way up sh					C
380	Dun Cuier	pin	bone	06D	b			finely polished	60	7:4			C
381	Dun Cuier	pin	bone	08A?	c			v short with stumpy sh.	52	6:4			C
382	Dun Cuier	pin	bone	08A?	c			ornate version	45	4:3			C
383	Dun Cuier	pin	ant?	06A	c/e			thick sh, oval sect	49	7:4.5			C
384	Dun Cuier	pin	bone	06B	c			nicks on ring	41	5:3			C
385	Dun Cuier	pin	ant	08B	b				32	5:3			E
386	Dun Cuier	pin	bone	08A	c				46	4.5:			C
387	Geirisclett, N Uist	pin	bone	01A	c					3:5			C E
388	Geirisclett, N Uist	pin	bone	16A	a				93	9.5			E
389	Geirisclett, N Uist	pin	bone	07	c/e				60	5.5:4			C
390	Geirisclett, N Uist	pin	ant?	08A	c				71+	5:5		4	C
391	Kildonan, S Uist	pin	Cu-alloy	loose r-hd plain-poly outlined lozenge design					112	15:4			E
392	Kildonan, S Uist	pin	Cu-alloy	04	c			transverse nicks on sh below head	99	6:3			E
393	Kildonan, S Uist	pin	Cu-alloy	07*?	c			battered disc/elliptical head	80	6:4			E
394	Kildonan, S Uist	pin	Cu-alloy	08B*	c/e*			approx polygonal head crudely beaten into shape	44	7:3			C
395	Kildonan, S Uist	pin	Cu-alloy	06B* inset	c*			v fine pin, tip faceted as result of beating	61	6:3			C



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
396 Kildonan, S Uist		pin	Cu-alloy	-	b	geom design			60+	:4			E
397 Kildonan, S Uist		pin	Cu-alloy	lozfillet c		one side, 3 zig-zags on other, 2 intersect milling around edge, collar below		bent sh circ sect sh					
398 Kildonan, S Uist		pin	Cu-alloy	08B*	c*			around waist:cross circ sect sh hatching inbetween rilling & transverse l					C
399 Kildonan, S Uist		pin	Cu-alloy	27?	c			NB rect sect head	99	6:4			E
400 Kildonan, S Uist		pin	Cu-alloy	08B?	b*			transverse rilling circ sect sh, crude nail head approx 1/3 way down sh	84	5:4			C
401 Kildonan, S Uist		pin	bone	30*	c	each rect face dec w 2 rows of dots		sq sect head	87	5:4			E
402 Kildonan, S Uist		pin	bone	12B	a				90	7			A C E
403 Skellor, N Uist		pin	bone	09A	c			oval sect sh	66	6:3			C
404 Skellor, N Uist		pin	bone	01A?	a			crude point w natural articulation remaining	42	7:4			C E
405 W Isles		pin	Cu alloy	proj r-hd	wire				81	13:3			A C?
406 W Isles		pin	Cu alloy	proj r-hd	wire				79	14.5:2.5			A C?
407 W Isles		pin	Cu-alloy	proj r-hd	wire				77	:2			A C?
408 W Isles		pin	Cu-alloy	proj r-hd	wire				-	11:2			A C?
409 W Isles		pin	Cu-alloy	proj r-hd	wire			only other	18+	20:			A C?
410 W Isles		pin	Cu-alloy	proj r-hd	ibex			parallel in Scotland at Covesea	44+	9:3			D
411 W Isles		pin	Cu-alloy	loose r-hd	-bal								C?
412 W Isles		pin	Cu-alloy	-	-			head of sh flattened transversely & rolled over	73	:5.5 3.5:3.5			
413 W Isles		pin	Cu-alloy	loose r-hd	plain-poly dot	patterns within lozenge panels, pendant tri							E
414 W Isles		pin	Cu-alloy	loose r-hd	kid-poly	under hd							E
415 W Isles		pin	Cu-alloy	loose r-hd	stir-crut	undec vertical grooving, pendant triangles below		close-fitting ring vertical grooving on ring					E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
416 W Isles		pin	Cu-alloy	loose r-hd -crut		inc transv and vertical lines in sides			56+	8:4			E
417 W Isles		pin	Cu-alloy	proj r-hd wire									A C?
418 W Isles		pin	Cu-alloy	kid r skeu -		brambled orn		ring dec w chevron design, cast w head		2.5			E
419 W Isles		pin	Cu-alloy	06B* c*		combination vertical lines w of dots and dots inbetween lines, dots in approx spiral ?much corroded inset in top		78A*	90	4.5:3			C
420 W Isles		pin	Cu-alloy	08B?inset c					36	5.5:3			C
421 W Isles		pin	Cu-alloy	spiralroll -				head of sh beaten transversely and rolled over	53	4:3			?
422 W Isles		pin	Cu-alloy	misc -				golf-club shaped head, fl sect	31+	7:2		3	
423 W Isles		pin	Cu-alloy	loose r-hd crutch		3 r&d on long faces, 1 on end			37+	7.5:3.5			E
424 W Isles		pin	Cu-alloy	30 c				frustrum w collar	100	4.5:3			E
425 W Isles		pin	Cu-alloy	05 -									C
426 W Isles		pin	bone	03D? -		collar beneath melon		NB chevron 'teeth' of melon	41+	8:3.5			C?
427 W Isles		pin	bone	-									
428 W Isles		pin	bone	-									
429 W Isles		pin	bone	-									
430 W Isles		pin	bone	-									
431 W Isles		pin	bone	-									
432 W Isles		comb	ant	comp s-s				e-pl, conv end, end-space, Fe riv	28+	7/13	26+	3+	11?
433 W Isles		comb	ant	comp s-s				e-pl, t grad, end-space, Fe riv	23+	9/16	25?+	4+	11?
434 W Isles		comb	ant	comp s-s				raised back	21+	8/20	29?+	4+	11
435 W Isles		comb	ant	comp s-s				high back, Fe riv, -	-		26+	3+	11
436 W Isles		comb	ant	comp s-s?			back dec w 2 r&d	end-space arched back	-		-	3+	04
437 W Isles		comb	ant	comp s-s				end-space Fe riv	-	6/10	12+	3+	11?
438 W Isles		comb	ant	comp s-s				Fe riv	-	3/5	-	4+	11?
439 W Isles		comb	ant	comp s-s				t-pl, slightly raised back, ? same comb as GT.1028	14+	5/12	35	2	11?



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
440 W Isles		comb	ant	comp	s-s			t-pl	16+		34	2+	11
441 W Isles		comb	ant	comp	s-s		c-pl w 2 l along outer edge and some vert l	conv sect c-pl, Fe - riv	-		-	6+	07?
442 W Isles		comb	ant	-	-			conv sect c-pl, t grad, Fe riv	56+	23/36	40	11	
443 W Isles		comb	ant	comp	d-s			t grad, central perf for susp, Fe riv	25+	12/21	-	3+	05?
444 W Isles		comb	ant	comp	d-s			end-space, Fe riv poss same comb as rec no 445. Fe riv	-	6/12	18	2+	06?
445 W Isles		comb	ant	comp	d-s		e-pl dec w r&d	c-pl w bevelled sect	31+		14+	4+	05/06?
446 W Isles		comb	ant	comp	d-s		c-pl dec w 3 rows double r&d	Fe riv, c-pl w bevelled conv sect	44+		15+	3+	07/08?
447 W Isles		comb	ant	comp	?		c-pl dec w longit l, hatching, r&d and s-spirals	conv sect c-pl expands in width, Fe riv	-		14+	4+	07/08?
448 W Isles		comb	ant	comp	d-s		c-pl dec w longit l on edges & middle, hatching in centre	c-pl almost tri sect, Fe riv	27+		14+	4+	07/08?
449 W Isles		comb	ant	comp	s-s								
450 W Isles		comb	ant	comp	s-s								
451 W Isles		comb	ant	comp	d-s			conv sect c-pl, Fe riv	-		-	3+	07/08?
452 W Isles		comb	ant	comp	s-s			no dec, expanding width conv c-pl, Fe riv	-		14+	4+	07/08?
453 W Isles		comb	ant	comp	d-s?			Fe riv	-		-	-	07/08?
454 W Isles		comb	ant	comp	s-s			Fe riv	-		-	-	07/08?
455 W Isles		comb	ant	comp	s-s?			deep conv sect c-pl, Fe riv	-	17/24	-	4+	07/08?
456 W Isles		comb	ant	comp	d-s			t grad	-		-	4+	
457 W Isles		comb	ant	comp	d-s			Fe riv	-	8/15	15+	3+	
458 W Isles		comb	ant	comp	d-s			Fe riv	-	6/11	-	3+	
459 W Isles		comb	ant	comp	d-s			Fe riv	-	6/11	11+	3+	
460 W Isles		comb	ant	comp	d-s			Fe riv	-	8/15	-	4+	
461 W Isles		comb	ant	comp	d-s			Fe riv	-	9/15	15+	3+	
462 W Isles		comb	ant	comp	d-s			4/6	-	4/6	45	3+	
463 W Isles		comb	ant	comp	s-s		e-pl have raised 'ear' above c-pl	bow-shaped c-pl w thin, conv sect. Fe riv, e-sp	20+	7/19	42+	3+	07 = A
464 W Isles		pin	bone	09G	-				80	5:			C E
465 W Isles		pin	bone	09B*	c		each side of head dec w four dots dog/pig-lik e head, w 2 dots on end snout and indented ears		115	12.5:4			
466 W Isles		pin	bone	14A	c				43	8:3			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
467 W Isles		pin	bone	08A	c			only slight swelling	111	5:4			C E
468 W Isles		pin	bone	01C	a			'true' Roman type	117	5:			A E
469 W Isles		pin	bone	09C	a				43	10:4			C
470 W Isles		pin	ant	08A	-			large pin	23+	10:4			E
471 W Isles		pin	bone	08A	c				53	5:4			C
472 W Isles		pin	ant?	28	e			inverted bucket w. rounded head	38	4:4			C
473 W Isles		pin	bone	08B	c*		line of heavily cut chevron decoration		37	4:3			C
474 W Isles		pin	bone	08B	c			v small, fine pin	26	3:2			C
475 W Isles		pin	ant?	08A	c				53	5.5:4			C
476 W Isles		pin	bone	08A	-			flat section	30+	5:3			C
477 W Isles		pin	bone	06E	-			oval sect sh	27+	4.5:3.5			C
478 W Isles		pin	bone	06B?	c				48	5:3.5			C
479 W Isles		pin	bone	29	b			very finely ?lathe-turned	60	7:3			C
480 W Isles		pin	bone	29	c			4?, similar to GT.1177, but not so well made	31+	7:3			C
481 W Isles		pin	ant	06B	-			rough ball head w flat top	23+	6:3			E
482 W Isles		pin	bone	08B	a			crude	74	5.5:3			C
483 W Isles		pin	ant?	33	-			v coarse thick sh, and small irregular head	31+	5:3			
484 W Isles		pin	ant?	24C	-			fine collar under head	20+	7:3			C
485 W Isles		pin	bone	06A	c				56	7:4			C
486 W Isles		pin	bone	06A	c?			76B, small head in relation to sh	26+	5:3			C
487 W Isles		pin	bone	19A	-			transversely flattened head still wider than sh	33+	9:3	5		C
488 W Isles		pin	bone	06B ?inset	e			slight hip	48	7.5:4			C
489 W Isles		pin	bone	06A	c			roughly cut head, but much polished sh	72	7.5:4			C
490 W Isles		pin	bone	06D?	e				55	8.5:4			C
491 W Isles		pin	bone	06B	e				62	8:4			C
492 W Isles		pin	bone	04	c			head has triangular section	65	6:4			C
493 W Isles		pin	bone	06B?	c				45	5.5:3.5			C
494 W Isles		pin	bone	06C	-				18+	7:3			C
495 W Isles		pin	bone	06D	b			NB semi-circular section & lop-sided point	32	6:4			C
496 W Isles		pin	bone	28	c			73E	53	6:3.5			C



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
497 W Isles		pin	bone	06E*	e	2 parallel transverse incisions around top of sh		hip 20mm, below head, 1 e high up	24+	4:3			C
498 W Isles		pin	ant?	27	-			neck inset from head	21+	9:4			C
499 W Isles		pin	bone	03E	c			reel w short, small, inverted bucket over	83	7:4.5			C
500 W Isles		pin	bone	11?	c		slightly flattened	?thistle head narrows slightly and then expands	45	4:3			C
501 W Isles		pin	bone	11A?	c			NB elongated bead approximates to thistle	62	6.5:4			C
502 W Isles		pin	bone	05*	-	8 dots in line around waist, rosette of dots on top		ball head w reel each side	28+	6:3			C
503 W Isles		pin	bone	34	-			imitation of end of metacarpal?	90	9:6			
504 W Isles		pin	bone	34	c/b			cross between astragaloid & melon	92	7:4.5			
505 W Isles		pin	ant?	-	a			rect/sq head, not narrower than sh	62	7.5:4			
506 W Isles		pin	bone	09E	b			large rough head w flattish sect, transversely fl	83+	7:6			
507 W Isles		pin	ant	16B	c			sub rect perforation	64	6:3.5			E
508 W Isles		pin	bone	34	-			v large crude sub rect head, much polished	49+	10:6		7	
509 W Isles		pin	bone	09E longit	-			transversely fl w spade-like head	43+	8:4			
510 W Isles		pin	bone	06D	c			fl sect head & sh, v large & thick	68+	7:6			C
511 W Isles		pin	bone	09A?	c			v crude, head damaged	56+	8:5			C
512 W Isles		pin?	bone	06D	b			fl sect w pronounced neck, ?poss orig perf	53+	5:5			C
513 W Isles		pin	bone	09E	c			small pin w sq transversely flattened head	36	4:2			
514 W Isles		pin	bone	08A	c			?6I, head not markedly narrower than shaft	40	7:3			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
515 W Isles		pin	bone	08A	-			?6I, crude disc hd, fl curved sect	29+	7:3			C
516 W Isles		pin	bone	08A	-			?6I, similar to GT.1213, but head fl in sect	29+	6:3			C
517 W Isles		pin		-	-			not located					
518 W Isles		pin	bone	06D	c			elongated head	52	4:3			C
519 W Isles		pin	bone	12	?-			short. Irreg ?disc	28	5:2			A C E
								hd = roughly mod					
520 W Isles		pin	bone	16?	-			nat artic					
								sub triangular hd	85	7:3			E
521 W Isles		pin	bone	06D	b			w flattish sect					
								head prob	82	4:3			C
								elongated, but					
522 W Isles		pin	bone	28	c?			eroded					
								inverted	60	5:2			C
523 W Isles		pin	bone	06B	c			bucket/tear drop					
								head has flattish	42	6:4			C
								sect					
524 W Isles		pin	bone	06B?	a			v short pin w	23	4:2			C
525 W Isles		pin	bone	06B?	c?			irreg rounded head					
								?6E, split- presum	28+	6:3			C
								orig rough ball					
526 W Isles		pin	bone	08A?	-			fl sect to whole	23+	5:			C
								pin. Recesses					
								stained green					
527 W Isles		pin	bone	01B	b			curved point, head	85	:3			A C
528 W Isles		pin	bone	01A	b			end cut obliquely,	59	4			C E
								fl sect					
529 W Isles		pin	bone	12B	b			marginally	89	8:4			A C E
								modified pig fib					
530 W Isles		pin?	bone	01A	b			v thick point,	56	7			C E
								possibly pin,					
								flattish sect					
531 W Isles		pin	bone	01A	a?			roughly worked	81+	5			C E
								splinter bone,					
								flattish hd & sh					
532 W Isles		pin?	ant?	-	-			irreg length,	64	5			
								?unfinshed pin-					
								but much polished					
533 W Isles		pin	ant	-	-			not located					E
534 W Isles		pin	ant	-	-			not located					E
535 W Isles		pin	bone	-	e								C
536 W Isles		pin	bone	-	e				39+	:4			C
537 W Isles		pin	bone/ant	-	-				39+	:4			C
								36 misc points, no					
								hips -					
538 W Isles		pin	bone	-	e				32+	:4			C
539 W Isles		pin	bone	01A	a			pin w slight head,	38	4			C E
								only slightly					
								expanding					



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
540 W Isles		pin	bone	-	-				25+	:3			
541 W Isles		pin	bone	01A	a			?1B, fl head, but faceted by knife cuts	52	5			C E
542 W Isles		pin	ant?	01A	a				57+	5			C E
543 W Isles		pin	bone	06D	c			constricted neck, large head roughly faceted	64+	6:4			C
544 S Fort of Luing		pin	bone	12A	b				73	11:3			A C E
545 S Fort of Luing		pin	Cu-alloy	20	-			bent T-shaped head, blunt point	89	18+:3			E
546 Castle Hill, S Howrat		Obank	ant	-	-			?squared off plate - ?comb blank					
547 Keil Cave		pin	bone	16A	-				82+	13:5			E
548 Keil Cave		pin	bone	01A	a			much polished. Circ sect	82	5			C E
549 Keil Cave		pin	bone	12A	-				90	14:5			A C E
550 Keil Cave		comb	ant	s-p	s-s		uncut areas at ends dec w 2 parallel vert lines	single Fe riv, for what? Oblique ends w conv back	48	12/30	37	3	11?
551 Keil Cave		comb	ant	comp?	d-s			poss s-p, conv end, sp left uncut	18+	7/10	49	3	01?
552 Keil Cave		comb	ant	comp	d-s		ornate openwork e-pl	Fe riv, t grad, ?susp hole, t more coarse on one s	24+	8/18	50	5	01
553 Laws of Monifieth		comb	ant	s-p	d-s	7		long & thin w conv ends, diff thickness teeth	83	34/74	37	4.5	11
554 Laws of Monifieth		pin	iron?	proj r-hd	wire				81	15.5:2			A C?
555 Laws of Monifieth		pin	Cu-alloy	crook-hd	-				93	18:2			A
556 Birkle Hills		pin	bone	08B	a			slightly curving sh	72	8:4			C
557 Elsay		pin	bone	-	e			fine hiped sh	31+	:4			C
558 Elsay		comb	ant	comp	d-s			Fe riv, undec, ends slightly conv	18+	7/8	49	4+	06?
559 Elsay		comb	ant	comp	d-s			Fe riv	21+	9/14	44+	3+	06?
560 Everley		pin?	bone	12D?	-			bird bone, poss used as pin					A C E
561 Everley		pin	bone	12A	b				94+	10+:			A C E
562 Everley		pin	Cu-alloy	proj r-hd	-			wire, tri sect ring	82+	16:4			A C?
563 Freswick Links		pin	bone	06B	e			well-finished head	41	5.5:3			C
564 Freswick Links		pin	bone	06B	b			rough	34	5:3			C
565 Freswick Links		pin	ant?	06E	c			v thick.swollen sh	43	5.5:4			C
566 Freswick Links		pin	bone	11B	-			large thistle head		8:			C
567 Freswick Links		pin	bone	-	-			badly weathered sh	32+	:3.5			
568 Freswick Links		pin	bone	09C	-			= 12B, fibula modified to fan shape	61+	9:3			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
569	Freswick Links	pin	bone	06B*	b?	bramble decorations, cf HR.1002		semi-circular sect	47+	5.5:3			C
570	Freswick Links	pin	bone	20?	b			half of head broken off	53+	7+3.5			E
571	Freswick Links	pin	bone	24A	e*		approx 5 lightly incised transverse grooves around hip	?24B. ?Faint grooves on head and sh result of turning	42	4.5:3			C
572	Freswick Links	pin	bone	06A*	e*	transverse lines w cross hatching inbetween	as for head	small depression in head - ?result of turning	51	7.5:3.5			C
573	Freswick Links	pin	bone	27?	e			polished but crude, knife marks still obvious	66	7:5			C
574	Freswick Links	pin	bone	24A*	e*	lightly incised transverse lines w cross-hatching inbetween	as for head	slight collar under head	56	7:4			C
575	Freswick Links	pin	bone	03E	c			= 3E. Thick pin, uppermost segment = inverted bucket	87	7.5:5			C
576	Freswick Links	pin	Cu-alloy	loose r-hd	crut-stir	undec		thick head	84	10:3.5			E
577	Freswick Links	pin	Cu-alloy	07*	?	unclear ?cross-hatching		much corroded	81+	6.5:4.5			E
578	Hillhead	pin?	bone	-	-			point/pin from bird fibula, rather fragile sh	54	6			
579	Hillhead	pin?	bone	09D	-			bird bone NB irregularity of sh	59	12			C
580	Hillhead	pin	bone	-	b			?pig's fibula	55+				
581	Freswick Links	pin	bone	-	-			tip of fine pin	18+	:3+			
582	Hillhead	comb	ant	comp	d-s			5 x Fe riv, t grad, spaces on ends of e-p', no dec	136		51	14	05/06 ?
583	Hillhead	pin?	bone	12	b			fish bone. V fine pin w head approximating to a pelta					A C E
584	Hillhead	pin?	bone	12	b			fish bone w natural artic split longitudinally					A C E



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
585	Keiss ?South	pin	bone	-	b?			fine	34+	:3+			
586	Keiss ?South	pin	bone	-	b?			fine	24+	:3+			
587	Keiss ?South	pin	ant?	-	-			thick mid sh, circ	71+	:4			
								sect					
588	Keiss ?South	pin?	bone	-	-			flat splinter of	67	:3	2		
								bone tapering to a					
589	Keiss ?South	pin	ant?	-	b?			point at ends					
								irregular sh of	74+	:5			
590	Keiss ?South	pin	ant?	-	a			pin					
591	Keiss West	pin?	bone	-	a			slightly curved sh	92+	:4			
								small tibia, split	79	10:6			
								longitudinally,					
								irreg sh					
592	Keiss North	pin	bone	12B?	c	approx nail head		not necessarily fibula. Rather large and crude					A C E
593	Kettleburn	ball	bone	-	-			?unfinished large	34		36	27	
594	Kettleburn	pin	bone/ant?	15A	-	approx spherical		globular pin head	27	25:	25	24+	D
595	Kettleburn	ball	bone	-	-			remains of Fe shank					
								?unfinished	35		35	25	
596	Wester Broch	pin?	bone	-	-		rect sect	globular pin head					
								lge sh, polished	120+	8:			
								head rather curved					
597	Wester Broch	pin?	bone	01A	a			& spatulate	61	6:			C E
								?peg, crude,					
598	Wester Broch	pin	bone	12A?	-			roughly sq sect	61+	:5			A C E
								head and tip					
599	Wester Broch	pin?	ant	-	-			broken off					
								irreg length, no	74+	:5			E
								diagnostic					
600	Kettleburn	comb	ant	s-p	s-s	miniature	line of zig-zags within inc line along top edge	features	36	19/34	22	4	03
								perf top centre of back					
601	Wester Broch	pin	cet?	04*	a	lightly incised saltire on top of reel		curving					
								latitudinal sect					
								compact dense	104	9:6			C? E?
								bone, poss cet					
602	Wester Broch	pin	ant	01A	b			long skewer,	144	6			E
								slightly curving					
603	Orkney	pin	ant?	15A	-			sh			22		D
								staining around					
								perf from Fe nail.					
604	Orkney	pin?	bone	15A	-	sub-ovular, much polished		Perf diam 6mm	27+	21:		15	D
								7bead					
605	Broch of Ayre?	pin	ant	15A	-				85	26:4	26+		D E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
606 Orkney?		pin	bone	01A	a				78	6:4			C E
607 Orkney?		pin	bone	12B	b				80+	8:3			A C E
608 Orkney?		pin	bone	12B	b?				88+	12:3			A C E
609 Orkney?		pin	bone	06C	e*		lightly incised transverse line at hip		48	6:3			C
610 Orkney?		pin	bone	15B	-			frag, much polished, Fe staining from sh	18+	19:			D
611 Orkney?		ball	bone	15?	-			ball of dense bone, ?for		23			D
612 Orkney		pin	bone	16E	c			globular pin head fl sect, ornamented perf head, cancellous tissue	89	14:6			E
613 Lanarkshire?		pin	Cu-alloy	loose r-hd plain-poly		quatrefoil interlace, knot & saltire dot pattern	transverse grooving on upper sh	ring grooved either side of head. Formerly Sim Collection	114	22:4.5			E
614 Gurness		pin	Cu-alloy	loose r-hd plain-poly		central lozenge panel dec w inc cross w collar below		ring has traces of grooving	175	20:4			E
615 Earl's Palace, Birsay		pin	Cu-alloy	loose r-hd plain-poly		interlace, pendant triangles below			172	18:8			E
616 Burrian		comb	ant	comp	d-s	7	butterfly ends w 3 r&d on each wing	t grad, thicker one side sub-rect sect	32+	10/19 17/1	30		10
617 Burrian		comb	ant	comp	d-s	longit grooves on c-pl	Cu-alloy riv	c-pl, br riv t grad & finer on 1 side. Rounded end w 2 perf	28+	6/12:11/14	29+ 10	05?	
618 Hillswick		pin?	bone	01A	b								C E
619 Bowermadden		comb	cet?	s-p	s-s	miniature		semi-circular open back. Bold tri teeth	36	12/34	28 6		03
620 Bowermadden		pin	Cu-alloy	prof r-hd	semi-bead			head 18x 12 mm	93	18:3			D
621 Orkney		pin	Cu-alloy	09A*	c*		double inc 1 and intermediate cross-hatching above waist		68	10:4.5			C
622 Broch of Burrian		pin	bone	28?	c				31	5:2			C
623 Broch of Burrian		pin	bone	08A	c			only slight expansion at head	64	3:3			C



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
624	Broch of Burrian	pin	bone	25	c/e				28+	7:3.5			C
625	Broch of Burrian	pin	bone	06D	c				54	5:4			C
626	Broch of Burrian	pin	ant?	01A	a			?1B. Curved sh	101	5			C E
627	Broch of Burrian	pin	bone	-	a/b				41+	13?+			
628	Broch of Deerness	comb	ant	comp	d-s	1	c-pl dec w single row r&d	shallow conv c-pl, no t grad, Fe riv, space at end	93+	12/19 13/2	7		06
629	Broch of Harray= Netlater	pin	bone	15B	-			perf diam 4 mm from animal	23	23:	21	20	D
630	Broch of Howe	pin	bone	15C	-			?molar, perf diam 4, D 9, bun-shaped	24+	25:	25	18	D
631	Broch of Ox_tro	pin	bone	12B	c			prob Fe shank. Rounded off					A C E
632	Broch of Ox_tro	pin	bone	12C	-	disc shaped							A C E
633	Broch of Ox_tro	pin	Cu alloy	loose r-hd plain-loop				lightly inc, trans grooves & cross design					E
634	Birsay	pin	bone	09B	c*			2 transverse grooves around widest part of sh		10:3.5	64		C
635	Birsay	pin	bone	13	a			6 segments	80+	3.5:3.5			E
636	Ashgrove Loch	pin	bone	-	b			bone splinter, tri sect but regular and worn	61+	:4			
637	Bishop's Loch	pin	bone	09C	c					9:3			C
638	Bishop's Loch	pin	bone	01A	b			fl sect		:4.5			C E
639	Loch Spouts Crannog	pin	bone	12A	-b				71	12:4			A C E
640	Loch Inch-Crindil	comb	ant	comp	d-s	7	c-pl w central r r&d, r&d & S-scrolls on either side(& e-pl)	wide, thick, rect c-pl, Fe riv, slight grad of t	70+	32/61 30/5	42+	12	05
641	Ledaig Moss	comb	wood	s-p	d-s			slight conv ends, diff thick t, no grad, e-sp	42+	9/35 37/37	69		01/11
642	Ledaig Moss	comb	wood	s-p	d-s	0		as for HT.20, but wider sp between teeth	51+	13/43 29/4	72	6.5	01/11
643	Ledaig Moss	comb	wood	-	-			not examined					
644	St Ford's Links	pin	bone	12A	b				99	14:5			A C E
645	St Ford's Links	comb	ant	comp	d-s			c-pl w central l r&d, 2 inc 1 above riv & below	58+	8/21	42	12	05/06 ?
646	Covesea	pin	Cu alloy	proj r-hd	rosette				62	16:3			A
647	Covesea	pin	Cu alloy	proj r-hd	semi-bead				62	12:4			A
648	Covesea	pin	Cu alloy	proj r-hd	semi-corr			?silver	57	10:3			A
649	Covesea	pin	Cu alloy	proj r-hd	corr-bead				58	10:3			
650	Covesea	pin	Cu alloy	proj r-hd	corr-bead				53	9:3			
651	Covesea	pin	Cu-alloy	proj r-hd	corr-bead				52	9:3			

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
652	Covesea	pin	Cu alloy	proj r-hd	ibex				47	8:3.5			A
653	Covesea	pin	Cu alloy	proj r-hd	corr-bead				49	8:3			
654	Covesea	pin	Cu-alloy	Fowler E	proto-zoo	round head, snout		found assoc w bone case (FM 133: layer 1, C8, cf below)	130	4.5:3			A
655	Covesea	pin	Cu alloy	-	-			sh only	56+	:3			
656	Covesea	pin	Cu alloy	-	-			sh only	33+	:3.5			
657	Covesea	pin	Cu alloy	-	-			sh only	26+	:2			
658	Covesea	pin	jet	-	-			pin-head, disc-shaped, w remains of ?Fe sh perforated at apex	15		6		
659	Langbank	comb	ant	s-p	s-s	engraved dec of triple circle motif w pricked infilling			36		38		02
660	Traprain Law	pin	Cu alloy	08A	b			thick sh, oval sect	99	8:5			B
661	Traprain Law	pin	Cu alloy	08A	a			long, thin and flat head	75+	12:3			B
662	Traprain Law	pin	Cu alloy	04	b*?		4 groups double inc lines below head	narrow sh	36+	6:2.5			B
663	Traprain Law	pin	Cu alloy	?	a			fl disc at 45 degrees	77+	9:3			
664	Traprain Law	pin	Cu alloy	misc	b?			regular width sh w fl top broken - ?orig horiz pl	87+	7+:3			
665	Traprain Law	pin	Cu alloy	08A	-			thick sh and large head	28+	6:3			B
666	Traprain Law	pin	Cu alloy	08B	-			?nail or tack	22	6:3			B
667	Traprain Law	pin?	Cu alloy	08A	a			regular width	16+	7:4			B
668	Traprain Law	pin	Cu alloy	08B	-			length of sh	52+	:2.5			
669	Traprain Law	pin	Cu alloy	-	-			same as Island of Coll	92	119:4			D
670	Traprain Law	pin	Cu alloy	r-hd dec	cast								
671	Traprain Law	pin	Cu alloy	proj r-hd	wire				71	9:3			A C?
672	Traprain Law	pin	Cu-alloy	proj r-hd	wire				58+	12:2.5			A C?
673	Traprain Law	pin	Cu alloy	proj r-hd	-			lozenge sect ring	81	11:2.5			A C?
674	Traprain Law	pin	Cu alloy	proj r-hd	wire			lozenge ring sect	72+	12:2.5			A C?
675	Traprain Law	pin	iron?	proj r-hd	-			much corroded	61+	15:5.5			A C?
676	Traprain Law	pin	iron?	proj r-hd	-			similar to 103. Inc 1 down sh	50+	18:5			A C?
677	Traprain Law	pin	Cu alloy	Fowler E	-	rounded head, slight snout			796	4:3			A



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
678	Traprain Law	pin	Cu alloy	-	-				173? 4.5:4				
679	Traprain Law	pin	Cu alloy	Fowler E	proto-zoo			much corroded	97+ 8:3				A
680	Traprain Law	pin	Cu alloy	Fowler E	proto-zoo	rounded head, slight snout		similar GVM.102-3	80+ 5:3				A
681	Traprain Law	pin	Cu alloy	Fowler E	proto-zoo	rounded head, slight snout, hollow on head		bend in sh	93+ 5:3.5				A
682	Traprain Law	pin	Cu alloy	Fowler E	zoo	squared, tooled head			37+ 3:3				A
683	Traprain Law	pin	Cu alloy	Fowler E	zoo	squared, tooled head	horizontal & oblique lines		140+ 4:3				A
684	Borness	pin	bone	-	b?			sh of polished bone found close to toggle, HN 39					
685	Borness	comb	ant	s-p	s-s?			if s-s presume had 14+ high back. Poss 1-handled comb			44+ 4+		02?
686	Buiston Crannog	pin	ant?	06D	c			76L		5:3			C
687	Buiston Crannog	pin	ant?	08B	c				45 6.5:4				C
688	Buiston Crannog	pin	bone	08A	c			78B	39 5.5:3.5				C
689	Buiston Crannog	pin	bone	12B?	b			small. End much trimmed & neck emphasised	47 6:3.5				A C E
690	Buiston Crannog	pin	bone	12B	b				84 14:6.5				A C E
691	Buiston Crannog	pin?	ant	04?	c			7unfinished pin	57+ :6				E
692	Buiston Crannog	pin	ant?	33	-			unfinished, head & sh roughly shaped	48+				
693	Buiston Crannog	pin	bone	33	-			7roughout for pin	63				
694	Buiston Crannog	pin	bone	11A	c				43 5.5:3.5				C
695	Buiston Crannog	pin	ant?	11A	c				42+ 6:3				C
696	Buiston Crannog	pin	bone	06B	b				46 5.5:3				C
697	Buiston Crannog	pin	ant?	08B*?	c			narrow collar under head	40+ 5.5:4				C
698	Buiston Crannog	pin?	bone	-	-	edge of head milled		incisor ?used as pin	45 6				
699	Buiston Crannog	pin	bone	12?	-			7pigs fibula	56+ 5+				A C E
700	Buiston Crannog	pin	ant?	06B	a				63 8:4.5				C
701	Buiston Crannog	pin	bone	01A	a			latitudinal file marks, fl sect	68 5				C E
702	Buiston Crannog	pin	ant	08B	c				66 6:4.5				E
703	Buiston Crannog	pin	ant	28	c				77 7:4				E
704	Buiston Crannog	pin	ant?	06A	b			big, thick pin	55 7.5:4.5				C
705	Buiston Crannog	pin	bone	34	-			split 7metacarpus, fl sect, expanding sh	81 6.5:6.5				

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
706	Buiston Crannog	pin	bone	12B	b				94	14:6			A C E
707	Buiston Crannog	pin	ant	15	-			T-shaped Fe sh inside. Beam set perpendicular to sh	36+	21	21	20	D E
708	Buiston Crannog	pin	ant	15A*	-	3 inc lines encircle sphere at top, waist and 'foot'		pierced all way through by Fe sh. Lathe turned	20+	21	21		D
709	Buiston Crannog	pin	ant	15A	-			globular, not spherical head. Fe sh protrudes	31+	21	21		D E
710	Buiston Crannog	comb	ant	comp	d-s		lines of overlapping r&d on c-pl and end spaces. Susp hole	rect, bevelled	88	46/80	59	10.5	05
711	Buiston Crannog	comb	ant	comp	d-s		2 horiz r r&d, & 3 vertic l on ends, of c-pl, r&d on e-pl	rect, shallow conv c-pl, 4 x Fe riv, t grad	90+	34/67	68	10	05
712	Buiston Crannog	comb	ant	comp	d-s		c-pl w groups of r&d, e-space w r&d	t grad, rect, bevelled e-pl, 3 x riv	79	34/67	58	10	05
713	Buiston Crannog	comb	ant	comp	d-s			misc fragments, some illus by Duncan. ?Cu alloy riv					
714	Buiston Crannog	pin	Cu alloy	08B*inset	c*	milling around edge of head, inset oval piece blue-green gl	2 bands l and vert milling at waist and junction head/shaft			:3			C
715	Buiston Crannog	pin	Cu alloy	08B*	e*?	orn as for HV.88	orn as for HV.88	circ sect becomes polygonal below orn on sh	44	:2.25			C
716	Buiston Crannog	pin?	Cu alloy	proj disc?	-			button/ disc. Small sub-circ ridge on reverse	34				A
717	Doone Hill, Regulas	pin	Cu-alloy	loose r-hd	-				128	16:4			E
718	Doone Hill, Regulas	pin	Cu alloy	loose r-hd	-				140	23:4			E
719	Doone Hill, Regulas	pin	Cu-alloy	loose r-hd	-				126	:3			E
720	Doone Hill	pin	Cu alloy	loose r-hd -bal		inc cross on top of head		prob took spiral ring	122+	:3			C?
721	Strathtay	pin	Cu alloy	discfillet	-	each face dec w 5 r&d, disposed in cross-like arrangement			68+	10:3.5	3		E



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
722	Dunkeld	pin	Cu alloy	loose r-hd	plain-poly	badly corroded. 7Traces dot ornament			150	24:4			E
723	N Berwick	pin	Cu alloy	proj r-hd	corrugated	12:2.5		fillet inbetween beads	64				A C?
724	Rossshire	pin	Cu alloy	25*	e	radiating lines on mushroom head		area below hip sq in sect. Cf BH.962.221	87	8:3.5			E
725	Scots Craig, Tayport	pin	Cu alloy	-	-	-		oval sh becomes rect nr bottom.	197	33:4.5			E
726	Sandwood Bay	pin	Cu alloy	loose r-hd	plain-loop	slight vertical grooving		Lozenge sect ring w grooves					
727	Golspie	pin	Cu alloy	22	-	flat face, forked beard/folde d arms		once gilded	55		15	4	C
728	Avielochan Cairn	pin	Cu alloy	discfillet	c	cross on disc made by chattering incised cross on both sides of head			100+	12:4			E
729	Midtown, Freswick	pin	Cu alloy	discfillet	c				98+	8:4		3	E
730	Broch of Lamaness	pin	ant?	01A	a			point of irregular width & curves					C E
731	Broch of Lamaness	pin	bone	15A	-			?15C. ?Ivory Fe sh still retained inside head	25+	21			D
732	Broch of Lamaness	comb	ant	comp	d-s			2 perf at each end, t grad, no sp, rect bevelled	68	35/62	42+	8.5	05
733	Broch of Lamaness	pin	Cu alloy	08A	c*			4 r&d between 2 horizontal lines on c-pl					
734	Broch of Lamaness?	pin	Cu alloy	01A	a			2 groups of 2 horiz encircling lines w herringbone inbetween	56	5:3			C
735	Lingro	pin	Cu alloy	proj r-hd	rosette			fine pin, sh swells gently					
736	Dunadd?	pin	bone	06B	e*			small, for pin cf Stevenson 1955a, fig B.3	68	5			C E
737	Craig of Boyne	pin	bone	-	-			smoothly carved	35	5.5:3			C
								NL					

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
738	Craig of Boyne	pin	bone	-	-			NL					
739	Covesea	pin	ant	16E star	b*		loose cross-hatching down one side of sh	hour-glass perf. One side of head v cancellous	95	13:5.5			E
740	Covesea	pin	ant	05 oval?	c			finest of all Covesea pins, v smooth all over	87	9.5:5			E
741	Covesea	pin	ant	16D	b			?open disc, perf diam 4.5 mm	61	13.5:5.5			E
742	Covesea	pin	ant	09A	-			joins w HM.123. Fl 127 sect	127	13:6			E
743	Covesea	pin	ant?	08A/01A	b				68	5.5:4			C
744	Covesea	pin	bone	01C*	a	several inc roughly inc lines around top of sh			87	4.5			A E
745	Covesea	pin	bone	-	b			thick point, sub circ sect	64+	17:+			
746	Covesea	pin	bone	12B?	a			?mature pig's fibula	98	11:4			A C E
747	Covesea	comb	ant	8-p	8-s		end sp dec w zig-zags on both sides	? v shallow, straight back, no graduation	45+	18/38	13+	3.5	00
748	Culbin Sands	pin	Cu alloy	proj r-hd	wire					14:2			A C?
749	Culbin Sands	pin	Cu alloy	-	-								
750	Rosenarkie	pin	bone	06A*inset	c	5 amber insets, 2 missing. Inset diam 2.5mm			38	5.5:3			C
751	Rosenarkie	pin	bone	06D	e			polished but not smooth. Hd & sh show tool marks	64	5:4			C
752	Rosenarkie	pin	bone	09C	a			large flat pin with large head	88	13:5			C E
753	Rosenarkie	pin	bone	01A	c?			small, thin, irregular sh w simple head	47	3			C E
754	Freswick Links	pin?	ant	-	c			tine, one end squared off, other pointed & polished	106	18			E
755	Freswick Links	pin	ant?	-	b?			thick sh, tapering to point, sub- tri sect	76+	17			
756	Freswick Links	pin	bone	01A?	b			fl sect	74	15.5			C E
757	Freswick Links	pin	bone	06B	c*		4 lightly & roughly incised lines around swelling	smooth carving	35	3.5:3			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
758	Freswick Links	pin	bone	06B*	-*	horiz encirc 1 w cross-hatch ing below rough horizontal encircling lines around waist	2 rows cross-hatching		41+	5.5:3			C
759	Freswick Links	pin	bone	06B	c*				33	4:3			C
760	Freswick Links	pin	bone	-	e*		cross-hatching between 2 horizontal encircling lines		41+	:4			C
761	Freswick Links	pin	bone	06B	b			rough. Thick sh	65	5.5:4.5			C
762	Freswick Links	pin	bone	01A	a			'skewer'	58	:4			C E
763	Freswick Links	pin	ant?	01A	a			small, fine point	47	:2.5			C E
764	Freswick Links	pin	bone	12B?	b			much smoothed	76+	7:4			A C E
765	Freswick Links	pin	bone	16A	b				64	10:4			E
766	Freswick Links	pin	bone	12?	-			tip of ?pig's fibula	54+	6.5?+			A C E
767	Freswick Links	pin	bone	01A*?	b	lightly incised line about 3 mm from top emphasises head		unfinished?	86+	4:5			C E
768	Freswick Links	comb	ant	comp	d-s			5 x Cu alloy riv, diff thickness teeth	25+	12/25 20/2	37	9	
769	Freswick Links	comb	ant	comp	s-s/d-s		3 horizontal grooves on c-pl	rect sect c-pl, 16 Cu alloy riv, orig d-s	74	44/62	29+	8	09?
770	Freswick Links	comb	ant	comp	d-s	butterfly		close set Cu alloy riv, t grad & diff thicknesses	20+	8/11 5/11	43	7	10
771	Freswick Links	pin	bone	06C	-				30+	7:4			C
772	Freswick Links	pin	bone	01A	a				103	5			C E
773	Freswick Links	pin	silver	proj r-hd	hand-pin			enamelled decoration	99	10:3			D
774	Freswick Links	pin	Cu alloy	06B* inset	b*	cross-hatch 4 horiz ing on head lines w intermediate cross-hatching			54	5:3			C
775	Freswick Links	pin	Cu alloy	spiral	-			3 twists of wire	43	3:1			E
776	Freswick Links	pin	Cu alloy	spiral	-			wound around head					
777	Freswick Links	pin	Cu alloy	09 oval	c/e*			2 twists of wire	45	3.5:1			E
								wound around head					
								42		5.5:2.5			C



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
778	Freswick Links	pin	Cu alloy	09	e*		3 horiz encircling 1 below head and just above hip	head broken, but obviously transversely flattened chisel ended. Sh sub-rect sect slightly stepped in end corrosion of head, 79 therefore difficult to identify NL head fairly fl in sect splinter, fl sect, 65 poss rough pin splinter of tibia, 41 part of natural artic remains ?dimple too small for inset	50+	5.5+:2			C
779	Freswick Links	pin	Cu alloy	09F?	a				51+	4:2			
780	Freswick Links	pin	Cu alloy	09F	c?				31+	6.5:2			
781	Freswick Links	pin	Cu alloy	misc	b				76+	:3			
782	Freswick Links	pin	Cu alloy	?	b								
783	Freswick Sands	pin	Cu alloy	-	-								
784	Freswick Sands	pin	bone	19A	-							4	C
785	Freswick Sands	pin?	bone	-	-								
786	Freswick Sands	pin?	bone	-	-								
787	Freswick Sands Broch	pin	bone	24B*	e*	zig-zags and horiz encirc 1, dimple on top, ?? collars	zig-zags & horizontal encircling lines around hip		20+	7:3			
788	Freswick Sands Broch	pin	ant/cet?	15A	-			bun-shaped head. Perf 4 x 10 mm poss needle, fibula w head broken off, irreg sect	24+	24	24	12	D
789	Freswick Sands Broch	pin?	bone	-	b				84+	:7			
790	Freswick Sands	pin	Cu alloy	discfillet	b	3 dots on each face, in equilateral arrangement dimple, horiz encirc lines and zig-zags			94	7.5:3.5			E
791	Freswick Sands Broch	pin	bone	24B*	e		ditto head	?dimple for inset	42+	6:3			C
792	Freswick Links	pin	bone	01A	b				80	:5			C E
793	Freswick Links	pin	bone	06A	c				38	5:3			C
794	Freswick Links	pin	ant	09A?	-			crude form	38+	15:6.5			E
795	Freswick Links	pin	bone	16A	-			massive	41+	25:			E
796	Keiss West	pin?	bone	-	9:5.5			split ?metacarpal, part of natural artic remains	79				

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
797	Keiss West	pin?	bone	01B	a			fl sect, splinter of long bone	78	7			A C
798	Ness Broch	pin?	bone	-	-			bird bone, one end broken obliquely, other perf	99+	10:6			
799	Ness Broch	pin	bone	02	b			4 irregular segments over thick sh					A E
800	Ness Broch	pin	bone	01A?	b			no dec, but head possibly originally squared off	80?+	4			C E
801	Ness Broch	pin	Cu alloy	proj r-hd	cast			lozenge sect wire ring, but cast splinter, fl sect, pointed at both ends	82+	16:3.5			A C?
802	Keiss West	pin?	bone	-	-			NL					
803	Reay	pin	Cu alloy	-	-			undec head		12:4			A C?
804	Reay	pin	mould	proj r-hd	cast			frag pronounced	21+	5+			
805	Tain	pin	bone	-	-			point from sh length as if straightened out	113	8:3			E
806	Fendon Sands	pin	Cu alloy	discfillet	b	cross of dots on one side, circle and central dot on other each side of frustrum outlined w deep incisions							
807	Kilminster	pin	bone	30*	e				50	6.5:3.5			C
808	Kilminster	pin	bone	04?	c			narrow reel	60	4:3.5			C
809	Kilminster	pin	Cu alloy	r-hd	-			straight neck	64+	10:3			D
810	Kilminster	pin	bone	12A	-				74	1:			A C E
811	Gullane	pin	jet?	-	-			virtually cylindrical length of sh w blunt end	37+	:5			
812	Gullane	pin	bone	-	b			sub-tri sect point cut from long bone	77+	:5.5			
813	Gullane	pin	Cu alloy	loose r-hd stir-crut	vertical grooving			plain ring, bent sh	116	13:4			E
814	Gullane	pin	Cu alloy	-	-			NL					
815	North Eildon Hill	pin	bone	-	c?				60+	:4.5			
816	Traprain Law	pin	Cu alloy	Fowler E	zoo				49+	4.5:3			A
817	Traprain Law	pin	Cu alloy	proj r-hd rosette	-				34+	14:3			A
818	Traprain Law	pin	Cu alloy	proj r-hd rosette	-			6 rosettes	26+				A
819	Traprain Law	pin	Cu alloy	-	-			NL					
820	Traprain Law	pin	Cu alloy	proj r-hd rosette	-			much corroded & faulty casting, not finished	67+	15:			A

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
821	Traprain Law	pin	Cu alloy	proj r-hd	small bead			22 beads all around	19+	14:			A
822	Traprain Law	pin	Cu alloy	proj r-hd	rosette			cf RMS G/M.116 & 111	24+	15:			A
823	Traprain Law	pin	Cu alloy	proj r-hd	rosette			gilt. 6 beads	17+	16:			A
824	Traprain Law	pin	Cu alloy	proj r-hd	rosette				27+	14:3			A
825	Traprain Law	pin	Cu alloy	proj r-hd	semi-bead			Ag plated. 5 beads/semi-circular plate	77	16:3			A
826	Traprain Law	pin	Cu alloy	proj r-hd	hand-pin			3 proj heads. Early Duignan (1973) class Ib	73+	7.5:4			A
827	Traprain Law	pin	Cu alloy	sm dome	-				10+	7:3.5			B
828	Traprain Law	pin	Cu alloy	Fowler E	-				113	2.5:2			A
829	Traprain Law	pin	Cu alloy	proj r-hd	wire				30+	3:3.5			A C?
830	Traprain Law	pin	Cu alloy	misc	-			trans fl wide end rolled over into spiral	39+	10:2.5			
831	Traprain Law	pin	Cu alloy	?	-			regular width, sub circ sect	40+	3:3.5			
832	Traprain Law	pin	Cu alloy	misc bent	-			head and sh in one plane	54+	14:4			B
833	Traprain Law	pin	Cu alloy	?	?			no distinguishing features	114+	3			A
834	Traprain Law	pin	Cu alloy	Fowler E	proto-zoo?			mid sh more rounded sect that ends	92+	4:3			
835	Traprain Law	pin	Cu alloy	Fowler E	zoo				59+	5:3			A
836	Traprain Law	pin	Cu alloy	proj r-hd? wire					44+				A C?
837	Traprain Law	pin	Cu alloy	06A	-				27+	7:3			B
838	Traprain Law	pin	Cu alloy	08B	a?				37+	9:3			B
839	Traprain Law	pin	Cu alloy	01A	a			short, fine pin	47	2			B
840	Traprain Law	pin	Cu alloy	proj r-hd? wire					41+	2:5			A C?
841	Traprain Law	pin	Cu alloy	01A?	b				115	4			B
842	Traprain Law	pin	Cu alloy	08A	-			oval sect	33+	8:4			B
843	Traprain Law	pin	Cu alloy	-	-			NL					
844	Traprain Law	pin	Cu alloy	Fowler E	proto-zoo	6 grooves/space/2 grooves			27+	3			A
845	Traprain Law	pin	Cu alloy	-	-			NL					
846	Traprain Law	pin	Cu alloy	-	-			NL					
847	Traprain Law	pin	Cu alloy	-	-			NL					
848	Traprain Law	pin	Cu alloy	25	-				8+	8.5:3			B
849	Traprain Law	pin	Cu alloy	04 ?inset	-			?reel with inset massive, heavy, solid bronze head	16+	9.5:3			B
850	Traprain Law	pin	Cu alloy	25	-				21+	16:3.5			B
851	Traprain Law	pin	Cu alloy	Fowler E	proto-zoo				34+	4:2.5			A
852	Traprain Law	pin	Cu alloy	-	-			NL					
853	Traprain Law	pin	Cu alloy	-	-			corroded, no diagnostic features	169	4:			



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
854	Traprain Law	pin	Cu alloy	-	-			NL					
855	Traprain Law	pin	Cu alloy	-	-			NL					
856	Traprain Law	pin	Cu alloy	proj disc?	-			?corroded projecting disc head	38+	20:9			B
857	Traprain Law	pin	jet	15	-			globular pin head with hole for shank	28+				D
858	Traprain Law	pin	mould	proj r-hd	-			plain ring	-				A C?
859	Traprain Law	pin	mould	proj r-hd	rosette			at least 10 beads	13:4				A
860	Traprain Law	pin	mould	proj r-hd	rosette			5 beads	11:4				A
861	Traprain Law	pin	mould	proj r-hd	rosette			6 beads	16:5				A
862	Traprain Law	pin	mould	-	-			misc pin shafts	-				
863	Traprain Law	pin	mould	proj r-hd	semi-bead			3 beads/semi-circular lunular plate	-	11:			A
864	Traprain Law	pin	mould	proj r-hd	semi-bead			6 beads/semi-circular plate	-	15:			A
865	Traprain Law	pin	jet	15	-			globular pin head, 33+ for Fe shank	36:				D
866	Traprain Law	pin	jet	15	-			globular pin head for Fe shank	35+				D
867	Glenluce Sands	pin	Cu alloy	-	-			not examined					
868	Luce Sands	pin	Cu alloy	mush	e	lines radiate from centre of head		cf RMS FC.238, Rosshire	80	7:3.5			E
869	Mote of Mark	pin	jet	15	-			Fe shank missing					D
870	Mote of Mark	pin	bone	15A*	-	several bronze studs		presume orig spherical. Stained green					D
871	Mote of Mark	pin	bone	08B	b			used for making some of moulds	46	7:4			C
872	Mote of Mark	pin	mould	08B	-			mould for 2 nail-headed pins	6:3				C
873	Mote of Mark	pin	mould	-	-			3 x pin shafts					
874	Mote of Mark	pin	mould	08B	-			3 x nail-headed pins. RMS HH.292 fits mould	7:3.5				C
875	Mote of Mark	pin	mould	11A?	-			?proj r-hd or disc w perf/raised centre. Collar at neck	8:				C
876	Mote of Mark	pin	mould	open disc*	-	raised centre			7.5				A
877	Mote of Mark	pin	mould	-	-			?shaft					
878	Mote of Mark	pin	mould	-	-			3 x pin sh radiating from gate					
879	Mote of Mark	pin	mould	04?	-			?6B. 1 head & vestiges of another	6:				?

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
880	Mote of Mark	pin	mould	06B	c?			poss remains of second similar pin	5.5:				C
881	Mote of Mark	pin	mould	08B	-				6:				C
882	Mote of Mark	pin	mould	09A?	-			possibly for disc head	10?+:				C
883	Mote of Mark	pin	mould	r-hd	-			78B	20:				D
884	Mote of Mark	pin	mould	06B	-			2 x nail heads	5:				C
885	Mote of Mark	pin	mould	08B	-			2 x parallel pin shafts	5.5:				C
886	Mote of Mark	pin	mould	-	-			2 x parallel pin shafts					
887	Mote of Mark	pin	mould	-	-			2 x parallel pin shafts					
888	Mote of Mark	pin	mould	-	-			1 x pin shaft					
889	Mote of Mark	pin	mould	-	-			2 x parallel pin shafts					
890	Mote of Mark	pin	mould	-	-			3 x parallel pin sh					
891	Mote of Mark	pin	mould	-	-			2 x parallel pin shafts					
892	Meikleour	pin	Cu alloy	?	a?*			band of concentric head impossible to inc 1 around top of sh					
893	Bonchester Fort	pin	iron	r-hd	-			true ring head. Cf Abernethy					D
894	Kaimes Hill	pin	Cu alloy	-	-			totally undiagnostic	29+	3			
895	Kaimes Hill	pin	iron	-	-			undiagnostic length of sh	41+				
896	Edgerston Fort	pin	Cu alloy	proj r-hd	wire			NB small ring	47+	8:3			A C?
897	Craig Phadraig	pin	Cu alloy	-	a/b			stout pin, no diagnostic features	42+	:4			
898	An Dunan	pin	Cu alloy	-	-			NL					
899	Perth	pin	Cu alloy	28*	b*			irregular impressed lines over facets of head					E
900	Steventon Sands	pin	Cu alloy	-	-			crude cross-hatching at top of sh					
901	Steventon Sands	pin	Cu alloy	-	-			not examined					
902	Steventon Sands	pin	Cu alloy	-	-			not examined					
903	Tents Muir	pin	Cu alloy	proj r-hd	rosette			beads equal size all around ring	49	14+:3			A
904	Rossal	pin	Cu alloy	09D*	c			radiating lines around crescent, both sides	91	88:3.5			E
905	Urguhart	pin	Cu alloy	proj r-hd	hand-pin			4 enamelled fingers, trumpet scrolls on enamel	88	12:4			D

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND CONES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
906	Ackergill Tower	pin	ant?	20	b				90	10:4			E
907	Jarlshof	pin	bone	14B	b				101	10:4			C E
908	Jarlshof	pin	bone	14B	a				96	8.5:5			E
909	Jarlshof	pin	ant?	14B	a/b				113	12:6			E
910	Jarlshof	pin	ant?	14B	b				111	11.5:5.5			E
911	Jarlshof	pin	bone	-	-			pierced mouth not examined					E
912	Jarlshof	pin	bone	16B?	-			?unfinished	104	9:6			E
913	Jarlshof	pin	bone	09B	b			roughly shaped compare different types of axe heads	114	15:4			C E
914	Jarlshof	pin	bone	09B perf	c				119	16:5			C E
915	Jarlshof	pin	ant?	09B	c				54	7.5+:5			C
916	Jarlshof	pin	bone	11B	b				115	7:4			C E
917	Jarlshof	pin	ant?	11B	b			slightly curved sh					C
918	Jarlshof	pin	bone	11B*	-			collar under thistle	102	9:4			C E
919	Jarlshof	pin	ant?	11B	-				53	9:5.5			C
920	Jarlshof	pin	ant?	?	c/b			as for HSA 15-6, but w fillet	88	5.5:3.5			
921	Jarlshof	pin	bone	?	-			as for HSA 16. Much polished	105	7:5			
922	Jarlshof	pin?	bone	16D?	b			?needle. Found in Curle's excavations	81	6.5:4.5			E
923	Jarlshof	pin	ant?	?	b			rect sect head, excavations	103	8:4			
924	Jarlshof	pin	bone	06A	b			curved sh large head, circ sect sh at top, rect at bottom	116	10:5.5			C
925	Jarlshof	pin	ant	25	b				75	11:5			E
926	Jarlshof	pin	ant	06B	c			flattish sect	119	9:5			E
927	Jarlshof	pin	bone	09A	-			76I	103	8:5			C E
928	Jarlshof	pin	bone	06D	e			sub rect sect in area of hip. NB	98	9:6			C
929	Jarlshof	pin	bone	30?	b			large hipped pin	114	7.5:5			E
930	Jarlshof	pin	bone	06	b/e			good polish	86	6:4			C
931	Jarlshof	pin	bone	08A perf	-			squat globular head, good polish	120	6:5			C
932	Jarlshof	pin	bone	16A	a			perf just below head, sh becomes					
933	Jarlshof	pin	ant	16A	a			. rect towards tip	86	12:5			E
934	Jarlshof	pin	ant	16A	e?			curved sh, flat sect	96	11:5.5			E
935	Jarlshof	pin	ant?	16A	b			swelling near bottom of sh	134	14:4.5			C
936	Jarlshof	pin	ant	16A	a			short, squat example	84	16.5:5			E
937	Jarlshof	pin	ant	16A	a				118	19:			E
									93	10:5			E



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
938 Jarlshof		pin	bone	16A	b				78	9:4.5			E
939 Jarlshof		pin	bone	09F	b				112	9.5:3.5			
940 Jarlshof		pin	ant?	16A	-			massive triangular head	71	18:9			E
941 Jarlshof		pin	bone	35	-			rounded, perf end, slightly expanded	134	10:5.5			-
942 Jarlshof		pin	bone	16A?	b			flattish sect	140	9.5:6			E
943 Jarlshof		pin	ant?	17E pent	b			pentagonal head	109	10:4			E
944 Jarlshof		pin	ant?	16E	c?			?9. Head transversely flattened	102	9:5.5			E
945 Jarlshof		pin	ant?	16E	a?		about 50mm of sh covered w light encircling lines		100	9.5:6.5			E
946 Jarlshof		pin	ant	16E	b			perf. Fl sect	166	10:6		6	E
947 Jarlshof		pin	ant	16B	a			curved, fl shaft. Rect head	89	7:5		4	E
948 Jarlshof		pin	ant?	16A?	a			fl sect, circ perf	94	12:4.5			E
949 Jarlshof		pin	ant	16D	a			large circ perf. Fl sect	103	9:5.5			E
950 Jarlshof		pin	ant	16	a			oval perf. Squared off head	97	7.5		4	E
951 Jarlshof		pin	ant	16A	a			fl sect	98	12.5			E
952 Jarlshof		pin	ant?	16	a		8:	fl sect	88	a			E
953 Jarlshof		pin?	ant	16D	b			?needle. Fl sect, large circ hole	95	9.5:6			E
954 Jarlshof		pin?	ant	16A	- a			?needle. Fl sect	98	10:			E
955 Jarlshof		pin?	bone	16D	b			?needle: modified pig fibula.	96	8.5:			E
956 Jarlshof		pin	bone	01?	a			Sub-tri sect modified pig fibula, head	75+	8+:			C E
957 Jarlshof		pin	bone	16?	a			broken, fl sect modified pig fibula, fl sect	74+	9.5+:			E
958 Jarlshof		pin	ant?	16?	a			fl sect. Cf Hamilton 1956, fig 69.8	94+	7+:			E
959 Jarlshof		pin	bone	16	a			perf, squared off head	86	7:			E
960 Jarlshof		pin?	bone	16	b			sq'd off hd. Same as HSA.54, but semi-circular section	79	6:			E
961 Jarlshof		pin	bone	16A	b			unfinished, perf not complete, hole from both sides	69	9.5:5			E
962 Jarlshof		pin	ant	16	-			rounded end	95	7:			E
963 Jarlshof		pin	ant?	16	a			rounded end, large perf	80	9.5:			E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
964	Jarlshof	pin	bone	08A*	a	2 drilled dots on top of head			73+	7.5:4			C
965	Jarlshof	pin	bone	08A	b				85+	8:4			C
966	Jarlshof	pin	ant?	08A	a				91	7.5:5			C
967	Jarlshof	pin	ant	08A	b			28B. Constricted neck, sub rect sect, all over polish	109	8:6			E
968	Jarlshof	pin	ant	08A	b				103	9:5			E
969	Jarlshof	pin	bone	08A?	b?			v thick, crude pin w cancellous tissue around head	79	9:6.6			C E
970	Jarlshof	pin	bone	08A	b				89	5.5:4.5			C
971	Jarlshof	pin	bone	08A?	-			facetted head	28+	7:			C
972	Jarlshof	pin	bone	08A	-			ovular sect	45+	6.5:4.5			C
973	Jarlshof	pin	bone	08A	-				72+	7.4:4			C
974	Jarlshof	pin	bone	08A	-*		inc encircling lines w diag 1 inbetween		58+	9:4.5			C
975	Jarlshof	pin	bone	08A*	-	4 x 6 vertical d under hd, bottom dot in 2 encircling lines			25+	7.5:5			C
976	Jarlshof	pin	ant	01A	a			flattish sect, end expands slightly, but is flat	121	5.5:			E
977	Jarlshof	pin	bone	33	-			crude bone point, irregular width	98	5.5			
978	Jarlshof	pin	ant?	-	a			sub-rect sect	74+	:5			C E
979	Jarlshof	pin	bone	01A	b?			swelling beneath head	71	7.5:5			
980	Jarlshof	pin	bone	-	e			fl sect, slight hip, much polished	114+	:7.5			C
981	Jarlshof	pin?	bone	01C	a				57	7			A E
982	Jarlshof	pin	bone	01A?	a			thick w fl sect	72	7.5			C E
983	Jarlshof	pin	bone	?	a			?natural head roughly cut to shape	91	9:			
984	Jarlshof	pin	bone	08B*	b	7 dots on top in approx circ arrangement			61	7:3			C
985	Jarlshof	pin	bone	08B*collar	-	5 dots on top, 4 around central one		long collar	37+	9:3.5			C
986	Jarlshof	pin	bone	08B*collar	-*	rough circ & dots on top of head		long collar dec w rows vertical dots	48+	7.5:4			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
987 Jarlshof		pin	bone	08B	a	4 slight dots on head both sides dec w dots: a vert l on one side, other outlining dec on one side w 3 dots			77+	7.5:3			C E
988 Jarlshof		pin	ant?	08B	-				74+	9:4			C E
989 Jarlshof		pin	bone	08B	c				75	8:3			C
990 Jarlshof		pin	ant	08B flat?	b.				103	10:5			E
991 Jarlshof		pin	bone	08B*	a				58	8:4			C
992 Jarlshof		pin	bone	12C*?	-			52+		8.5:4			A C E
993 Jarlshof		pin	bone	09F*	b				94	9:4.5			
994 Jarlshof		pin	bone	08A flat	b*		4 thick dots on one side of shaft	splinter long bone	85	7:4.5			C
995 Jarlshof		pin	bone	17A?	c			splinter long bone w slightly expanding head	112	10:6.5			E
996 Jarlshof		pin	ant	12F	-			from long bone	77	10:5			E
997 Jarlshof		pin	bone	17A	c				118	12:7			E
998 Jarlshof		pin	ant?	17A	b				137	10:5			E
999 Jarlshof		pin	bone	01A?	a				108	7.5:2.5			C E
1000 Jarlshof		pin	bone	12A	b				95	10			A C E
1001 Jarlshof		pin	bone	08A	b/e			fl sect, sq sect at bottom	94	7.5:3.5			C
1002 Jarlshof		pin	bone	33	b			large, rough head	102	8:5.5			
1003 Jarlshof		pin	bone	33	b			head modified to a triangle	96	12.5:5			A C E
1004 Jarlshof		pin	bone	12B	a			massive chatter marks	74	19:6			6.5 E
1005 Jarlshof		pin	bone	17A	-			?pig's fibula, cut across top	142	11:4.5			E
1006 Jarlshof		pin	bone	17A	-			lop-sided globule/half triangle	88	7.5:4.5			C
1007 Jarlshof		pin	bone	08A flat	b				84	10.5:6			
1008 Jarlshof		pin	bone	34	b				99	:4			A C E
1009 Jarlshof		pin	bone	12A	a			fl sect	89	8:6.5			E
1010 Jarlshof		pin	ant	08A	b			roughly modified metacarpal?	103	10:6.5			A C E
1011 Jarlshof		pin	bone	12E	b				76+	9:6			A C E
1012 Jarlshof		pin	bone	12A	b?			splinter long bone, pin shape, but coarse & thick	95	12:5			
1013 Jarlshof		pin	bone	33	-			as for HSA.113	139	13.5:8			
1014 Jarlshof		pin	bone	33	-								



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1015	Jarlshof	pin	bone	21	c			v cancellous tissue on reverse of head. Note in Hamilton	117	8:4.5			E
1016	Jarlshof	pin	ant?	21	b			curved sh	101	12:5			E
1017	Jarlshof	pin	ant	09B?	-			not transversely flattened	84	13:7			E
1018	Jarlshof	pin	bone	16E	a			double cruciform	114	12.5:4.5			E
1019	Jarlshof	pin	ant	34	c				98	8.5:5.5			E
1020	Jarlshof	pin	bone	17E	thistle				68	13:5.5			E
1021	Jarlshof	pin	bone	12D	-			bird ulna	54+				A C E
1022	Jarlshof	pin	bone	12D	-			bird ulna	48+				A C E
1023	Jarlshof	pin	bone	12D	-				43+				A C E
1024	Jarlshof	pin	bone	17A	b?			massive, thick	142	20:9			E
1025	Jarlshof	pin	bone	17E*	a			v long. Sh curves	142	15:5.5			E
1026	Jarlshof	pin	bone	33	-			head outlined on one side by uneven dots	57	9:5			
1027	Jarlshof	pin	bone	09E?	c			rect length w slight indentation where head to be	76+	14:5			E
1028	Jarlshof	pin	bone	20*	b			transversely fl	111	10:6			
1029	Jarlshof	pin	bone	09E?	e			fl sect	64+	9:6.5			C
1030	Jarlshof	pin	bone	09C?	c			fl sect. Irreg shaped head	91	12:6			C E
1031	Jarlshof	pin	bone	09E	b?				98+	8:5			C
1032	Jarlshof	pin	ant?	11A?	a				73	8:6.5			E
1033	Jarlshof	pin	bone	21	b				129	16:5			A C E
1034	Jarlshof	pin	bone	12D	-				38+				A C E
1035	Jarlshof	pin	bone	12D	-				38+				A C E
1036	Jarlshof	pin	bone	12D	-				40+				A C E
1037	Jarlshof	pin	bone/ant	-	-			misc pin shafts					
1038	Jarlshof	pin	bone/?ant	-	b			misc bone points					
1039	Jarlshof	pin	bone	-	b?			misc bone points					
1040	Jarlshof	pin	bone/ant	-	b?			misc bone pin points					
1041	Jarlshof	pin	bone	-	b?			misc bone pin points					
1042	Jarlshof	pin	bone	-	b?			splinter long bone	83+				
1043	Jarlshof	pin	bone/ant	-	b			misc bone points					
1044	Jarlshof	pin	bone	33	-			misc splinters long bone, unfinished pins	misc				
1045	Jarlshof	pin	bone	33	-			misc splinters long bone, unfinished pins					
1046	Jarlshof	pin	ant/bone	33	-			misc lengths antler and bone, unfinished pins					

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D CLASS
1047 Jarlshof		pin	bone	18*	c/e	ball head w profuse knobbed projections			32+	5:3		C
1048 Jarlshof		pin	bone	08A	e			prominent swelling	38	4.5:3.5		C
1049 Jarlshof		pin	bone	01B	a			slightly twisted	98	4		A C
1050 Jarlshof		pin	bone	01A	a			sh, presume intentional find no 1467.	79	3.5		C E
1051 Jarlshof		pin	Cu alloy	proj r-hd	wire			Small ring	42+	8:2		A C?
1052 Jarlshof		pin	Cu alloy	-	-			mid sh. From being circualr sh becomes square in section	54	:3		
1053 Jarlshof		pin	Cu alloy	-	-			v corroded	40+	:3.5		
1054 Jarlshof		pin	Cu alloy	loose r-hd baluster				head worn and perf	83+	7		E
1055 Jarlshof		pin	Cu alloy	loose r-hd plain-poly				to take small ring	111	16:4		
1056 Jarlshof		pin	Cu alloy	20	c	2 r&d on all long sides, 1 on each end		inc V at top of sh	71	6:3		E
1057 Jarlshof		pin	Cu alloy	loose r-hd crut-stir		2 r&d surrounded by oval line panel on longit sides of head	chevron motif at base of head	ring dec w r&d	94	13:3.5		E
1058 Jarlshof		pin	Cu alloy	spiral-in	c			sh bent. Perf in centre & through one of r&d	76	7:2.5		E
1059 Jarlshof		pin	Cu alloy	mush	c	radiating grooves			79	5.5:3.5		E
1060 Jarlshof		pin	Cu alloy	09A	c/?e			much corroded	53	10:3.5		C
1061 Jarlshof		pin	Cu alloy	lobed	c			cf Garry Iodrach	80	4.5:3.5		E
1062 Jarlshof		pin	Cu alloy	14A	c	Anl w long open snout, raised brows & pronounced ears		small animal head set at right angles to sh	64	6:2.5		C? E?
1063 Jarlshof		pin	Cu alloy	20*	c	2 r&d on long sides, one on ends			84	6.5:3.5		E
1064 Jarlshof		pin	Cu alloy	16A	?	trans fl exp end, orig perf and poss tri. Inc 1 around head		sh round, but becomes fl near head	132+	7.5:7		E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1065	Jarlshof	pin	mould	proj r-hd	rosette			nearest parallel is Stevenson 1955a, fig 8.4	c	8.5			A
1066	Finyarhoose Brae	pin	Cu alloy	03E	C			3 angular segments	73	7:3			C
1067	Finyarhoose Brae	pin	Cu alloy	03E	C*			4 encircling lines w intermediate milling	59	6:3			C
1068	Finyarhoose Brae	pin	Cu alloy	08A*	C*			Laing illustrates detail on underside of hd	7:3.5				C
1069	Stennes	pin	Cu alloy	loose r-hd	plain-poly	lozenge panel partly outlined by grooving			156	19:4			E
1070	Birsay	pin	Cu alloy	proj r-hd	hand-pin	3 enamelled fingers, plate prob enamelled			107	16:4			D
1071	Birsay	pin	Cu alloy	-	-	6 beads, scroll on enamel filled fillet below head		not examined	73	12:3.5			D
1072	Kirbister, Birsay	pin	Cu alloy	proj r-hd	hand-pin			3 encircling grooves around sh	53	5.5:2			C
1073	Kirbister, Birsay	pin	Cu alloy	08B	C*								
1074	Orkney	pin	bone	-	e?			irreg, v smooth bone	82+	:5			C
1075	Orkney	comb	ant	comp	d-s	3 butterfly double rhd on wings. 3 horiz grooves on c-pl. 2 rows 12 riv single row rhd		rect sect c-pl, Cu alloy riv, t grad 2 & diff thicknesses	79	50/53 30/6	37	9	10
1076	Kirkbrae, Hoxay	comb	ant	comp	d-s			misc frag including convex section c-pl. Fe rivets					
1077	Orkney	blank	ant	-	-			rect block ant, unfinished t-pl short, much polished	58		12	7	
1078	Sands of Bracon, Yell	pin	bone	06A	b			76H*. Large head, much corroded, on very thin shaft	33	7:3			C
1079	Sands of Bracon, Yell	pin	Cu alloy	lens hd	b	encircling groove around widest part of head							E
1080	Sands of Bracon, Yell	comb	ant	comp	d-s	6 butterfly		2 rhd on each wing. 4 longit grooves on c-pl. 2 x rows 9 riv	75	24/56 43/5	36	9	10
1081	Sands of Bracon, Yell	comb	ant	comp	d-s			section c-p t grad & diff thick. Conv sect c-pl w zig-zag Cu alloy riv					11?



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1082	Broch of Burray	pin	bone	24B*	e*	lightly inc 1 around top of head	lightly inc 1 around hip		33+	4.5:3			C
1083	Broch of Burray	pin	bone	06B	c			76B	58	7:4			C
1084	Broch of Burray	pin	ant?	06A	e			212B. Irregular shaft with knife marks	37	4:3			C
1085	Broch of Burray	pin	bone	12A?	-				61+	4			A C E
1086	Broch of Burray	pin?	bone	-	-			?section of shaft, 58+ although thick	58+	6			
1087	Broch of Burray	pin	bone	12A	a			transversely	99	14:7			A C E
1088	Broch of Burray	pin	bone	01A	a			flattened head	96	6			C E
1089	Broch of Burray	pin	bone	12B	a			shaft much polished	80+	10			A C E
1090	Broch of Burray	pin	bone	12A	b			thick shaft	84+	10			A C E
1091	Broch of Burray	pin	bone	12B	b			head roughly rounded	88+	11			A C E
1092	Broch of Burray	pin	bone	15A	-			Fe shaft all way through head. Flat top. ?femur	21	11			D
1093	Broch of Burray	pin	bone	15B	-			section of antler tine, squared	19	15	15	18	D
1094	Broch of Burray	pin?	ant	15?	-			off, ?for globular pin hd	25		18	21	D E
1095	Broch of Burray	pin	Cu alloy	09A*	c*	line of billets and incised 1 around head and neck	alternate inc 1 and billets around swelling	facetted sh	78	12:4			C
1096	Broch of Burray	comb	ant	comp	d-s			t grad, Fe riv, suspension hole, convex e-pl	22+	10/22 8/16	56	3.5+	05
1097	Saevar Howe	pin?	bone	-	a?			bone point, poss pin	70+	7+			
1098	Saevar Howe	comb	ant	comp	s-s	high back 46/64	open work on back rid on c-pl and e-pl	Fe riv	16+	14/16			04
1099	Saevar Howe	comb	ant	comp	-			t grad. Deep, conv c-pl. Fe riv	70+	d-s	50	12	05
1100	Saevar Howe	pin	ant	16	-			sub-rect section	74	12:5			E
1101	Saevar Howe	pin	bone	08A*	b	2 rows zig-zags inbetween inc 1, row of dots under & on top			86	8:5			C
1102	Bruathach na Tigh	pin	Cu alloy	proj r-hd	-	incisions radiate from centre of head		?gilt	68	11:3			A C?
1103	Sliganach, Kildonan	pin	Cu alloy	rush	c				57+	7:3			E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1104	Cnoc a'Comhdhalach	pin	Cu alloy	discfillet -				Lain type G	29+	7:3			E
1105	Cnoc a'Comhdhalach	pin	Cu alloy	loose r-hd plain-loop				circular sect and plan ring	91+	18:3.5			E
1106	Illeray, N Uist	pin	bone	06D	c			irregular globular head w pronounced neck	77	7:4			C
1107	Illeray, N Uist	pin	bone	36	c			irreg acorn-shape w faceted head. Areas of red staining					C
1108	Illeray, N Uist	pin	Cu alloy	04	c/b			similar to GT 943-4; head beaten and added to sh	84	8:3			E
1110	Uist	pin	bone	06?A	c			NB head slightly faceted. Pronounced pumice marks	80	8:5			C
1111	Uist	pin	bone	06D	c			GT.950-3 all v similar					C
1112	Isle of Eigg	pin	Cu alloy	loose r-hd plain-poly faint design resembling maltese cross, outlined by beads			step pattern	much corroded	163	19:4.5			E
1113	Pabbay, S Uist	pin	Cu alloy	proj r-hd hand-pin					146	12:3.5			D
1114	Paible, Taransay	pin	bone	16A	a			rect sect	91+	15:6		4	E
1115	Sands of Rath, Taransay	pin?	bone	-	-			point, polished both ends, unlikely dress pin point, possibly pin	84	5			
1116	The Sands, Colonsay	pin?	bone	-	-			point, possibly pin	49+	:4			
1117	Rhutha Chalsteal	comb	cet	comp	d-s	9	sp at end e-pl dec w 4 r&d	t grad, diff thick, sp at end. Fe riv	27+	17/22 11/1	40	5.5	05
1118	Bac Mhic Connain	pin?	bone	-	-			tip only of fine sh. Oblique break. Worn smooth	24+	:3?+			
1119	Bac Mhic Connain	pin	bone	158	-			burn-shaped Fe shank	19+	22	22	26	D
1120	Bac Mhic Connain	pin	Cu alloy	-	-								
1121	Boreray, Harris	pin	bone	-	b?				72+	:5			C
1122	Boreray, Harris	pin	bone	25	b				51+	8.5:4			C
1123	Boreray, N Uist	pin?	bone	06A	a			poss peg thick w polished, rounded hd. Cf Sanday					

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1124	Boreray, Harris	comb	ant	s-p	s-s			thick t. Long proj handle = tine cut longitudinally. Perf	111	14/50	18	4	11
1125	Borvemore, Harris	pin	bone	04	c				73	6:4			C
1126	Berneray, Harris	pin	bone	34	a			sub-tri head, tapering in section	64	5.5:3			
1127	Berneray, Harris	pin	iron	proj r-hd	-				43	15:5			A C?
1128	Boreray, Harris	pin	Cu alloy	sm dome	a			poss ball or frustrum head, much corroded	42+	7			E
1129	Boreray, Harris	pin	Cu alloy	07*	b?				40+	6:3			E
1130	Boreray, Harris	pin	Cu alloy	loose r-hd kid-poly					121	16:4			E
1131	Boreray, Harris	pin	Cu alloy	07	b			28. Low facettted ?nail head	58	4:2.5			E
1132	Boreray, Harris	pin	Cu alloy	spiral	b			5 examples, v fine. Joins in spiral smoothed over	@ 50	e g 3.5:1			E
1133	Boreray, Harris	pin	Cu alloy	06A/08B/	b			13 misc pins, very, very small and fine	@ 29	e g 2:1			C
1134	Boreray, Harris	pin	Cu alloy	proj r-hd semi-bead					60	11:3			A
1135	Boreray, Harris	pin	Cu alloy	loose r-hd kid-poly				ring has outlined beaded design	136	15:4.5			E
1136	Boreray, Harris	pin	Cu alloy	loose r-hd -poly				prob held kidney ring, cf GR 238-9	140	:4.5			E
1137	Boreray, Harris	pin	Cu alloy	30*	c				71	7:3			E
1138	Boreray, Harris	pin	Cu alloy	mush?	c/?e			sh sq sect at bottom	86	5.5:2.5			E
1139	Boreray, Harris	pin	Cu alloy	30*?	c			variation on frustrum head	80	3:3			E



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1140 Boreray, Harris		pin	Cu alloy	30	c			frustrum w collar	109	5:4			E
1141 Bruthach a Sithean		pin	bone	06D?	c			head not pronounced, only slight constriction neck					C
1142 Bruthach a Sithean		pin	bone	-	b				48+	:4?+			
1143 Bruthach a Sithean		pin	bone	01A	b			fl, almost semi-circ sect v corroded	48	4.5			C E
1144 Bruthach a Sithean		pin	iron	prof r-hd	-				36+	19:7			A C?
1145 Bruthach a Sithean		pin	Cu alloy	prof r-hd	cast?				100	18:4			A C?
1146 Dun Cuier		pin	bone	-	-			misc bone pin tips			4		
1147 Dun Cuier		comb	ant	comp	s-s	high back	r&d & inc dec on all parts. Open back	thick, conv c-pl, Fe riv, t grad.	67	45/60	46	12	04
1148 Dun Cuier		comb	ant	comp	d-s		r&d and S-scroll on s-pl. 3 rows, central	Perf each end bevelled c-pl, Fe riv, perf	62+	23/36	55	11.5	05
1149 Dun Cuier		comb	ant	comp	d-s	unconnected		wide, bevelled c-pl, Fe riv	74+	15/32	48	10.5	05/06
1150 Dun Cuier		comb	ant	comp	d-s			bevelled, shallow c-pl, Fe riv	46+	13/26	33+	7.5	05/06
1151 Dun Cuier		comb	ant	comp	d-s			Fe riv. Susp hole in centre	16+	5/12	31+	3+	05/06
1152 Dun Scurrival		pin	bone	08A	c				36+	6:4			C
1153 Dun Scurrival		pin	bone	12B	b				84	14:5		4.5	A C E
1154 Dun Cuier		comb	ant	comp?	d-s			e-pl only, t grad, 19+ light incisions to mark out teeth	19+		45	3+	05
1155 Garry Iodrach		pin	bone	06B	c			thick head, good overall polish. Sh curves	99	8:5			C
1156 Garry Iodrach		pin	bone	-	a			curving sh, polished tip	92+	:4.5			
1157 Garry Iodrach		pin	bone	-	c?			flattish sect, much polished. Sh twists slightly	48+	:3			
1158 Garry Iodrach		comb	ant	comp	d-s			Fe riv. NL	76	4			E
1159 Garry Iodrach		pin	Cu alloy	lobed	a	inc at top of sh, including 4 stabbed dots							
1160 Garry Iodrach		pin	Cu alloy	loose r-hd	-poly	brambled and grooved orn		head and sh only. Prob kidney ring	124+	:5			E
1161 Garry Iodrach		pin?	jet	15?	-			bun-shaped jet bead or pin head	29		29	13	D
1162 Galsen, Borne		pin	bone	08A	c*	2 inc 1 beneath hd, 10mm apart, dots inbetween			62+	5:4			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1163 Galson		pin	bone	34	c				99	8:5			
1164 Galson		pin	bone?	08A	c/b				100	6:4			C
1165 Galson		pin	bone	08A	c/b			rough nail head, irreg thick sh	99+	8:5			C
1166 Galson		pin	bone	08B	c			head either broken off or flat	94	5.5:5			C E
1167 Galson		pin	bone	01A?	c			rough splinter, polished through use, flattish sec	79	4			C E
1168 Galson		pin	bone	01A?	b				65	4.5:3.5			C E
1169 Galson		pin	bone	08A	c			splinter long bone	64+	5:4			C
1170 Galson		pin	bone	32	b			polished through use. Fl sect	57	3.5			
1171 Galson		pin	bone	08A	-			same as HR.706	45+	6:4			C
1172 Galson		pin	bone	08A	-			thick sh, constant width	39+	7:5			C
1173 Galson		pin?	ant	-	b			v crude point, hd broken off, no signs polish,?peg trans fl w squarish burnt head	62+	7			E
1174 Galson		pin	bone	09G	a				77	6:3			
1175 Galson		pin	bone	08B	b				73	5.5:3			C
1176 Galson		pin	bone	08A	a			fl sect	125	8:			C E
1177 Galson		pin	bone	08A	b			slightly fl sect	118+	8:6			C E
1178 Galson		pin?	bone	-	-			v irregular bone point, poss pin	58+	7			
1179 Galson		comb	ant	comp	s-s			Fe riv, t-pl	15+	8/15	28+	3+	07/08
1180 Galson		comb	ant	comp	s-s?		openwork back, convex upper edge	26+	24	9/16	32+		?
1181 Galson		comb	ant	comp	s-s		rid on e-pl space and top of t-pl	rect. V fine, squat. Numerous Cu alloy riv. T graduate	39+	29/32	21	9	08 = B3
1182 Galson		comb	ant	comp	s-s		vert inc l on top of raised upper ridge of e-pl	e-pl w raised upper ridge, Fe riv, perf much polished point	17+		39?+	6	11
1183 Galson		pin?	bone	-	a/b				45+	:5			
1184 Galson		pin?	bone	-	-			slightly tapering section of polished shaft	30+	:3			
1184 Brough of Birsay		comb	ant	comp	s-s			c-pl w Cu alloy rivets					11?
1185 Galson		pin	bone	-	-			bone point, much polished	19+	4+			
1186 Galson		pin	Cu alloy	loose r-hd plain-poly faint saltire and dot designs	step pattern			ring of lozenge cross-section	157	16:4			E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1187	Galson	pin	Cu alloy	loose r-hd -crut		2 dots on either side of T		ring missing, prob 69+ stirrup		7:3			E
1188	Galson	pin	Cu alloy	sq pl prof		cross hatching and horiz inc 1 below sq plate			78	6:3.5			E
1189	Sithean a Phiobaire	pin	bone	11A	e			sh gently expands into bulb of thistle	58	6:4			C
1190	Sithean a Phiobaire	pin	bone	28	e			?3E. Much polished all over, slight hip	67	6.5:4.5			C
1191	Sithean a Phiobaire	pin	bone	13	b	3 segments		good polish	45	5:3.5			E
1192	Sithean a Phiobaire	pin	bone	30?*	c	hole poss drilled into top			60	5.5:4			E
1193	Sithean a Phiobaire	pin	bone	-	-			NL					
1194	Sithean a Phiobaire	pin	bone	06D	-			stumpy	33+	5:2.5			C
1195	Bealach Ban, S Uist	pin?	bone	01A?	-			bent sh, flattish	69	4			C E
1196	Bealach Ban	pin?	bone	01B	c			sect					
1197	Bealach Ban	pin	bone					much polished	82	3.5:5			A C
1198	Bealach Ban	pin	bone	12A	b			?skewer					
1199	Bealach Ban	pin	bone	01A	a				94	10.5			A C E
1200	Old Cattlefold, Vallay	comb	ant	-	a			fl sect	58	4.5			C E
1201	Old Cattlefold, Vallay	comb	ant	comp	s-s?			e-pl only w space at end. T grad, Fe riv	18+	5/9	33+	3.5	
1202	Old Cattlefold, Vallay	comb	ant	comp	s-s			deep conv c-pl. Fe & ant riv	108+	28/52	25+	14	08? = B4?
1203	Vallay	comb	wood	-	d-s			frag t-pl. Diff thickness teeth	20+	22/20 4/14	12+	3+	01/11 ?
1204	Vallay	pin	bone	01B	-				61		37	6	11
1205	S Uist	pin	bone	09?	-			thick pin w transversely fl head, poss triangular large fibula, poss sheep	121. :6				A C
1206	S Uist	pin	bone	12A?	a				122	8:6.5			C E
1207	Howmore, S Uist	pin	bone	06D?	a			irreg shaped head, flattish section	66	4:2.5			C
1208	S Uist	pin	bone	08B	b				89	8:5			C E
1209	S Uist	pin	bone	02	-	1 segment		unfinished	34+	4.5:3.5			A E
1210	Gnoc Geillbst	pin	bone	-	-			NL					
1211	Bealach Ban	pin	bone	30*	c			rect head w rect sect	40	5:3.5			C
1212	Sithean Mor	pin	bone	?	a			irreg splinter bone w flattish, rounded hd	66	5			



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1213	Illeray, N Uist	pin	Cu alloy	04	c			Irreg disc hd, added to sh & beaten into shape as GT.943, but longer sh.	83	8:3			E
1214	Illeray, N Uist	pin	Cu alloy	04	c			Flattish sect sh winged head, one side perf. Fl sect polished splinter of long bone, semi-circ sect	92	8:4			E
1215	Illeray, N Uist	pin	Cu alloy	butterfly	a			thick wire similar to GT.948. Head added to sh, beaten to shape	74	20:2	2		E
1216	Bellochan, N Uist	pin	bone	01A	a			irreg globular head w thick shaft	63	6			C E
1217	Illeray, N Uist	pin	Cu alloy	proj r-hd	wire			irreg hd approximating to 6G. Sub-circ sect sh	88	12:3			A C?
1218	Uist	pin	Cu alloy	25	c								E
1219	Uist	pin	bone	06D	c				75	8:5			C
1220		pin	Cu alloy	proj r-hd	wire				84	12:3			A C?
1221		pin	Cu alloy	25	c	83			83	8:3			E
1222	Foshigarry	pin	bone	-	-								
1223	Foshigarry	pin	bone	-	-								
1224	Sithean Mor	pin?	bone	01B	-			thick bone skewer	89	7			A C
1225	Foshigarry	pin	bone	-	-								
1226	Foshigarry	pin	bone	-	-								
1227	Foshigarry	pin	bone	28	b			pinched-in neck	71	6:5			C
1228	Foshigarry	pin	ant?	08A	c			well formed and finished	68+	5.5:4.5			C
1229	Foshigarry	pin	bone	24B	e			pinched neck, cf GUA.154	58	6:4			C
1230	Foshigarry	pin	bone	08B*	c				58	6:4.5			C
1231	Foshigarry	pin	bone	-	b?*			vestiges of 2 median grooves just below head	42+	14			
1232	Foshigarry	pin	bone	09I*	a			multiple chevron design on each face	65	11:3.5			C
1233	Foshigarry	pin	bone	12B	b			crutch-shaped head. Short, stumpy pin	44	13:4.5			A C E
1234	Foshigarry	pin	bone	-	-			NL					
1235	Foshigarry	pin	bone	12F	a			?modified sheep ulna	59	6.5:4			A C E
1236	Foshigarry	pin	bone	-	-			NL					
1237	Foshigarry	pin	bone	-	b?			fl sect	59+	13.5			
1238	Foshigarry	pin	bone	01B	a			fl sect	57	6			A C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1239	Foshigarry	comb	ant	comp	d-s		heavy r&d on c-pl	shallow conv c-pl. Fe riv	54+	8/16	37+	11	05
1240	Foshigarry	comb	ant	comp	d-s		compass drawn dec on each c-pl (diff designs each side)	shallow conv c-pl. Central perf on e-pl. No grad. Fe riv	67	42/67	50	10	05
1241	Foshigarry	pin	Cu alloy	r-hd	true			ring in same plane as sh	61	13:3			D
1242	W Isles	pin	Cu alloy	08B	a			fl sect: ?point	115	8:3.5			C E
1243	Foshigarry	pin?	bone	01A	a			much polished sh	53	4.5			C E
1244	W Isles	pin	bone	12A	a			much polished sh:	78	11.5:3.5			A C E
1245	Foshigarry	pin?	bone	12D	-			bird bone	105+	7			A C E
1246	Foill, Coll	pin	bone	06B	c			slight collar above and below ball	49+	6:4			C
1247	Coll and Tiree	pin	bone	16B	b			trans fl & perf. Cf Jarlshof	100	8:5			E
1248	Coll and Tiree	pin	Cu alloy	24B*inset	c*	ball dec w cross hatching spiral inc into head. Vertical lines below to trans l	3 trans l around waist	sh has circ sect above waist, polygonal below cf Jarlshof and Garry Iodrach	38	4.5:3			C
1249	Coll	pin	Cu alloy	lobed	c				73+	4.5:3.5			E
1250	Borness	pin?	bone	-	-			splinter long bone, one end pointed and worn	51+	:7			
1251	Borness	pin	bone	12A	-			212B	64+	:87+			A C E
1252	Borness	pin?	bone	-	b?				31+	:4			
1253	Borness	pin?	bone	01A	a			?peg	34	4			C E
1254	Borness	pin	bone	12A	-				73+	14:5			A C E
1255	Borness	pin	bone	12A	b				89	13:5			A C E
1256	Balevuillin, Tiree	pin	bone	01A	a			fl sect	67	3			C E
1257	Tiree	pin	Cu alloy	30?	-			rect head, beaten from sh	87	4:2.5			E
1258	Coll and Tiree	pin	Cu alloy	spiral	-			2 x spiral wound pins	@ 59	3:1.5			E
1259	Dunadd	pin	bone	-	-			NL					
1260	Dunadd	pin	bone	-	-			NL					
1261	Dunadd	pin	bone	08B	b?				40+	5:3			C
1262	Dunadd	comb	ant	comp	d-s			bold zig-zags along c-pl, r&d at riv. Shallow conv ends	63	32/55	54	5+	05
1263	Dunadd	comb	ant	-	-			c-pl					
1264	Dunadd	pin	Cu alloy	proj r-hd	hand-pin			NL					D
1265	Dunadd	pin	Cu alloy	proj r-hd	cast			comments in Duncan 1982	93+	8:4			A C?
1266	Dunadd	pin	Cu alloy	proj r-hd	trefoil				95	12:4			D

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1267	Dunadd	pin	iron	proj r-hd?	-			ring of proj r-hd?		17:			A C?
1268	Dunadd	pin	Cu alloy	09D	b			rect sect sh	60	7:3.5			C
1269	Dunadd	pin	Cu alloy	06A?	-			circ sect sh	26+	5:3.5			C
1270	Dunadd	pin	Cu alloy	loose r-hd -loop	-			parallels in	55+	5+:3			C E
1271	Dunadd	pin	Cu alloy	misc bent	-			Duncan 1982, 21-2	65+	3.25+			
								oval sect sh.					
								Similar to RMS					
								HPO.397					
1272	Dunadd	pin	Cu alloy	loose r-hd	-			sh only. Oval sect	43+	5	5	4	E
1273	Dunadd	pin	Cu alloy	-	-			sq sect sh	20+	5			
1274	Dunadd	pin	iron	06B	b?				37+	4.5:2.5			C
1275	Dunadd	pin	Cu alloy	-	-			oval sect sh		:3.5			
1276	Dunadd	pin	Cu alloy	-	-			sq sect	67	4.5			
1277	Dunadd	pin	Cu alloy	20	-			portion only of	67	:3.5			E
								head. Oval sect					
								sh. Cf RMS IL.564					
1278	Dunadd	pin	mould	-	-			3 x sh		:4.5			C
1279	Dunadd	pin	mould	08A & 08B	-			no sh					
1280	Dunadd	pin	mould	08B	-			2 x nail heads		6:			C
1281	Dunadd	pin	mould	25	-			?6T		7.5:			C E
1282	Dunadd	pin	mould	06B	-			2 x ball w flat		7:			C
								top					
1283	Dunadd	pin	mould	06A	C?					5.5:			C
1284	Dunadd	pin	mould	11A	-					6.5:			C
1285	Dunadd	pin	mould	08B	-					7:			C
1286	Dunadd	pin	mould	06B & 08B	-					5:3			C
1287	Dunadd	pin	mould	08B & 09A	-					7:3			C
										10:3			
1288	Dunadd	pin	mould	08B & 09A	-					5:3			C
										8:3			
1289	Dunadd	pin	mould	-	-			misc moulds for					
								pin shafts					
1290	Dunadd	pin	mould	01A	-			3 straight	3				C E
								channels for pin	4				
								sh, one w sq end	2				
1291	Dunadd	pin?	mould	-	-			narrow straight	2				
								channel, poss for					
								stick pin					
1292	Dunadd	pin	mould	08A & ?09A	-								C
1293	Dunadd	pin	mould	-	-			sh only		:2			
1294	Dun an Fheurain	pin	Cu alloy	proj r-hd	-			2C AD (Stevenson					A C?
								1967,22). Not					
								beyond 3C (Fowler					
								1963,122-3)					
1295	Dun an Fheurain	pin	bone	12C	a				57				A C E
1296	Dun an Fheurain	pin	bone	12C	a				80				A C E
1297	Dun an Fheurain	pin	bone	12B?	-				37				A C E
1298	Dun an Fheurain	pin	bone	12?	b				80	c			A C E
1299	Dun an Fheurain	pin	bone	12A?	c				80	12:			A C E
1300	Dun an Fheurain	pin	bone	25	C?				45+	6:		5	C



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1301	Dun an Fheurain	pin	bone	06A	e	fillet around top and bottom of ball head			45	7:			C
1302	Dun an Fheurain	pin	bone	24B*	c				52	5.5			C
1303	Dun an Fheurain	pin	bone	-	-		inc vert 1 on outer edge of c-pl.	frag c-pl	45+		10+	3+	11?
1304	Dun an Fheurain	comb	ant	comp	-		Cross-hatching in centre		24+				
1305	Dunollie	comb	ant	comp	d-s		c-pl w rid and border of 3 inc 1 on each edge	Fe riv	59+				05/06 ?
1306	Dunollie	comb	ant	comp	d-s			?t grad. Sp at each end	16+		50	3+	05?
1307	Dunollie	pin	bone	12A	-				78	11:4.5			A C E
1308	Dunollie	pin	bone	24B	-				69.5				
1309	Dunollie	pin	bone	6B	c			?model for mould SF 022	40	4.5:3			C
1310	Dunollie	pin	bone	-	-			mould for ring and pin	32+				
1311	Dunollie	pin	mould	24B	-			2 pins	33+				
1312	Dunollie	pin	mould	-	-				12+				
1313	Dunollie	pin	mould	-	-				60	:3.5			C
1314	Dunollie..	pin	mould	-	-			?6H*					
1315	Broch of Burrian	pin	Cu alloy	06A*	c	inc linear dec on head							
1316	Broch of Burrian	pin	Cu alloy	08B*	c*	cross-hatch 3 zones of ing around longitudinal 1 edge of head		cf Kildonan, Buistion Crannog & B of Burray	44+	6.5:3			C
1317	Broch of Burrian	pin	Cu alloy	01B	-			?bodkin	93	:3			A C
1318	Broch of Burrian	pin	bone	06B	c				52	6:4			C
1319	Broch of Burrian	pin	bone	06B	c/e				42	5:3			C
1320	Broch of Burrian	pin	ant	06B	c*		encirc 1 around swelling		48	8:4			E
1321	Broch of Burrian	pin	ant?	06B	c/e				25+	5:3			C
1322	Broch of Burrian	pin	bone	06B	b								C
1323	Broch of Burrian	pin	bone	06B	-				23+	7:3.5			C
1324	Broch of Burrian	pin	bone	08A	e				49	7:3			C
1325	Broch of Burrian	pin	bone	08A	c				48	6.5:3			C
1326	Broch of Burrian	pin	bone	36	c/e				79	8:5.5			C
1327	Broch of Burrian	pin	bone	08A	c*		encircling lines above swelling		42	6:3.5			C
1328	Broch of Burrian	pin	bone	08A	c				68	5:3.5			C
1329	Broch of Burrian	pin	bone	08B	c				41	5:4			C
1330	Broch of Burrian	pin	bone	08B	c				29	4:2			C
1331	Broch of Burrian	ant?	bone	28*	e	arrangement of dots in cross form on top			63	5.5:4.5			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1332	Broch of Burrian	pin	bone	06D	e				49	5.5:3.5			C
1333	Broch of Burrian	pin	bone	06D	c				36+	5.5:3			C
1334	Broch of Burrian	pin	bone	06A	c/e				35	4:3			C
1335	Broch of Burrian	pin	bone	06A	c/e				47	7:4			C
1336	Broch of Burrian	pin	bone	19C*	b?	irreg arrangement of dots on faces of head			110	9:5			C E
1337	Broch of Burrian	pin	bone	09A	c				67	8:4			C
1338	Broch of Burrian	pin	bone	09A	c				48+	6.5:3.5			C
1339	Broch of Burrian	pin	bone	09A	e				62	10:4.5			C
1340	Broch of Burrian	pin	bone	09A	c				55	7:3			C
1341	Broch of Burrian	pin	bone	09A	c				38	5:2.5			C
1342	Broch of Burrian	pin	bone	09C	c*		encircling lines around waist						
1343	Broch of Burrian	pin	bone	09C	c				36	7:2			C
1344	Broch of Burrian	pin	bone	09C	c				36	5:2.5			C
1345	Broch of Burrian	pin	bone	09C	e				64	8:7			C
1346	Broch of Burrian	pin	bone	09C	c			green staining --?intentional	39	7:2.5			C
1347	Broch of Burrian	pin	bone	09D	c					3+2			C
1348	Broch of Burrian	pin	bone	10	c				29	3.5:1.5			C
1349	Broch of Burrian	pin	bone	10	e				25	3:1.5			C
1350	Broch of Burrian	pin	bone	11A	c*		median encirc lines around lower waist of sh		34	4:3			C
1351	Broch of Burrian	pin	bone	12A/7D	a				138	7:5			A C E
1352	Broch of Burrian	pin	bone	12D	-				38	5:2			A C E
1353	Broch of Burrian	pin	ant?	13	c			2 segments	112	15:5			E
1354	Broch of Burrian	pin	bone	12B	-				54+	15:5.5			A C E
1355	Broch of Burrian	pin	bone	12B	-				108	17:5			A C E
1356	Broch of Burrian	pin	bone	12A	a				91	13:8			A C E
1357	Broch of Burrian	pin	bone	12B	a				81	16:6.5			A C E
1358	Broch of Burrian	pin	bone	12A	b				83	14:7.5			A C E
1359	Broch of Burrian	pin	bone	12A	a				79	14:5			A C E
1360	Broch of Burrian	pin	bone	12A	a				81+	14:6			A C E
1361	Broch of Burrian	pin	bone	12A	b				84	13:6			A C E
1362	Broch of Burrian	pin	bone	12A	a								A C E
1363	Broch of Burrian	pin	bone	12B	-				92+	12:5			A C E
1364	Broch of Burrian	pin	bone	12B	b				78+	12:6			A C E
1365	Broch of Burrian	pin	bone	12A	b				82	12:5.5			A C E
1366	Broch of Burrian	pin	bone	12A	a				63	12:4			A C E
1367	Broch of Burrian	pin	bone	12B	-				80+	13:5			A C E
1368	Broch of Burrian	pin	bone	12A	a				66	13:6			A C E
1369	Broch of Burrian	pin	bone	12A	a				77+	9:5			A C E
1370	Broch of Burrian	pin	bone	12A	b				87+	8+6			A C E
1371	Broch of Burrian	pin	bone	12A	a				84+	7			A C E
1372	Broch of Burrian	pin?	bone	12A	a				77	:5			A C
1373	Broch of Burrian	pin	bone	01B	f*		zig-zag lines on lower part of sh	worn and broken head					

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1374	Broch of Burrian	pin	bone	01B	f*	short transverse grooves down length of one side of sh			66	7:			A C
1375	Broch of Burrian	pin	bone	24B	c				41	6:3.5			C
1376	Broch of Burrian	pin	bone	06A	e				37	4:2.5			C
1377	Broch of Burrian	pin	bone	06A	c				57	6.5:3			C
1378	Broch of Burrian	pin	bone	06A	b/c				39	5:3			C
1379	Broch of Burrian	pin	ant?	06A	c				34	5.5:3			C
1380	Broch of Burrian	pin?	bone	15C	-			solid. Rect plan, tri cross-section glob head	19				D
1381	Broch of Burrian	pin	bone	12B	a				79	16:4			A C E
1382	Broch of Burrian	pin	bone	12C	a				124	17:7			A C E
1383	Broch of Burrian	pin	bone	12C	-				121	14:5			A C E
1384	Broch of Burrian	pin	bone	12C	a				92	11:5			A C E
1385	Broch of Burrian	pin	bone	12C	a				89	10:5			A C E
1386	Broch of Burrian	pin	bone	12C	a				104	15:6			A C E
1387	Broch of Burrian	pin	bone	12C	b?				119	17:6			A C E
1388	Broch of Burrian	pin	bone	12C	a				48	7:3			A C E
1389	Broch of Burrian	pin	bone	14A	c			2 opposed zoomorphic features					C
1390	Broch of Burrian	pin	bone	15C	-			bun-shaped, ivory. 18+ ?molar: pierced all through			26	23	D
1391	Broch of Burrian	pin	ant?	15A	-			bun-shaped. Remains of Fe sh, diam 4 mm	22		24	23	D
1392	Broch of Burrian	pin	bone	15B	-			remains of Fe sh. Secondary transverse perf	20+		26	16	D
1393	Broch of Burrian	pin	bone	15B	-				21+		20	15	D
1394	Broch of Burrian	pin	bone	15B	-			Fe stained	20				D
1395	Broch of Burrian	pin	bone	15B	-				22+		23+	14+	D
1396	Broch of Burrian	pin	bone	09D/7F	e				25	4.5:2			C
1397	Broch of Burrian	pin	bone	-	a				61+				C
1398	Broch of Burrian	pin	bone	-	e			t-pl only, w irreg diagonal teeth.	71+				C
1399	Broch of Burrian	comb	ant	comp	s-s?			Conc back shallow conv c-pl. T grad	28+	10/28	39	32+	04
1400	Broch of Burrian	comb	ant	comp	s-s	high-back	rtd on c-pl and back. Back has multiple perf						04
1401	Broch of Burrian	comb	ant	comp	s-d	shallow high-back		single perf in centre of back					04
1402	Broch of Burrian	comb	ant	comp	d-s			double rtd on end-space. No grad	22+	11/17	61	4+	05
1403	Broch of Burrian	comb	ant	comp	d-s								05/06 ?



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D CLASS
1404	Broch of Burrian	comb	ant	comp	d-s			t grad. Central perf on e-pl, sp at end	21+	11/21	54	3.5+ 05
1405	Broch of Burrian	comb	ant	comp	d-s			r&d on either side of perf on e-pl	17+	10/13	56	3+ 05
1406	Broch of Burrian	comb	ant	comp	d-s			double r&d on either side of perf	30+		57+	3+ 06
1407	Broch of Burrian	comb	ant	comp	d-s			groups of 3 vertical lines on c-pl	44+	12/21	32+	7+ 05/06
1408	Broch of Burrian	comb	ant	comp	d-s			2 rows r&d on c-pl	40+	8/17	25+	9+ 05
1409	Broch of Burrian	comb	ant	comp	d-s?			3 rows double r&d on c-pl	51+		22+	3.5+ 05/06
1410	Broch of Burrian	comb	ant	comp	d-s?							05/06
1411	Broch of Burrian	comb	ant	comp	d-s			t-pl only. Fe riv	15+	9/15	41	3+ 05/06
1412	Broch of Burrian	comb	ant	comp	d-s			Fe riv	19+	9/19	45+	3.5+ 05/06
1413	Broch of Burrian	comb	ant	comp	d-s				21+	10/21	32+	9+ 05/06
1414	Broch of Burrian	comb	ant	comp	d-s				18+	10/18	43	4.5+ 05/06
1415	Broch of Burrian	comb	ant	comp	d-s				95	:5.5		06
1416	Broch of Burrian	pin	bone	01	b				78+	:4.5		E
1417	Broch of Burrian	pin	bone	01A	b				47	:7		C E
1418	Broch of Burrian	pin?	ant	01A	a				64+	:4.5		E
1419	Broch of Burrian	pin	bone	01	a				52+	:4		E
1420	Broch of Burrian	pin	bone	01A	b?				58+	:5		E
1421	Broch of Burrian	pin	bone	-	af				47+	:5		C E
1422	Broch of Burrian	pin	bone	-	b				79	:6		
1423	Broch of Burrian	pin	bone	01	a				46+	:4.5		
1424	Broch of Burrian	pin	bone	-	b				43	:5		
1425	Broch of Burrian	pin	bone	-	b				45	:5		C E
1426	Broch of Burrian	pin	bone	01A	b			fl sect	39+	:5		C E
1427	Broch of Burrian	pin?	bone	01A	b			?peg	70	:6		C E
1428	Broch of Burrian	pin	bone	01	a				71	7.5:3		
1429	Broch of Burrian	pin	bone	-	a				73	:8		C E
1430	Broch of Burrian	pin	bone	01A?	b				27	4.5:3		A C
1431	Broch of Burrian	pin?	bone	01B	a				102+	:8		A C
1432	Broch of Burrian	pin	bone	01B	a				68	:4		A C
1433	Broch of Burrian	pin	bone	01B	a							A C
1434	Broch of Burrian	pin	bone	01B	a							A C
1435	Broch of Burrian	pin	bone	?	e				87+	:4		C
1436	Broch of Burrian	pin	bone	01A	a				87+	:6		C E
1437	Broch of Burrian	pin	bone	01B	a							A C
1438	Hurley Hawkin	pin	Cu alloy	proj r-hd	wire							A C?
1439	Hurley Hawkin	pin	Cu alloy	proj r-hd	wire							A C?
1440	Dun Cuifer	pin-imp	pottery	proj r-hd	-							A C?
1441	Tigh Talambanta	pin-imp	pottery	proj r-hd	-			numerous pin impressed sherds				A C?

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1442	Moredun	pin	iron	proj r-hd	-								A C?
1443	Culbin Sands	pin	Cu alloy	-	-								A C?
1444	Culbin Sands	pin	Cu alloy	proj r-hd	-								A C?
1445	Dun Croc a'Chomdhalach	pin-imp	pottery	proj r-hd	-								A C?
1446	Illeray, N Uist	pin	Cu alloy	proj r-hd	-								A C?
1447	Broch of Ayre	pin-imp	pottery	proj r-hd	-								A C?
1448	Gurness	pin	mould	proj r-hd	-								A C?
1449	Lingro	pin-imp	pottery	proj r-hd	-			5 examples: GE.54,56,99,100,104					A C?
1450	Midhowe	pin	Cu alloy	proj r-hd	-								A C?
1451	Midhowe	pin	Cu alloy	proj r-hd	-								A C?
1452	Midhowe	pin	Cu alloy	proj r-hd	-								A C?
1453	Coupar Angus	pin	Cu alloy	proj r-hd	-								A C?
1454	a Cheardach Mhor	pin-imp	pottery	proj r-hd	-								A C?
1455	Sithean a Phìobaire	pin	iron	proj r-hd	-								A C?
1456	Sithean a Phìobaire	pin-imp	pottery	proj r-hd	-								A C?
1457	Clickhimin	pin	bone	proj r-hd	-			'head roughly circular'	66	10:4			A C?
1458	Midhowe	comb	cet	s-p	s-s	shaped back with grip/handle		unique, almost complete					03
1459	Clatchard Craig	pin	mould	proj r-hd	hand-pin			tenuously identified as hand-pin by Close-Brooks					D
1460	Clickhimin	pin	Cu alloy	loose r-hd	-loop		loop dec w linear orn	not examined					D
1461	Sheep Hill Fort	?	mould	-	-								
1462	Hill of Crichtie	pin	shale	15	-						ø34		D
1463	Mote of Mark	pin	mould	misc	-			13 examples, some retaining portions Fe sh					
1464	Sandwick	pin?	bone	-	-			lenticular terminal w ?raised central circ boss	c70	7			
1465	nr Sumburgh	pin	bone	08B	b			poss needle shaped, broken across eye	75	7:4			C
1466	Sandwick	pin	bone	08B	a			nail headed, very fine	68	7:4			C
1467	Sandwick	pin	bone	?	?			rough	46	1:5			
1468	Millya Skera	pin	bone	22	c	'Janus'		pronounced swelling c 3/4 way down sh	74	10:5			E
1469	Millya Skera	comb	ant	comp	-			'keel form, very fine open work'					
1470	Millya Skera	comb	ant	comp	s-s			long. Keyband decoration					

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1471	Millya Skera	comb	ant	comp	s-s			small, fine keel-backed long. Fine toothed. Parts of similar comb short. Straight line decoration curved and ridged mid-rib. Complete length of rib, cut 23 into rect shape w rect sect					
1472	Millya Skera	comb	ant	comp	s-s			well-made, well-polished. Pronounced hip v cancellous bone v rough, paring marks all around thick sect. v highly polished	34+	3:			C
1473	Millya Skera	comb	ant	comp	d-s			28B. Much polished small, roughly shaped hd, high hip, v polished constricted neck worked into approx 3 facets v smooth sh	53+ 44+	4.5: 5			C
1474	Millya Skera	comb	ant	comp	d-s				39+	6.5:3			C
1475	Howmae	pin?	bone	-	-				42+	5:4 30 4:3			C
1476	Pool	pin	bone	-	e?*		slight inc l around waist		35	5.5:3.5			C
1477	Pool	pin	bone	-	b								
1478	Pool	pin	ant?	-	b?								
1479	Pool	pin	bone	08B	c/e								
1480	Pool	pin	bone	04	e								
1481	Pool	pin	bone	04?	e								
1482	Pool	pin	bone	06A	c								
1483	Pool	pin	bone	06B*	e		2 rows v small dots on sides, irreg arrangement dots on top rough scoop lightly incised on head, scoring marks diam 3mm, poss for inset		44	6.5:3			C
1484	Pool	pin	bone	08B?inset	e*				33	5.5:3			C
1485	Pool	pin	bone	06A/G	e*		slight scoring around hip		42	7:4			C
1486	Pool	pin	ant?	09A	e			sh curves in opposite plane to sh	51	8:4			C
1487	Pool	pin	bone	09C	c			polished	40	4.5:3			C
1488	Pool	pin	bone	09C	-			much polished	48	C			C
1489	Pool	pin	bone	09C?	-			much eorded head hardly trans flattened	32+	6.5:3.5			C
1490	Pool	pin	bone	06B	e			sub-rect sect hd low hip, 12 mm up from tip	55	5:3			C



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1491 Pool		pin	ant	08A	c				58	7:4.5		E	
1492 Pool		pin	bone	06B	e			well finished and polished	52	5:3.5		C	
1493 Pool		pin	bone	34	*f1	one side has double disc & z-rod, indented rect w 2 l below	misc irreg l and dots down sh	splinter of long bone w expanded hd, end tapers	68+	12:7			
1494 Pool		pin	bone	6B	e*	2 encirc horiz l w rows dots inbetween, 4 dots on top	approx 4 irreg encirc l and vertical l around hip	v fine	45	5:3		C	
1495 Pool		pin	bone	19A	a			slight dimple on one side of face.	55	8:2.5		C	
1496 Pool		pin	bone	09H?	e			High polish head broken longitudinally	38	5+:3		C	
1497 Pool		pin	bone	34	c			2 'overlapping' horiz 'sticks' for hd, 4 projections	31	5.5:3			
1498 Pool		pin	bone	-	e			polished	33+	:3		C	
1499 Pool		pin	bone	33	e?			no signs of wear. Rounded form of head not apparent	29	4.5:3		C	
1500 Pool		pin	bone	06D?	b			v fine, ?globular head w unpronounced hd.	25	2.5:2		C	
1501 Pool		pin	bone	34	e?			Short rough irreg hd and sh, but polished through use	48	5.5:3.5		C	
1502 Pool		pin	bone	06C?	c			cancellous bone	48+	5.5:4		C	
1503 Pool		pin	ant?	08A	a			v polished	84	9:4.5		E	
1504 Pool		pin	bone	08A	a			v polished	115	8:5		E	
1505 Pool		pin	bone	08A	b				69	5.5:4.5		C	
1506 Pool		pin	bone	08A	b				98	5:4		C E	
1507 Pool		pin	bone	08A	a			v long and well polished	125	9:5		C E	
1508 Pool		pin	bone	08A	b				109+	8:5.5		C E	
1509 Pool		pin	bone	08A*	b	cross inc on hd, rough cross-hatching on a part of underside		v well polished	95	6:5		C	

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1510 Pool		pin?	ant?	01A	-			obliquely sawn off end	39+	7			C E
1511 Pool		pin	bone	01A	a			?cut from long bone	58	6+			C E
1512 Pool		pin	ant?	01A	-				25+	8:			C E
1513 Pool		pin	bone	08A*	-				48	7:5			C
1514 Pool		pin	bone	11B	c?			v cancellous bone	83	6:5			C E
1515 Pool		pin	ant?	11B	b?				92+	7:4.5			C E
1516 Pool		pin	bone	11B	-			high polish. Hd approx sq sect.	38+	7.5:4.5			C
1517 Pool		pin	bone	-	b			?Orig ball hd	110	7:5.5			
1518 Pool		pin	bone	22	b			hd resembles knave in cards!	98	12:6			E
1519 Pool		pin	bone	08B	b			?8A. High polish	112	10:5			C E
1520 Pool		pin	bone	08A	-				21+	8.5:4.5			C
1521 Pool		pin	bone	08B	b			high polish	85	10.5:5			C
1522 Pool		pin	bone	08	b			crude	86	9:4.5			C
1523 Pool		pin	bone	08B	c			deep hd. High polish	91	8:5.5			C
1524 Pool		pin	bone	06A?	b				82+	6.5:4			C
1525 Pool		pin	bone	17A	b				186	13:5.5			E
1526 Pool		pin	ant?	17A*	-			fl sect overall	69+	11:5			E
1527 Pool		pin	bone	17A	b			good polish. Pronounced tool/wear marks on head	119	13:6			E
1528 Pool		pin	bone	12A	b			flattish sect sh, but head semi-circ in section	138	10.5:7			A C E
1529 Pool		pin	bone	?	?			hd= modified articular end, approx 6C w dimple in top	30	10:5			
1530 Pool		pin	bone	17A?	-			pronounced neck. Totally unpolished shaft	93+	10:5			E
1531 Pool		pin	bone	17A	b			as for SF 717	153	12:5			E
1532 Pool		pin	bone	12B	b			?17A	90	13:4			A C E
1533 Pool		pin	bone	12B	b			slight trimming below articulation	115	16:6			A C E
1534 Pool		pin	bone	12A	-			unmodified. No evidence of use	107	15:6.5			A C E
1535 Pool		pin	bone	12A	b				80	11:5			A C E
1536 Pool		pin	bone	12B	b				89	10:6			A C E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1537 Pool		pin	bone	12A	b				86	13:5			A C E
1538 Pool		pin	bone	17A*	b	one side of head lightly incised with triangle			96	11:5			E
1539 Pool		pin	bone	12A	b				95	14:5.5			A C E
1540 Pool		pin	bone	12A	b				97+	8+6			A C E
1541 Pool		pin	bone	12B	-				88	9.5:8.5			A C E
1542 Pool		pin?	bone	-	-			217A small mammal bone, poss hare, artificially pointed	36	8:3.5			A C E
1543 Pool		pin?	bone	-	-			articulated end retained, sh pointed	48	10:4.5			
1544 Pool		pin	bone	01C	a			fl sect sh. Splinter of polished bone	71	6:			A E
1545 Pool		pin	bone	17A	a				69	9:5			E
1546 Pool		pin	bone	16	-				94	10:6			E
1547 Pool		pin	bone	16A	a				119	13:6			E
1548 Pool		pin	bone	17A?	a				117	21:109			E
1549 Pool		pin	bone	17A	b				136	16:5.5			E
1550 Pool		pin	bone	31	a			pierced metacarpal	81	13:5			-
1551 Pool		pin	bone	31	a			pierced fibula	81	13:5			-
1552 Pool		pin	bone	17B?	-				49+	105:7			E
1553 Pool		pin	bone	17A	-			metapodial	29+	16:			E
1554 Pool		pin	bone	12A	b				119+	12:6			A C E
1555 Pool		pin	bone	12A	b?				73+	10.5:6			A C E
1556 Pool		pin	bone	17B?	-				49+	10.5:7			E
1557 Pool		pin	bone	17B?	-				29+	9.5:			E
1558 Pool		pin	bone	17D	b?				87+	11:5.5			E
1559 Pool		pin	bone	17D	b				61	11:4			E
1560 Pool		pin	bone	17	b			very high polish all over	77	12:4			E
1561 Pool		pin	bone	17D	b				91	9:4			E
1562 Pool		pin	bone	-	b				60+	:8			C
1563 Acurrach		pin	Cu alloy	loose r-hd spiral-bal				2 coils threaded through head w projection					
1564 Pool		pin	bone	-	b			length of gradually tapering sh, polished	107+	7:			
1565 Balinaby, Islay		pin	Cu alloy	loose r-hd plain-loop				sh slightly splayed					E
1566 Reay		pin	Cu alloy	loose r-hd plain-loop				ring has lozenge cross-section					E
1567 Reay		pin	Cu alloy	loose r-hd plain-loop				crude cross design					E



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1568	Carn-nan-Bharraich	pin	Cu alloy	loose r-hd	plain-loop								E
1569	Ardkinish, Colonsay	pin	Cu alloy	loose r-hd	plain-loop			lower sh has rectilinear cross sect w double inc 1					E
1570	Machrins, Colonsay	pin	Cu alloy	loose r-hd	plain-loop				96	21:			E
1571	Brough of Birsay	pin	Cu alloy	loose r-hd	plain-loop			ring slightly expanded on either side of head					E
1572	Doone Hill	pin	Cu alloy	loose r-hd	plain-loop								E
1573	Kirkcudbright	pin	Cu alloy	loose r-hd	plain-loop								E
1574	Skaill	pin	silver	loose r-hd	plain-poly	incised spiral-like design		ring of lozenge cross-section w concentric grooving very corroded					E
1575	Jarlshof	pin	Cu alloy	loose r-hd	plain-poly								E
1576	Loch Bornich, S Uist	pin	Cu alloy	loose r-hd	plain-poly	crude dot ornament							E
1577	Culbin Sands	pin	Cu alloy	loose r-hd	plain-poly	traces of dot ornament							E
1578	Lochlee Crannog	pin	Cu alloy	loose r-hd	plain-poly	faint traces angular quatrefoil & saltire dot design		sh bent at tip					E
1579	Howe	pin	Cu alloy	misc	-				58	23:3			
1580	Doone Hill	pin	Cu alloy	loose r-hd	stir-crut	undec		repousse disc, w tapering 'U'-shaped sh					E
1581	Carn-nan-Bharraich	pin	Cu alloy	loose r-hd	knob-loop			ring has 3 knobbed projections					E
1582	Doone Hill	pin	Cu alloy	loose r-hd	-bal	traces dot pattern on one side head crowned with small perforated projection							E
1583	Kiloran Bay	pin	Cu alloy	loose r-hd	-poly								E
1584	Skaill	pin	silver	loose r-hd	-needle								E
1585	Culbin Sands	pin	Cu alloy	loose r-hd	-crut	undec							E
1586	Knap, Lewis	pin	Cu alloy	loose r-hd	-crut	undec							E
1587	Dun Olabhat	pin?	mould	?	?			?pin shaft or linear plate w raised spine					
1588	Dun Olabhat	pin?	mould	?	?			?pin sh tapering	21+	13			
1589	Dun Olabhat	pin	mould	proj r-hd	hand-pin	3 beads over semi-circular plate			33+	14:4			D

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D CLASS
1590 Barra or S Uist		pin	bone	13	c			3 segments	69+	5:5		E
1591 Barra or S Uist		pin?	bone	01A	a			top of head	37	4.5		C E
1592 unprov		pin	bone	06D	c			faceted	74	6:4		C
1593 Barra or S Uist		pin	ant?	08B?	c			v small and fine	35	3.5:2.5		C
1594 unprov		pin	bone	09A?	-			tip of sh points forwards	58	7:3.5		C
1595 unprov		pin	Cu alloy	spiral	-				64	3.5:1.5		E
1596 unprov		pin	Cu alloy	20	c	2 r&d on long sides, one on ends		r&d on ends no deeper than on sides	102	7:4		E
1597 unprov		pin	bone	08B	e				56	5:3.5		C
1598 unprov		pin	bone	34	b*	top of hd has 4 facets, w rough radial grooves on top		rilling around 3/4 of upper sh	85	7:E		
1599 Vallaquie, N Uist		pin	Cu alloy	Fowler E	proto-zoo	enamel inset, originally yellow		perforated tag on end of head			78+	A
1600 Freswick Links		pin	bone	-	a			splinter of long bone	54+	5.5		
1601 Freswick Links		pin	bone	-	-			splinter long bone, natural articulation, polished point	74	10:4.5		
1602 Freswick Links		pin	bone	08A	c			well polished	51+	5:3		C
1603 Freswick Links		pin	bone	06B	e			used with obvious knife marks on head	46	5.5:3.5		C
1604 Freswick Links		pin	bone	03E	e				49	5:3		C
1605 Freswick Links		pin	bone	11B*	e*	cross swelling-cum-hip w hatching on rough encircling pear shaped lines			55	6.5:4		C
1606 Freswick Links		pin	bone	26*	-	thistle head reel on top elliptical rounded head w small sub-triangular knob on top		slight collar under head	18+	6:2.5		C
1607 Freswick Links		pin?	ant?	16C?	-				49+	7:5		E
1608 Freswick Links		pin	bone	08B	b			sub-circular head w cancellous tissue at top	116	8.5:5		C E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1609	Freswick Links	pin	bone	16A	-			unfinished. Beginnings of perforation on one side of bone	158	17:			E
1610	Freswick Links	comb	ant	comp	d-s			e-pl w perf, Fe riv, graduated t	25+	9/20	53	3+	05
1611	Freswick Links	comb	ant	comp	d-s			t shorter or more worn on one side	17+	6/13	46	4.5+	05/06?
1612	Freswick Links	comb	ant	comp	d-s			slightly convex end. Fe riv	17+	6/8	40	3.5+	05?
1613	Freswick Links	comb	ant	comp	d-s			e-pl w 2 large perf & 2 longit	17+	4/8			
1614	Freswick Links	comb	ant	comp	d-s			small perf. T grad e-pl					
1615	Freswick Links	comb	ant	comp	s-s			t-pl. Fe staining	21+	15/19	24+	4+	
1616	Freswick Links	comb	ant	comp	s-s			t-pl. Fe staining	16+	11/16	43	3+	
1617	Freswick Links	comb	ant	comp	s-s			e-pl frag, Fe staining, no grad, end sp	16+	4/7	22+	3+	
1618	Freswick Links	pin	Cu alloy	spiral	-			t-pl w expanding back, prob Norse. Rivet hole	14+	7/13	29+	3+	
1619	Freswick Links	pin	Cu alloy	loose r-hd plain-poly decorated on all sides with dots, 4 on main facets, 1 others				4 x misc frag combs w staining from Fe rivets numerous short examples	-		-	-	E
1620	Freswick Links	pin	Cu alloy	09C	c*			ring decorated with dots, some joined by faint l	50+	11:3			E
1621	Bu	pin?	bone	01?	11:5			circ sect above waist, polygonal below	39	5:2.5			C
1622	Bu	pin?	bone	-	-			pointed end of curved bodkin/pin	105+				C E
1623	Bu	pin	bone	01A	a			point of pin/needle	28+	:5			
1624	Crosskirk	pin	Cu alloy	088*	b*			oval cross-section head	58+	7			C E
1625	Crosskirk	comb	ant	s-p	s-s			diagonal cross-hatching cross-hatch between encircling ing around head	63	6:2.5			C
								dec on both sides w rld on either side of a horizontal line					
								embellished w ring above, 19-24 mm diam	33+	7/32	59	7	03



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1626	Crosskirk	pin	Cu alloy	?	-			leaded bronze, 3 frag. Square cross section	87+	2.5			
1627	Crosskirk	pin	Cu alloy	?	?			frag shaft, leaded bronze	12+				
1628	Crosskirk	pin	Cu alloy	proj r-hd	wire?			damaged head and sh. Tin bronze	34+	10:			A C?
1629	Crosskirk	pin	Cu alloy	20?	-			Fairhurst suggests corroded crutch head	82+	20:			E
1630	Crosskirk	pin	Cu alloy	?	?			badly corroded pin ?					
1631	Crosskirk	pin	Cu alloy	?	?			traces of a pin sh					
1632	Crosskirk	pin	Cu alloy	proj r-hd	-			incomplete	60+	9:			A C?
1633	Crosskirk	pin	Cu alloy	Fowler E	proto-zoo	bulbous head w small cup-shaped depression	traces of parallel lines 20mm below the head	bent sh	105				A
1634	Balevullin	comb	ant	s-p	s-s		top of back dec with feather design	thick, short teeth, straight back. 2 horiz l on top edge	33+	10/26	15+	4.5	00
1635	Balevullin	comb	ant	s-p	s-s			conc back, sp at end. Short stumpy teeth, rect in plan, V sec	48+	12/39	16+	3.5	00
1636	Balevullin	comb	ant	s-p	s-s		horiz groove above teeth, cross-hatching over	worn and polished conc t. Straight back	47+	14/33	17	4	00
1637	Balevullin	comb	ant	comp	?		double chevron along length	poss length of c-pl, Fe staining around rivet hole	31+		7.5+	4+	
1638	Balevullin	comb	ant	comp	?		double chevrons along length	as for B.1914.499/1	46+		8+	4+	
1639	Balevullin	comb	ant	comp	?		shallow diag notches down onw side	much worn ?t-pl w riv but no t	32+	-	16+	3.5+	
1640	Balevullin	pin	bone	loose r-hd *			2 encircling lines above waist, fl below carved w interlace	sh circ sect above	72+	6.5:5			E
1641	Balevullin	pin	bone	13	b			4 segments. Fl sect sh	56	4:3.5			E
1642	Balevullin	pin	bone	03E?	a			3 angular segments	70	7:3.5			C
1643	Balevullin	pin?	bone	33	-			unfinished needle, perf not complete	67	5:4			
1644	Balevullin	pin	bone	-	-			NL					
1645	Balevullin	pin	bone	-	-			NL					

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1646	Scotland?	pin	bone	04	a			crude form. Fl disc head, much polished	88	7:6			C
1647	Balevullin	pin	bone	-	-			unfinished perf pin w tri head	87+	9:7			
1648	Leckie	pin	bone	15B	-			hole for sh not complete. Core packed w Fe wedges	25+		23	19	D
1649	Leckie	pin	Cu alloy	prof r-hd	wire			thin wire of equal width. Oval ring	67	15:2			A C?
1650	Leckie	pin	Cu alloy	prof r-hd	cast			v thick head, poss cast. Small-holed ring. Tri cross-section	64+	9.5:3.5			A C?
1651	Balevullin	pin	Cu alloy	loose r-hd	stir-crut		dec w dot orn	crutch head, pierced for stirrup ring					E
1652	Culbin	pin	Cu alloy	08B	b?			flat, thin nail head	89+	11:4			C E
1653	Culbin	pin	Cu alloy	04	a			78B. Crude nail head beaten from sh	75+	6:3			E
1654	Culbin	pin	Cu alloy	crook-hd	-			large crook head with flat section	47+	17:4.5			A
1655	Tiree	pin	Cu alloy	spiral	-				60	3.5:1.5			E
1656	Tiree	pin	Cu alloy	lobed	c		top 3 sides impressed w r&d producing lobed effect		76	4:3.5			E
1657	Hebrides	pin	Cu alloy	30	b				70	3:2.5			E
1658	Hebrides	pin	Cu alloy	prof r-hd	wire			lozenge sect head not examined	72	12:3.5			A C?
1659	Lingro	?	mould	-	-			not examined					
1660	Orkney or Shetland	?	mould	-	-			long, thin point	57+		3		
1661	Howe	pin	Cu-alloy	-	-								
1662	Sheep Hill Fort	?	mould	-	-			long comb. Conv c-pl, 3 x Fe riv, no grad, but small sp at end	83+	42/69	42	10	
1663	Scotland?	comb	ant	comp	d-s								
1664	Balevullin	pin	Cu alloy	r-hd	-								D
1665	Balevullin	pin	Cu alloy	r-hd	wire			small, lozenge section ring	75	12:3	12	3	D
1666	Balevullin	pin	Cu alloy	loose r-hd	-crut		3 dots on each long face of head		55+	4	9	4	E
1667	Balevullin	pin	Cu alloy	sm dome	c			no radial grooves. Collar under head	53+	6:4			E
1668	Balevullin	pin	Cu alloy	mush	c			radial grooves. Collar	65	7:4			E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1669	Balevullin	pin	Cu alloy	mush	c*	radial grooves and chevrons over central r&d single encircling w 3 surrounding	under head 1 of		82	6:4			E
1670	Balevullin	pin	Cu alloy	07	c*			facets beaten into shape. Sh milled along each facet	95	5:4.5			E
1671	Balevullin	pin	Cu alloy	01A	a			rect sect. Long edges outlined w inc 1 on each side	72	3.5			C E
1672	Balevullin	pin	Cu alloy	30*	c*	2 notches on either side top of head	1 of inc crosses down sh	projecting collar	70+	4:3			E
1673	Balevullin	pin	Cu alloy	30	c*	'star' of 4 sh slightly transecting faceted w tool 1 on top of marks visible as head			101	5:3.5			E
1674	Balevullin	pin	Cu alloy	30	c			slight collar	cl00	4:4			E
1675	Balevullin	pin	Cu alloy	misc bent	-			?folded over head. c60 Sh only slight and relatively short	c60			2.5	
1676	Balevullin	pin	Cu alloy	09 oval	b			transversely flattened oval	c85	10:3			C E
1677	Scotland?	comb	ant	comp	d-s		c-pl dec w 3 rows double r&d	disc head wide conv c-pl, 4 x Fe riv, t grad, sp dec w r&d	89	55/79	44+	10	05
1678	Peterkirk, Sanday	comb	ant	comp	d-s		end space dec w 3 r&d arranged around perf	e-pl w grad t. Staining from Fe rivet	24+	11/18	52	3+	05
1679		comb	ant	comp	d-s			single t-pl w diff thick t. Fe riv	18+	8/17 7/12	27+	3.5+	01/11 ?
1680		comb	ant	comp	d-s			t-pl w diff thick t. Fe riv. Larger than B.1914.492/3	17+	8/17	40	3.5+	01/11 ?
1681		comb	ant	comp	d-s			e-pl w diff thickness t. Fe riv. T grad	14+	5/15 5/7	43	3.5+	05?
1682	Dun Mor Vaul	pin	Cu alloy	proj r-hd	-			SF 334.GJ	45?+	:2.5			A C?
1683	Dun Mor Vaul	pin	Cu alloy	proj r-hd	-			ring only: SF 417.JM					A C?
1684	Dun Mor Vaul	pin	Cu alloy	proj r-hd	-			diamond-shaped cross section					A C?
1685	Dun Mor Vaul	pin	Cu alloy	?	?			pin sh only	41	:2			
1686	Dun Mor Vaul	pin	Cu alloy	?	?			pin sh frag	19+	:2			
1687	Dun Mor Vaul	pin	Cu alloy	?	?			pin sh frag	21+				
1688	Dun Mor Vaul	pin	Cu alloy	?	?			pin sh frag	105	62/88	29	12	08 =
1689	Dun Mor Vaul	comb	ant	comp	d-s		c-pl w horiz l, diag & vertic grooves on end	deep conv c-pl, orig 4 Fe riv, 1 Cu alloy repair. T grad, sp					B



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1690	Dun Beg Vaul	pin	Cu alloy	proj r-hd? wire					83	14:3			A C?
1691	Dun Ardtreck	pin	Cu alloy	proj r-hd? -									A C?
1692	Dun Lagaidh	pin	Cu alloy	proj r-hd? -				thick circ sect wire, bent	83+	18:3			A C?
1693	Dun Lagaidh	pin	bone	13 a?				3 segments	98	8:5			E
1694	Quoybanks, St Ola	pin	Cu alloy	misc bent* -				rect sect upper sh and hd. Circ sect lower sh, point trans fl	123	23:5			E
1695	Skaill, Sandwick	pin	Cu alloy	open disc* b*				line of upper sh dec w row median dots of saltires on crook					
								edges of 2 encirc 1 around head framed waist by raised ridge. Centre of billets	70	8:3			C E?
1696	Ardnamurchan, Drymen	pin	Cu alloy	spiral	-			misc pins					E
1697	Westray	comb	ant	comp	s-s			- at least 4 Fe riv. T grad	55+	29/55	38	5+	
1698	Westray	comb	ant	comp	s-s			t-pl. Fe riv	24+	13/24	45	3+	
1699	Balevullin	comb	ant	comp	d-s			central row 10 Cu alloy rivets. Conv e-pl. No grad but sp	98	70/77	40	10	09
1700	Dun Mor Vaul	pin-imp	pottery	proj r-hd wire				LH twist		17:2.5			A C?
1701	Dun Mor Vaul	pin-imp	pottery	proj r-hd wire				round wire w LH twist		14.5:2			A C?
1702	Dun Mor Vaul	pin-imp	pottery	proj r-hd -				small oval head 16, pl XIa, SF 283.FP		9.5:2			A C?
1703	Dun Mor Vaul	pin-imp	pottery	proj r-hd -				small oval ring w LH twist		10:2			A C?
1704	Dun Mor Vaul	pin-imp	pottery	proj r-hd -				sherd w impression of ring part broken					A C?
1705	Dun Mor Vaul	pin-imp	pottery	proj r-hd -				same pot as 1704, but very diff context. ?Mix in sorting					A C?
1706	Clickhimin	pin	bone	12A b				length 2 3/8"					A C E
1707	Clickhimin	pin	bone	? ?				'broken pin shaft'					
1708	Clickhimin	pin	bone	? ?				broken sh 2 1/4" L					
1709	Clickhimin	pin	bone	? ?				'plain bone pin 2 1/4" L					
1710	Clickhimin	pin	bone	01B a				?IC. Not examined					A C
1711	Clickhimin	pin	wood	- -				2 1/4" L					
1712	Clickhimin	pin	wood	01B a?				'thin wooden plain pin'					A C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1713	Clickhimin	pin	wood	06D	c			wooden pin w knob head. 9 1/4" L					C
1714	Clickhimin	pin	bone	15B	-			not examined. 7/8" L					D
1715	Clickhimin	pin	bone	15B	-			not examined. 5/8" L					D
1716	Clickhimin	pin	bone	01A	a			not examined. 5 96 7:					C E
1717	Clickhimin	pin	bone	01A?	a			1/2" L not examined. 3 83+ 5:					C E
1718	Clickhimin	pin	bone	?	-			3/4" L not examined. 1 137 5:					
1719	Clickhimin	pin	bone	01A	a			3/8" L short and stumpy - 55 4.5 not examined. Broken off at both ends					C E
1720	Clickhimin	pin	bone	?	?			pin sh broken. Not 56 6: examined. Terminates in chisel point					
1721	Clickhimin	pin	bone	01A	a			not examined. 3 35 4.5 1/4" L. Terminates in blunt point					C E
1722	Clickhimin	pin	bone	?	-			'round-headed pin'. 2 1/4" L					
1723	Clickhimin	pin	bone	?	?			'round-headed pin' - not examined. 2" L					
1724	Clickhimin	pin	Cu alloy	proj r-hd?	-			proj or true r-hd?. Not examined. 5/8: diam					A C?
1725	Clickhimin	pin	Cu alloy	proj r-hd	wire			head missing. Not examined. 3 5/8" L					A C?
1726	Clickhimin	pin	bone	01A	-			obliquely cut flat head. Not examined. 2 3/4" L					C E
1727	Clickhimin	pin	Cu alloy	Fowler E	-			frag sh of twisted square section. 2 1/4" L					
1728	Clickhimin	pin	Cu alloy	Fowler E	-			sh w twisted decoration. 5 3/8" L					A
1729	Freswick Links	pin	bone	-	-			not examined					
1730	Clickhimin	pin	Cu alloy	-	-			'bronze pin'. Not examined. 3" L					C
1731	Clickhimin	pin	bone	09A	c?			not examined. 2 1/2" L					
1732	Clickhimin	pin	Cu alloy	08A*?				78B*. Not examined					C

cross-hatch  
ed lines  
[stamped  
design?]

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1733	Gurness	pin	bone	?	-			not traced, pin at right shoulder of female V grave VII					
1734	Gurness	pin	bone	-	-			not traced by Hedges					
1735	Gurness	pin	Cu alloy	?	-			not traced by Hedges					
1736	Gurness	pin	mould	proj r-hd	semi-bead			1 complete valve, for fronts 2 pins, larger w 3 beads, & 2?	33+	7:			A
1737	Gurness	pin	mould	proj r-hd	-			valve for back of pair of pins	48	8:			A C?
1738	Gurness	pin	mould	proj r-hd	-			valve for casting back pair of pins. Similar to GA 34.68		-			A C?
1739	Gurness	pin	mould	proj r-hd	hand-pin			h-pin w 3 fingers. Part of mould					D
1740	Gurness	pin	mould	?	-			moulds for front and back of a pin sh, head missing	47+	:5			
1741	Gurness	pin	mould	?	-			parts mould for sh of pin					
1742	Gurness	pin	mould	?	?			part of back valve for sh of pin					
1743	Gurness	pin	mould	?	?			frag back valve for sh of pin					
1744	Plate Hill	pin	Cu alloy	?	?			appearance of being much twisted. Sh expands slightly	5+	:4			
1745	Oronsay?	pin	Cu alloy	loose r-hd	plain-loop			round section ring	117	20:4			E
1746	Coll	pin	Cu alloy	24B	b*			collar above and below hd. Sh below waist faceted, circ over	47	5:2.5			C
1747	Coll	pin	Cu alloy	06A	b			v small hd, long, thin sh	45	2.5:1			C
1748	Coll	pin	Cu alloy	06A	b			v small head, very fine	32	1.5:1			C
1749	Culbin Sands	pin/peg	Cu alloy	09C	-			very short. Amongst collection of misc plate and scrap	19+	4:2			C
1750	Drinmore	comb	ant	comp	s-s			wide conv c-pl w 'zoo' ends. 5 x Fe riv	202		38	13	07
1751	Freswick	comb	ant	comp	s-s			t grad, perf on sp at one end, 23 Cu alloy riv, thin rect c-p	160	114/141	25	10	09



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1752 Drimore		pin?	bone	-	-			?pin sh	34+	3:5			
1753 Drimore		pin	bone?	01A	-			trans fl	51+	6.5:5			C E
1754 Culbin Sands		pin	Cu alloy	spiral	-			n x varying sizes spiral, incl 1 v fine nail head					E
1755 Corraig Sands, Tiree		pin	Cu alloy	spiral	-			n x misc spiral, incl 1 fine nail head					E
1756 Tiree		pin	Cu alloy	misc*	b*		3 encirc 1 top sh dec w below continuous spiral, conical hd. zig-zag 1 below Small vert nicks junction hd/sh	sub-rect sect sh. NB apparent repair to sh w rivets	81	5.5:3			
1757 W Isles		pin	Cu alloy	spiral-out -	-			misc Cu alloy obj incl spiral pins. See no 1758	22+	9:2			E
1758		pin	Cu alloy	spiral-out -	-			sh = strip metal bent so long sides join, split to from head	17+	11:2			E
1759 W Isles		pin	Cu alloy	misc*	c		vertical 1 on hd	rect fl hd w collar under	76	4:3			
1760 W Isles		pin	Cu alloy	08B*	c		central hole from which 1 radiate		83	6.5:3.5			C
1761 W Isles		pin	Cu alloy	07	c*		longitudinal 'milled' lines	polygonal head beaten into shape cf Irish pins	93	5:4.5			E
1762 W Isles		pin	Cu alloy	lobed-	c		central lobe, 4 surrounded 1. R&d at bottom ng, each w dot		97	7:5			E
1763 Balevullin Sands, Tiree		pin	Cu alloy	proj r-hd	degen ibex			cruciform head, expanded arms w amber settings each spiral of rect cross section	77	17:3.5			D
1764 W Isles		pin	Cu alloy	spiral-out -	-				78	10:3			E
1765 W Isles		pin	Cu alloy	loose r-hd -bal					105+	4			E
1766 W of Scot		pin	Cu alloy	loose r-hd kid-poly			inc 1 and crude quatrefoil interlace		127+	14:4			E
1767 W Isles		pin	Cu alloy	misc*	c*		punched spiralling 1	beaten longit w oblique 1 giving herringbone effect	74	4:3			
1768 W Isles		pin	Cu alloy	lobed	b*		irreg 1 punched on top	3 vert 1 of 5 oblique 1 stamped below hd	87	6:3.5			E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1769 W Isles		pin	Cu alloy	26	-			NB large head. Cf Roman pins 2 x deteriorated lengths sh	27+	9:3			C
1770 W Isles		pin	Cu alloy	-	-								
1771 W Isles		pin	Cu alloy	06D*	b?	dec all over w random arrangement dots			41+	4:5.4			C
1772 W Isles		pin	Cu alloy	07*	-	facets dec w at least 2 oblique transecting 1		slight collar under	11+	7:			E
1773 W Isles		pin	Cu alloy	25	-			not examined	27+	7:2			E
1774 unknown		pin	Cu alloy	swans neck	-			true ring-head.					A
1775 Sleat, Sasaig, Skye		pin	Cu alloy	r-hd	-			Not examined					D
1776 unknown		pin	Cu alloy	proj r-hd	-			r-hd, only slightly projecting. Not examined	c 50				A C?
1777 Cornaig, Tiree		pin	bone	12	-			naturally modified articulation of ?metapoidal	65	12:5			A C E
1778 Drimore		pin	ant?	16D	b				97	13:5			E
1779 Drimore		pin	bone	08B*	b	irreg shaped hd w 5 irreg disposed dots drilled onto top			97	10:5			C
1780 Drimore		pin	ant	08A	c			roughly shaped, and little polished	75	9:5			E
1781 Brough of Birsay		pin	bone	12	-			v crudely formed	87	10:			A C E
1782 Brough of Birsay		pin	bone	33	e?			?roughout for hipped pin	42	18:			C
1783 Brough of Birsay		comb	ant	comp	s-s?			t-pl	20+		30	3+	07/08
1785 Brough of Birsay		pin	Cu alloy	loose r-hd	-crut			head perpendicular to axis of shaft	38+				E
1786 Kerrera, Lorn		pin	bone	14A	-	rfd		not examined					C
1787 Jonathan's Cave, Weemys		pin	bone	-	-			not examined.					C
1788 Jonathan's Cave, Weemys		pin	bone	11A	c?			no further details	3"				
1789 Freswick Links		pin	bone	708	-			'raquet head	0.8	3"			
1790 Newark Broch		pin	bone	-	-			x 0.6" and sq sectioned sh'					
1791 Kell Cave		pin	iron	misc	-								

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1792 Keil Cave		pin	iron	misc bent	-			straight sh	1.7"				
1793 Keil Cave		comb	cet	comp	S-S			central t-pl w rivet holes. Back expands	.65" 8/	1.2"			07/08 ?
1794 Keil Cave		pin	bone?	34	-			rect perf hd, round sh, polished by use	2.7"				
1795 Dundurn		pin?	bone	14C	b?	articular end represents open mouthed beast w eye		proximal end of sheep ulna, flange perf. Little polish	90	20	15	C	
1796 Dundurn		pin?	bone	?	b			?hd originally wedge-shaped					
1797 Dundurn		pin?		misc	-	swirling knobs on domed swirling ... background sub-ovular ?disc w 4 equally disposed ?bosses	15	knobbed boss w hollow under					
1798 Dundurn		pin?	mould	misc	-			much abraded & weathered surface					
1799 Sithean an Altair, Vallay		pin	bone	-	-			several rude pins known only from MSS. Sh appears short in					?C
1800 Lingro		pin		07	?c	perforated		proportion to head pins of bone 'slender pin' several					
1801 Ceardach Ruadh		pin	bone	-	-			baluster form	52+	3:2			A
1802 Machair Leathann		pin	Cu alloy	-	-			below head, groups of inc 1					
1803 Ruchna na Traghad		pin	bone	-	-			flat disc hd, sq section sh					A
1804 Pool		pin	Cu alloy	Fowler E	proto-zoo			frag retaining semi-circ polished edge & fine perf					D
1805 Hurley Hawkin		pin	Cu alloy	proj disc	-								
1806 Hurley Hawkin		pin	jet	15	-								
1807 Pool		pin	Cu alloy	loose r-hd stir-crut		diagonal slashing on ring			128	13:4			E
1808 Clatchard Craig		pin	bone	15B	-			found w short pin, broken at one end, 13 mm L, fits exactly			18		D
1809 Howe		pin	Cu alloy	08B inset	-	central depression filled w yellow paste ? to hold dec			13+	16:2			B



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D CLASS
1810	Howe	pin	Cu alloy	proj r-hd	semi-corr	lge bead at base, 2 smaller either side inc 1 dots around widest part of head, central dot on top			50	7.5:2.5		A
1811	Howe	pin	Cu alloy	06B*	c*		2 encirc 1, intermediate ribbing below hd	hd circ in plan, hexagonal in sect	50+			B
1812	Howe	pin	Cu alloy	02	a			long tapering pin w ribbed top, ie many segments.Blob on top	82	3		A B
1813	Howe	pin	Cu alloy	Fowler E	zoo			sq sect sh lower part w irreg anti-clockwise twist	183	3.5:2		A
1814	Clatchard Craig	pin	mould	06B	-	disc on top		back & front valves, found together, 3 or more small pins	17+			C
1815	Clatchard Craig	pin	mould	06B	-			mould for pin sh mould frag for 2 pin sh	29?			C
1816	Clatchard Craig	pin	mould	?	?				7+			
1817	Clatchard Craig	pin	mould	?	?							
1818	Brough of Birsay	pin	bone	06B	e			trans fl	35			C
1819	Brough of Birsay	pin	bone	09B	e			axe/thistle hd	34+			C
1820	Brough of Birsay	pin	bone	08A	c			fractured at perf	45			C
1821	Brough of Birsay	pin	bone	23	?			not examined	77			C
1822	Brough of Birsay	pin	bone	07?	e			not examined	36			C
1823	Brough of Birsay	pin	bone	19A	e			not examined.	41			C
1824	Brough of Birsay	pin	cet?	01?	-			Described as skewer, split & roughly formed	77			C E
1825	Brough of Birsay	pin	ant	16	-			not examined.	128			E
1826	Brough of Birsay	pin	bone	16A	b			Irreg shaped hd not examined.	74			E
1827	Brough of Birsay	pin	bone	01A?	-			'Head set at an angle'				
1828	Jarlshof	comb	ant	comp	s-s			not examined.	66			C E
1829	Brough of Birsay	pin	bone	34	e			'Rough condition' medial horiz panel and occas herringbone patt around rivets				07/08
								not examined. Melon w collar above and below	38			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1830	Brough of Birsay	pin	bone	14A	e			not examined	57				C
1831	Brough of Birsay	pin	bone	14A	e			not examined	53				C
1832	Brough of Birsay	pin	bone	14A	-			not examined	48				C
1833	Brough of Birsay	pin	bone	24B?	e			not examined	43				C
1834	Brough of Birsay	pin	bone	04	e			not examined	42				C
1835	Brough of Birsay	pin	bone	07 collar	C			not examined	42				C
1836	Brough of Birsay	pin	bone	07?	C			not examined	37				C
1837	Brough of Birsay	pin	bone	06B*	C*		inc oblique 2 bands hatching	not examined	60				C
1838	Brough of Birsay	pin	bone	06A*	e		1 inc cross, lozenge pattern on circumferen	not examined	39				C
1839	Brough of Birsay	pin	bone	24A*	e		ce cross and dots	not examined	42				C
1840	Brough of Birsay	pin	bone	19A*	C		single dot on either side, 3 dots around edge of disc	not examined	32				C
1841	Brough of Birsay	pin	bone	06A*	C		triangular ovoid hd w dot in each sector and on top	not examined	31				C
1842	Brough of Birsay	pin	bone	24A*	b		square hd dec w dots	not examined	52				C
1843	Brough of Birsay	pin	bone	24C?	e		5 dots on flat top, ring of dots around circumferen	not examined	55				C
1844	Brough of Birsay	pin	bone	06B*	C*		ce flat top 2 rows dots w dec w dots intersecting 1 on swelling	not examined	51				C
1845	Brough of Birsay	pin	bone	06B*	-		dots, outlined by inc 1	not examined	45+				C
1846	Brough of Birsay	pin	bone	?	C			not examined	55+				E
1847	Brough of Birsay	pin	bone	17C?	b			not examined	44+				E
1848	Brough of Birsay	pin	bone	17B?	b			not examined	60				
1849	Brough of Birsay	pin	bone	?	?			not examined	66				
1850	Brough of Birsay	pin	bone	?	?			not examined	64				C
1851	Brough of Birsay	pin	bone	25	e			not examined	53				C
1852	Brough of Birsay	pin	bone	36	e			not examined	45				C
1853	Brough of Birsay	pin	bone	?	e			not examined	48				C
1854	Brough of Birsay	pin	bone	?	e			not examined	40				C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1855	Brough of Birsay	pin	bone	?	e			not examined	39				C
1856	Brough of Birsay	pin	bone	?	e			not examined	39				C
1857	Brough of Birsay	pin	bone	?	e			not examined	39				C
1858	Brough of Birsay	pin	bone	?	e			not examined	39				C
1859	Brough of Birsay	pin	bone	?	e			not examined	35				C
1860	Brough of Birsay	pin	bone	06A	e			not examined	58				C
1861	Brough of Birsay	pin	bone	06A	e			not examined	56				C
1862	Brough of Birsay	pin	bone	06A	?			not examined	48				C
1863	Brough of Birsay	pin	bone	06A	e			not examined	48				C
1864	Brough of Birsay	pin	bone	06A	e			not examined	53				C
1865	Brough of Birsay	pin	bone	06A	C			not examined	30+				C
1866	Brough of Birsay	pin	bone	06A	C			not examined	55				C
1867	Brough of Birsay	pin	bone	06D	C			not examined	44+				C
1868	Brough of Birsay	pin	bone	24A	e			not examined	45				C
1869	Brough of Birsay	pin	bone	05	C			not examined	35				C
1870	Brough of Birsay	pin	bone	05	e			not examined	45				C
1871	Brough of Birsay	pin	bone	05	e			not examined	45				C
1872	Brough of Birsay	pin	bone	06C	e			not examined	67				C
1873	Brough of Birsay	pin	bone	06C	e			not examined	66				C
1874	Brough of Birsay	pin	bone	06C	e			not examined	54				C
1875	Brough of Birsay	pin	bone	06C	e			not examined	43				C
1876	Brough of Birsay	pin	bone	06C	e			not examined.	44				C
					?			Curved shank					
1877	Brough of Birsay	pin	bone	06C	e			not examined	40				C
1878	Brough of Birsay	pin	bone	06C	e			not examined	40				C
1879	Brough of Birsay	pin	bone	06C	e			not examined	39				C
1880	Brough of Birsay	pin	bone	06C	e			not examined	37				C
1881	Brough of Birsay	pin	bone	24C	e			not examined	47				C
1882	Brough of Birsay	pin	bone	24C	e			not examined	40				C
1883	Brough of Birsay	pin	bone	?	?			not examined	37				C
1884	Brough of Birsay	pin	bone	06D	?			not examined	35				C
1885	Brough of Birsay	pin	bone	19D	?			not examined	60+				C
1886	Brough of Birsay	pin	bone	?	?			not examined	26+				C
								narrow incised band w oblique strokes					
1887	Brough of Birsay	pin	bone	34	b			not examined	114				E
1888	Brough of Birsay	pin	bone	13	b			not examined	95				E
1889	Brough of Birsay	pin	bone	17 misc	-			not examined	72+				E
1890	Brough of Birsay	pin	bone	17 misc	-			not examined	62+				E
1891	Brough of Birsay	pin	bone	34	-			not examined	68+				A C D
1892	Brough of Birsay	pin	bone	12B	-			not examined	110				E
1893	Brough of Birsay	pin	bone	12B	-			not examined	87+				A C D
1894	Brough of Birsay	pin	bone	12B	-			not examined	92				E
1895	Brough of Birsay	pin	ant	17A	-			not examined	93+				E
1896	Brough of Birsay	pin	bone	17A	-			not examined	90				E
1897	Brough of Birsay	pin	bone	12B	-			not examined	83				A C D



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1898	Brough of Birsay	pin	bone	12B	-			not examined	87				A C D E
1899	Brough of Birsay	pin	bone	12A	-			not examined	98				A C D E
1900	Brough of Birsay	pin	bone	16E	-			not examined	123				E
1901	Brough of Birsay	pin	bone	16A	-			not examined	80+				E
1902	Brough of Birsay	pin	bone	16A	-			not examined	105				E
1903	Brough of Birsay	pin	bone	16E	-			not examined	108				E
1904	Brough of Birsay	pin	bone	16B	-			not examined	90				E
1905	Brough of Birsay	pin	ant	16C	-			not examined	60+				E
1906	Brough of Birsay	pin	bone	16A	-			not examined	97				E
1907	Brough of Birsay	pin	bone	16A	-			not examined	105				E
1908	Brough of Birsay	pin	bone	17A	-			not examined	160				E
1909	Brough of Birsay	pin	bone	16D	-			not examined	35+				E
1910	Brough of Birsay	pin	bone	16D	-			not examined	35+				E
1911	Brough of Birsay	pin	ant	16D	-			not examined	50+				E
1912	Brough of Birsay	pin	ant	16D	-			not examined	28+				E
1913	Brough of Birsay	pin	bone	16D	-			not examined	44+				E
1914	Brough of Birsay	pin	bone	16D	-			not examined	74+				E
1915	Brough of Birsay	pin	bone	08B	b			not examined	117				E
1916	Brough of Birsay	pin	bone	08B	-			not examined	40+				C
1917	Brough of Birsay	pin	ant	08B	c			not examined	58				C
1918	Brough of Birsay	pin	ant	08B	-			not examined	40+				E
1919	Brough of Birsay	pin	bone	08B	c			not examined	42+				C
1920	Brough of Birsay	pin	ant	08B	c			not examined	115				E
1921	Brough of Birsay	pin	bone	08B	-			not examined	30+				C
1922	Brough of Birsay	pin	bone	15B	-			not examined	24+				D
1923	Brough of Birsay	pin	Cu alloy	09C	c			not examined	30				C
1924	Brough of Birsay	pin	Cu alloy	09C?	?			not examined	50+				E?E
1925	Brough of Birsay	pin	Cu alloy	wheel-hd	-			not examined	38+				C? E?
								sq sect sh			23		
1926	Brough of Birsay	pin	Cu alloy	loose r-hd plain-loop				not examined. Point of sh flattened	77				E
1927	Brough of Birsay	pin	Cu alloy	kid r skeu -				not examined	52				E
1928	Brough of Birsay	pin	Cu alloy	20*	c			not examined	76				E
1929	Brough of Birsay	pin	Cu alloy	1oz fillet b				not examined	85				E
1930	Brough of Birsay	pin	Cu alloy	25	b			not examined. Fl hd	68				E
1931	Brough of Birsay	pin	Cu alloy	misc*	b			not examined. Roman parallels	110				

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1932	Brough of Birsay	pin	Cu alloy	loz fillet b		Ag inlaid design around central perf. Inc 1 borders opp side		not examined. Transverse mouldings on edges	120				E
1933	Sithean Mor	pin	Cu alloy	kid r skeu b		inc chevrons on 'ring' terminating in tri motifs: bramble			960				E
1934	Whithorn	pin	ant	11A	c?			flat hd. Bulb below consists of 8 elongated projections hollow bone. Much polished. Unique	23+	5:			E
1935	Whithorn	pin	bone	08B*	c	four projecting knobs below the hd			43+	6:4			C
1936	Whithorn	pin	bone	12B	a			well-formed hd	92+	13:			A C D E E E
1937	Whithorn	pin	ant	06B	c					6:4			
1938	Whithorn	pin	Cu alloy	lobed	-	triskele, relatively simple							
1939	Whithorn	pin	Cu alloy	09A	c			small hd, slightly irreg shape		6:2.5			C
1940	Whithorn	pin	Cu alloy	lobed	c			cf Garry Iodrach. Sh bent	82+	4.5:4			E
1941	Whithorn	pin	Cu alloy	25	-			bent sh. Head beaten into shape	13+	8:4			E
1942	Whithorn	pin	Cu alloy	27?	c			bent sh	91+	5:4			E
1943	Whithorn	pin	Cu alloy	-	b			bent sh	56+	:3			C E
1944	Whithorn	pin	Cu alloy	01A	-			bent sh	87	4			E
1945	Whithorn	pin	Cu alloy	25	c			unclean, but no sign radiating grooves	83	8:4.5			
1946	Whithorn	pin	Cu alloy	misc	c			square plate hd. Gentle curve to sh	84	4.5:3.5			C
1947	Whithorn	pin	Cu alloy	06A?	c			length of curved sh	64+	5.5:5			
1948	Whithorn	pin	Cu alloy	-	c?				61+				
1949	Whithorn	pin	Cu alloy	lobed	c	vert 1 of dots immed below hd			86	6.5:4.5			E
1950	Whithorn	pin	Cu alloy	lobed*	c	horiz and vert 1, lower horiz 1 encircling		poss quite short. Circ sect becomes rect	49?+	4:3			E

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1951	Whithorn	pin	Cu alloy	lobed*	c	v ornate. Divides into 4 w 'basketwork'			78	5.5:4			E
1952	Whithorn	pin	Cu alloy	20	c	rect sides outlined above & below, vert l inbetween		fillet undec. Sides milled	84 101	5.5:3 7.3:5			E E
1955	Whithorn	pin	Cu alloy	discfillet tri fill	b c			straight tip tip bent. Transversely fl fillet sh bent	72 71+	7:3 5:3			E E
1956	Whithorn	pin	Cu alloy	lobed*	c	elegant triskele pentagonal hd			74+	5:3.5			E
1957	Whithorn	pin	Cu alloy	20?	c			poss loose-ring pin - holes on ends deeper than sides	82+	8:4			E
1958	Whithorn	pin	Cu alloy	lobed*	c	similar to 1956, but no incised dec at top of sh			76	4.5:4			E
1959	Whithorn	pin	Cu alloy	mush	c			bent sh. Very small tri hd	72+	7:3.5			E
1960	Whithorn	pin	Cu alloy	09F	c				58+	4:3			C E
1961	Dundurn	pin	iron	09F	b			NB decoration on base fragment.	38	8:2.5			
1962	Dundurn	pin	iron	06A?	b			Dark grey steatic ware	46+	5: 12:			
1963	Clickhimin	pin-imp	pottery	proj r-hd	wire?								
1964	Clickhimin	pin-imp	pottery	proj r-hd	wire?								
1965	Brough of Birsay	pin	mould	misc	-			cordon, heavy neckband and everted rim trans fl, v unusual symmetrical ?bird profiles not examined. V short stumpy shafts, perhaps not pins not examined. Multiple mould, similar pins as HB.328		11: cl4:			
1966	Brough of Birsay	pin?	mould	misc	-								
1967	Brough of Birsay	pin?	mould	misc	-								



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
1968	Brough of Birsay	pin	mould	14A	-			not examined		8:			
1969	Brough of Birsay	pin	mould	24A 26	-			not examined. Multiple mould		5: 6:			
1970	Brough of Birsay	pin	mould	24A 24A	-			not examined. Multiple mould					
1971	Brough of Birsay	pin	mould	-	-			not examined. Multiple mould, incomplete, shanks only					
1972	Brough of Birsay	pin	mould	-	-			not examined. Single mould, shank only					
1973	Brough of Birsay	pin	mould	-	-			not examined. 13 misc mould frag, single & multiple twisted splinter					
1974	Loch na Berie	pin	bone	32	-			much polished tip	43+			6	
1975	Loch na Berie	pin	bone	04	-			fl section.	15+	5:3			
1976	Loch na Berie	pin	bone	-	b?			Slightly expanding neck	36+				
1977	Loch na Berie	pin	ant?	34	c			lightly incised lines encircle waist	51	5.5:4			
1978	Loch na Berie	pin	bone	-	c*			v short	36+	:3.5			
1979	Loch na Berie	pin	bone	01B	a			hip, but coarse, fl section	30	:3.5			
1980	Loch na Berie	pin	ant	08A	b			bulb-shaped hd	49	5.5:3.5			
1981	Loch na Berie	pin	bone	09?A	e			sq sect hd, crudely cut	62	10:5.5			
1982	Loch na Berie	pin	ant?	34	c			v lge and crude	39	4:3			
1983	Loch na Berie	pin	bone	08A	c			v crudely cut sh	48	5.5:3			
1984	Loch na Berie	pin	ant	08A	-			good polish	38+	9.5:6			
1985	Loch na Berie	pin	bone	08A	-			pinched neck, cf	44+	5:4			
1986	Loch na Berie	pin	bone	08A	b			149. Decoration uncertain	51+	6.5:4			
1987	Loch na Berie	pin	bone	28*	c				40	5:4			
1988	Loch na Berie	pin	bone	-	b								
1989	Loch na Berie	pin	bone	12B	-			rounded crutch head	38+	:4.5			
1990	Loch na Berie	pin	bone	-	b?			fine and polished	45+	10:3			
1991	Loch na Berie	pin	bone	-	c			much polished	31+	:4.5			
1992	Loch na Berie	pin	bone	12D	-			3 x incised lines around waist	30+	:3			
1993	Loch na Berie	pin	bone	08A	b				61+	5.5:3.5			
1994	Loch na Berie	pin	Cu alloy	-	c*				61	7:4			
1995	Loch na Berie	comb	ant	comp	d-s			c-pl & e-pl. Deep bevelled c-pl w Fe riv	55+	:3			
									34+	co/co			05-08
													?

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D CLASS
1996	Loch na Berie	comb	ant	comp	d-s			t-pl only	13+	7/13	21+	
1997	Loch na Berie	comb	ant	comp	d-s			perf e-pl w slightly conc end and grad t, but no e-sp	16+	co/co	22+	05?
1998	Loch na Berie	comb	ant	comp	d-s		double r&d	shallow c-pl. Bevelled sect not examined. Duignan (1973) class Ib examined from a photograph. Assoc w plain weave fabric	17+	-	17+	
1999	Traprain Law	pin	Ag	proj r-hd	hand-pin							
2000	Boysack Mills	pin	iron	proj r-hd	wire				77	15:		
2001	Talnotrie	pin	Ag	-	-			not examined	49+	5:2.5		F
2002	Pool	pin	Cu alloy	Fowler E	proto-zoo			hd broken	50+			A
2003	Dundurn	pin	iron	-	b				61			C
2004	Freswick Links	pin	Cu-alloy	08B	c*							
2005	a Cheardach Mhor	pin	bone	15								N
2006	Freswick Links	pin	Cu-alloy	04	c			not examined	113		31	5
2007	Howe	comb	ant	s-p	s-s	horiz 1 and cross-hatch ing one side, chevron on opp side rounded perf back		complete. Perf one end, t do not grad	47	coarse		6
2008	Broch of Burgar	comb	silver	s-p	s-s			lost, but description best fits group 04	-	?	-	-
2009	Brough of Birsay	comb	ant	comp	s-s	2 perf		t-pl & c-pl, Fe riv, conv sect	62+	?		04
2010	Brough of Birsay	comb	ant	comp	s-s		inc oblique opposing 1 & r&d	c-pl, t grad	26+			04
2011	Brough of Birsay	comb	ant	comp	s-s	four perf on centre back	short oblique 1 = zig-zag	c-pl & t-pl: bevelled c-pl, no perf, slight t grad	80+	?		04
2012	Brough of Birsay	comb	ant	comp	s-s	zoomorphic ends: terminal of bird head. R&d	crossing double 1 ending in r&d	Fe riv	87+			04
2013	Brough of Birsay	comb	ant	comp	s-s	2 r&d, short oblique cut on inward side		e-pl	19+			04
2014	Brough of Birsay	comb	ant	comp	s-s	zoomorphic terminal		e-pl	17+			04

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2015	Brough of Birsay	comb	ant	comp	s-s	open back, double r&d slightly zoomorphic, w arcading & r&d random r&d		e-pl, t-pl & c-pl. 83+ T grad, no perf					04
2016	Brough of Birsay	comb	ant	comp	s-s			frag thin curved plate, poss trial piece for comb frag shaped ant pl 22+ dec w r&d, poss e-pl	28+		15+		04?
2017	Brough of Birsay	comb	ant	comp	s-s			outlined by inc 1, c-pl & t-pl. Fe orn by interwoven riv, shallow conv inc 1	70+		16+		04?
2018	Brough of Birsay	comb	ant	comp	s-s			vert inc 1 on end e-pl & c-pl	44+				07 = A
2019	Brough of Birsay	comb	ant	comp	s-s			cording at end c-pl only, expanding plan. Fe riv	76+				08 = B 08?
2020	Brough of Birsay	comb	ant	comp	s-s			e-pl frag. Fe riv, 18+ grad t	18+				07/08 ?
2021	Brough of Birsay	comb	ant	comp	s-s			band of cording at c-pl frag end & band of hatching	30+				07/08 ?
2022	Brough of Birsay	comb	ant	comp	s-s			c-pl extend Cu alloy rivets in almost complete. Pear-shaped sect to from long 1	83+				11
2023	Brough of Birsay	comb	ant	comp	s-s			arched back w Cu alloy rivets					
2024	Brough of Birsay	Ccase	ant	comp	-			vertical inc frag of one end double 1 separator & 2 c-pl. No perf, t grad	38+				
2025	Brough of Birsay	Ccase	ant	comp	-			single contour 1 & one c-pl and frag of separator short oblique 1 along edge	88+				
2026	Brough of Birsay	comb	ant	comp	d-s			double c-pl only. Conv sect, Fe riv	115+				06?
2027	Brough of Birsay	comb	ant	comp	d-s			zig-zag c-pl only, bevelled sect	22+				05/06 ?
2028	Brough of Birsay	comb	ant	comp	d-s			oblique inc 1 alternate vert & c-pl only, conv crossed double inc sect 1	52+				05/06 ?
2029	Brough of Birsay	comb	ant	comp	d-s			double r&d 3 rows double r&d almost complete. Conv sect c-pl, Fe riv, perf each end, t grad	112				05
2030	Brough of Birsay	comb	ant	comp	d-s			double r&d on e-pl e-pl, t-pl & c-pl. 48+ Flat sect, Fe riv, perf, t grad	48+				05



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2031	Brough of Birsay	comb	ant	comp	d-s		r&d	frag c-pl w Fe riv 70+	-				05/06 ?
2032	Brough of Birsay	comb	ant	comp	d-s	r&d on e-sp	central 1 r&d, outer grooves on either side	almost complete. Shallow conv sect, Fe riv, no perf or grad	153	-			06
2033	Brough of Birsay	comb	ant	comp	d-s			e-pl w e-sp & perf 18+					06
2034	Brough of Birsay	comb	ant	comp	d-s			almost complete.	96				06
2035	Brough of Birsay	comb	ant	comp	d-s		double r&d	Conv e-pl, Fe riv, no perf or t grad	60				06
2036	Brough of Birsay	comb	ant	comp	d-s		3 rows r&d	bevelled c-pl only, Fe riv	60				06
2037	Brough of Birsay	comb	ant	comp	d-s	r&d on e-sp		c-pl & t. Shallow conv c-pl, Fe riv	30+				06
2038	Brough of Birsay	comb	ant	comp	d-s	r&d on e-sp		e-pl & t-pl only. No perf or t grad	24+				06
2039	Brough of Birsay	comb	ant	comp	d-s		2 rows r&d	e-pl w e-sp & perf. No t grad expanding conv	53+				06
2040	Brough of Birsay	comb	ant	comp	d-s		r&d	c-pl w t c-pl frag only. Fe riv	35+				05/06 ?
2041	Brough of Birsay	comb	ant	comp	d-s	ogival end		e-pl. Fe riv	55+	fine			05
2042	Brough of Birsay	comb	ant	comp	d-s			e-pl, t-pl & c-pl	60+				05/06 ?
2043	Brough of Birsay	comb	ant	comp	d-s		fine vert l	c-pl frag	32+		11+		05/06 ?
2044	Freswick Links	pin	Qu-alloy	09K	b	diamond w pelleted edge, unevenly spaced dots around top		not examined. Round sect sh. Different dec each side of hd	90	9:3			E
2045	Freswick Links	pin	bone	11B	-			not examined.	15+				
2046	Freswick Links	pin	bone	16A	b			Shaft broken not examined.	82	10:			
2047	Freswick Links	pin	bone	-	-			Shaft broken not examined. Sh broken, fl sect, eccentric	30+	10:			
2048	Freswick Links	pin	bone	-	-			perforation not examined. Sh broken, fl sect, central	49+	15:			
2049	Skaill	comb	ant	comp	d-s			perforation not examined.	48		15	4	05
2050	Skaill	comb	ant	comp	d-s			Fragment, End-tooth segment. T slightly grad not examined. Fragment. Tooth segment. Rivet hole	24		17	3	06

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2051	Skaill	comb	ant	comp	d-s		saltire crosses of double incised lines r&d	not examined. Broken. 5 Fe rivets not examined. Fragments, Fe rivets	127	50	3		06
2052	Skaill	comb	ant	comp	d-s			not examined. Fragments, Fe rivets					06
2053	Skaill	comb	ant	comp	d-s		r&d and incised lines	not examined. Fragments, Fe rivets					06
2054	Skaill	comb	ant	comp	d-s	r&d		not examined. End-pl segment.	10	23			05
2055	Skaill	comb	ant	comp	d-s			not examined. Broken? Undec? T grad, susp hole, rivets	114	40	10		06
2056	Skaill	comb	ant	comp	d-s			not examined. Fragment. T-pl. T grad	23	11			05
2057	Skaill	comb	ant	comp	d-s		r&d	not examined. Fragment. E-pl	40	20	4		06
2058	Skaill	comb	ant	comp	d-s			not examined. Fragment. T-pl	50	15	3		06
2059	Skaill	comb	ant	comp	d-s			not examined. Fragment. E-pl with Fe staining	50	25	3		06
2060	Skaill	comb	ant	comp	d-s			not examined. Fragment. T-pl	45	25	2		06
2061	Skaill	comb	ant	comp	d-s		paired r&d connected by double-inc 1 forming saltire crosses	with Fe staining not examined. Fragment. C-pl	33	18	4		06
2062	Skaill	comb	ant	comp	d-s			not examined. Fragments of 4 t-pl w Fe rivets					06
2063	Skaill	comb	ant	comp	d-s			not examined. Fragment. E-pl. Rivet and susp hole. T grad					05
2064	Skaill	comb	ant	comp	s-p			not examined. Teeth particularly fine	41	40	2		11?
2065	Skaill	comb	ant	comp	-			not examined. Misc fragments of indeterminate type					
2066	Skaill	comb	ant	comp	-			not examined. Fragments of indeterminate type					
2067	Skaill	pin	bone	21	c/e	collared effect under head	2 lightly incised 1 around widest part give effect of hip	not examined. Indeterminate type	39	9:3			C

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2068 Skaill		pin	bone	08A	b			not examined.	108	8:5			E
2069 Skaill		pin	bone	15B	-			not examined. Fe shank	23		20	16	D
2070 Skaill		pin	bone	08B	-			not examined. Broken	27	5:4			
2071 Skaill		pin	bone	12	-			not examined	56	9:			
2072 Skaill		pin	bone	03	-			not examined	12+	9:			C
2073 Skaill		pin	bone	01A	c			not examined	67				
2074 Skaill		pin	bone	15A				not examined. Cylindrical bone set with Fe shank	21+	11:			D
2075 Skaill		pin	bone	12?	-			not examined. Distal end of bone, partially modified	31	8:			
2076 Skaill		pin	bone	-	-			not examined. Squared head	52	5:			
2077 Riggan of Kami		comb	ant	-	-			not examined. Fragment					
2078 Riggan of Kami		comb	ant	-	-			not examined. 7 pieces. Decorated					
2079 Riggan of Kami		pin	bone	-	-			not examined. No further details					
2080 Riggan of Kami		comb	ant	-	-			not examined. 3 fragments, one decorated					
2081 Riggan of Kami		pin	bone	-	-			not examined. No further details					
2082 Riggan of Kami		pin	bone	21	-			not examined. No further details					
2083 Riggan of Kami		pin	bone	21	-			not examined. 2 fragments. No further details					
2084 Riggan of Kami		pin	bone	-	-			not examined. 'Birsay type' No further details					
2085 Riggan of Kami		pin	bone	-	-			not examined. Fragment					
2086 Freswick Links		comb	ant	comp	s-s			Complete. High arched back w upturned ends. T slightly grad	81		22	4	11
								line of 19 Cr-alloy rivets follows high, arched outline of back					
2087 Freswick Links		comb	ant	comp	s-s			Fragment w 5 complete t, broken across rivet hole	21		10	1	



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMES (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2088	Freswick Links	comb	ant	comp	s-s		2 horizontal incised lines and single row of Cu alloy rivets	Incomplete. T slightly grad	77		20	5	
2089	Freswick Links	comb	ant	comp	s-s		evenly spaced Cu alloy rivets	Incomplete. T grad. Plain, straight c-pl	60		27	8	
2090	Freswick Links	comb	ant	comp	s-s		2 rows of Cu-alloy rivets	T grad. Straight c-pl ridged by 4 horiz incisions, conc ends	95		21	7	
2091	Freswick Links	comb	ant	comp	s-s		19 Cu alloy rivets in a row	T grad. Single perf in e-pl. Straight c-pl w 4 ridges	113		23	15	09
2092	Freswick Sands Broch	comb	ant	comp	d-s	1 of 5 r&d on top & bottom of e-pl	2 rows of Cu-alloy rivets	Ridged T grad. c-pl. 2 susp holes at one end	70	co/fine	37	5	11
2093	Freswick Sands Broch	comb	ant	comp	d-s		row of Fe rivets. Saltires divided by 2 x 2 incised lines	7 fragments of c-pl of ?same comb	80	co/co	18	17	
2094	Freswick Sands Broch	comb	ant	comp	d-s			T-pl w 7 intact t & trace of Fe rivet	53		16	2	
2095	Freswick Links	comb	ant	comp	d-s	single double r&d on ends, and row on back	2 horiz inc 1 and 2 parallel rows of end, t grad Cu alloy rivets	Incomplete. Conv	52	co/fine	37	7	
2096	Freswick Links	comb	ant	comp	d-s	single double r&d on ends	14 Cu alloy rivets set in a ridged decoration of horiz inc 1	Single susp hole	80	co/fine	38	6	10
2097	Freswick Links	comb	ant	comp	d-s	single row of 8 Cu alloy rivets		t slightly grad. C-pl s traight w 2 perf on one side	73	co/fine	42	6	
2098	Freswick Links	comb	ant	comp	d-s		irregular r&d motifs, some double, also simple dots	Fe riv	130	co/fine	33	6	11
2099	Freswick Links	comb	ant	comp	d-s	double r&d on ends	horiz 1 forming ridges & 2 rows of 19 Cu alloy rivets	Complete, 5 t-pl	820	co/fine	40	6	10
2100	Freswick Links	CCase	bone	-	-			4 main plates dec w r&d and inc 1. Fe riv not examined	144		19	7	
2101	Skaill	pin	Cu alloy	-	-	decorated, but too corroded to distinguish			51+	7:4			

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2102 Skaill		pin	Cu alloy	-	-			not examined. Broken in 2 parts at 90 degree bend	51	3:1.4			
2103 Skaill		pin	Cu alloy	-	-			not examined. ?Ring headed. Badly decayed	31+				
2104 Skaill		pin	Cu alloy	Fowler E?	-			not examined. Too badly corroded to distinguish decoration	91+				
2105 Skaill		pin	Cu alloy	Fowler E	zoo			Perforation on top, with surviving metal ring: unique	77	:2.3			A
2106 Skaill		pin	Cu alloy	Fowler E	zoo			Perforation on top 200 for ring: ring missing	200	5:2			A
2107 Jarlshof		comb	ant	comp	s-s		vert band formed by double inc 1, w lozenge pattern within	not examined. Medial fragment of c-pl, decorated both sides					07/08
2108 Jarlshof		comb	ant	comp	s-s		ear-like projection and slight expansion to snout end	not examined. End of c-pl					07/08
2109 Jarlshof		comb	ant	comp	s-s		ear-like projection and slight expansion to snout end	not examined. E-pl					07/08
2110 Jarlshof		comb	ant	comp	s-s		ear-like projection and slight expansion to snout end	not examined. E-pl					07/08
2111 Jarlshof		comb	ant	comp	s-s		medial lines converge at end, occasional herringbone plain	not examined. Frag of c-pl					07/08
2112 Jarlshof		comb	ant	comp	s-s			not examined. Fe rivets					11
2113 Jarlshof		comb	ant	comp	s-s			not examined. 3 frag of similar comb, teeth missing					11
2114 Jarlshof		comb	ant	comp	s-s		lateral & central bands of upright inc 1 & central geom patt	Not examined. Frag of c-pl w Fe rivets					07?
2115 Jarlshof		comb	ant	comp	s-s			Not examined. Frag of t-pl					
2116 Jarlshof		comb	ant	comp	s-s		zones of vertical incised lines	Not examined. Terminal of c-pl, end slightly expanded					

APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2117	Jarlshof	comb	ant	comp	S-S		bands of incised lines, & inc geometric design on end	Not examined. Broken terminal of c-pl & t-pl. T grad, Fe riv Not examined. Long. 9 Fe riv w Cu alloy heads. No decoration					11
2118	Jarlshof	comb	ant	comp	S-S			Not examined.					11
2119	Jarlshof	QCase	ant	comp				Not examined.					08?
2120	Jarlshof	comb	ant	comp	S-S			Not examined.					07/08
2121	Jarlshof	comb	ant	comp	S-S			Not examined.					?
2122	Jarlshof	comb	ant	comp	S-S			Not examined.					07/08
2123	Jarlshof	comb	ant	comp	S-S			Not examined.					?
2124	Jarlshof	comb	ant	comp	S-S			Not examined.					07/08
2125	Jarlshof	comb	ant	comp	S-S			Not examined.					?
2126	Jarlshof	comb	ant	comp	S-S			Not examined. Rectangular section c-pl					09
2127	Jarlshof	comb	ant	comp	S-S			Not examined.					11
2128	Jarlshof	comb	ant	comp	S-S			Not examined.					09
2129	Jarlshof	comb	ant	comp	S-S			Not examined.					09
2130	Jarlshof	comb	ant	comp	S-S			Not examined. Circular section c-pl					11
2131	Jarlshof	comb	ant	comp	S-S			Not examined. T-pl frag w 3 rivet perforations					
2132	Jarlshof	comb	ant	comp	S-S			Not examined. Frag broad-backed comb w Cu alloy rivets					
2133	Jarlshof	comb	ant	comp	S-S			Not examined. Similar to Hamilton 1956, fig 77.6					
2134	Jarlshof	comb	ant	comp	S-S			Not examined. 3 frag, much decayed					11
2135	Jarlshof	comb	ant	comp	d-S			Not examined.					10
2136	Jarlshof	comb	ant	comp	d-S			Not examined.					10
2137	Jarlshof	comb	ant	comp	S-S			Not examined. Arched back & Cu alloy rivets					11
2138	Jarlshof	comb	ant	comp	S-S			Not examined. Straight back, prominent Cu alloy rivets					11
2139	Jarlshof	comb	ant	comp	S-S			Not examined. Similar to examples found at Oseberg					07/08



APPENDIX II: CATALOGUE OF SCOTTISH PINS AND COMBS (BY RECORD NUMBER)

NO	SITE	OBJECT	CATEGORY	QUAL:1	QUAL:2	QUAL:4	QUAL:5	COMMENTS	L	QUAL:3	B:DI	D	CLASS
2139	Edinburgh Castle	comb	ant	comp	d-s		double rtd arranged in groups of six (2x3) along c-pl	shallow conv c-pl not possible to assess full proportions Not examined. Similar to examples found at Oseberg		co/fine			06/07
2140	Jarlshof	comb	ant	comp	s-s								07/08
2141	Jarlshof	comb	ant	comp	d-s								11
2142	Jarlshof	comb	ant	comp	d-s								11
2143	Jarlshof	comb	ant	comp	d-s								11
2144	Jarlshof	comb	ant	comp	d-s								11
2145	Jarlshof	comb	ant	comp	d-s								09
2146	Jarlshof	comb	ant	comp	d-s								11
2147	Skaill	pin	mould	34	-						3		
2148	Brough of Birsay	pin	bone	18	e		2 rows of projections around sides, one on top	two piece mould	57				C
									51				





ASPECTS OF THE LATE ATLANTIC IRON AGE

Sally M Foster

VOLUME II

Thesis submitted in accordance with the requirements for the degree  
Doctor of Philosophy in the Faculty of Arts of the University of  
Glasgow, September, 1989.



### APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

In appendix III the data base is ordered by site, the object is defined, and details of its context, the dating evidence for that context, the artefact's museum accession number and a list of the published references are cited. Published references are preceded, where applicable, by a reference to illustrations in this text. About one sixth of all the listed objects have been illustrated here. Throughout both data bases extensive use has been made of abbreviations (as listed). Cross-referencing between appendices II and III is done by using the site and record number.

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Ackergill Tower	Caith	ND 35	54	peat moss, discovered 1865		Fig 28.	RMS GT.947	1220
Acurrach	Argyl		pin				RMS GT.948	1221
An Dunan	Argyl		comb				H B.1914.492/3	1679
Ardkinish, Colonsay	Argyl	NR 34	91	found w Cu alloy strap buckle			H B.1914.492/2	1680
			comb				H B.1914.429/1	1681
			pin				GAGM '46-66/2	1758
			pin				RMS GA.1176	906
			pin			Fanning 1983a, no 2	Inverary	1563
			pin				RMS HH.727	898
			pin			Anderson 1907, 442, fig 6	RMS FC.190	325
			pin			Grieg 1940, 61, fig 34		
			pin			Fanning 1983a, no 7		
			pin			Grieg 1940, 54, fig 30		
			pin			Fanning 1983a no 8		
			pin			RCAHMS 1984 no 292		
Ardkinish, Colonsay	Argyl	NR 34	91	not associated w Kiloran burial				1569
Ardnamurchan, Drymen Sand	Argyl		pin				H B.1951.280	1696
Ashgrove Loch	Ayrsh		pin				RMS HT.133	636
Avielochan Cairn	Inv	NH 90	16			Fig 13. Cash 1910, 193, fig 3	RMS EQ.309	728
			pin					
Bac Mhic Connain	Inv	NF 768	762	pin?	passage to NE of chamber A other finds incl ogam inscribed Knife-handle, samian, pottery stamp and cetacean bone orn (MacGregor, M 1976, no 271)	Laing 1973, fig 5,30		1118
						Beveridge & Callander 1932	RMS GNB.69	
Bac Mhic Connain	Inv	NF 768	763	pin	other finds incl ogam-inscribed knife handle, samian, pottery stamp & cetacean bone orn (MacGregor, M 1976, no 271)	Fig 12. Beveridge & Callander 1932, 61	RMS GNB.139	1119
Bac Mhic Connain	Inv	NF 768	762	pin	other finds incl ogam inscribed knife-handle, samian, pottery stamp & cetacean bone orn (MacGregor, M 1976, no 271)	Beveridge & Callander 1932, 50	RMS GNB.86	1120
Bachda Mor, Vallay	Inv	NF 78	76	pin		Fig 26.	RMS GT.377	308
Bachda Mor, Vallay	Inv	NF 78	76	pin		Fig 12.	RMS GT.378	309
Bachda-Mor, Vallay	Inv	NF 78	76	pin			RMS GT.179	272
Bachda-Mor, Vallay	Inv	NF 78	76	pin			RMS GT.180	273
Bachda-Mor, Vallay	Inv	NF 78	76	pin		Fig 26,	RMS GT.181	274
Bachda-Mor, Vallay	Inv	NF 78	76	pin		Fig 12.	RMS GT.182	275
Bachda-Mor, Vallay	Inv	NF 78	76	pin		Fig 23.	RMS GT.183	276
Bachda-Mor, Vallay	Inv	NF 78	76	comb			RMS GT.184	277
Balevuillin, Tiree	Argyl	NL 959	497	pin			RMS HD.389	1256
Balevuillin	Argyl	NL 959	497	comb	hut no 1	Mackie 1963, 165, fig 2.11, pl 16.1	H B.1914.493/1	1634

'LBA/EIA'

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Balevullin	Argyl	NL 959	497 comb	hut no 1	'LBA/EIA'	Mackie 1963, 165, fig 2.10, pl 16.1	H B.1914.493/2	1635
Balevullin	Argyl	NL 959	497 comb	hut no 1	'LBA/EIA'	Mackie 1963, 165, fig 2.9, pl 16.1	H B.1914.493/3	1636
Balevullin	Argyl	NL 959	497 comb			Fig 15.	H B.1914.499/1	1637
Balevullin	Argyl	NL 959	497 comb			Fig 26.	H B.1914.499	1638
Balevullin	Argyl	NL 959	497 comb			Fig 23.	H B.1914.499	1639
Balevullin	Argyl	NL 959	497 pin				H B.1914.504	1640
Balevullin	Argyl	NL 959	497 pin				H B.1914.2050	1641
Balevullin	Argyl	NL 959	497 pin				H B.1914.2050	1642
Balevullin	Argyl	NL 959	497 pin?				H B.1914.2050	1643
Balevullin	Argyl	NL 959	497 pin				H B.1914.2050	1644
Balevullin	Argyl	NL 959	497 pin				H B.1914.2050	1645
Balevullin	Argyl	NL 959	497 pin			Fanning 1983a, no 58	H B.1914.502	1647
Balevullin	Argyl	NL 959	497 pin			Beveridge 1903, 132-36	H	1651
Balevullin	Argyl	NL 959	497 pin				H B.1951.2051	1664
Balevullin	Argyl	NL 959	497 pin				H B.1951.2051	1665
Balevullin	Argyl	NL 959	497 pin			Fig 28.	H B.1951.2052/1	1666
Balevullin	Argyl	NL 959	497 pin			Fig 28.	H B.1951.2052/2	1667
Balevullin	Argyl	NL 959	497 pin			Fig 28	H B.1951.2052/3	1668
Balevullin	Argyl	NL 959	497 pin			Fig 24.	H B.1951.2052/4	1669
Balevullin	Argyl	NL 959	497 pin				H B.1951.2052/5	1670
Balevullin	Argyl	NL 959	497 pin				H B.1951.2052/6	1671
Balevullin	Argyl	NL 959	497 pin			Fig 27.	H B.1951.2052/7	1672
Balevullin	Argyl	NL 959	497 pin				H B.1951.2052/8	1673
Balevullin	Argyl	NL 959	497 pin			Fig 28	H B.1951.2052/9	1674
Balevullin	Argyl	NL 959	497 pin				H B.1951.2052	1675
Balevullin	Argyl	NL 959	497 pin				H B.1951.2052	1676
Balevullin Sands, Tiree	Argyl	NL 959	497 comb			Kilbride-Jones 1980b, fig 61.2	H B.1914.494	1699
Balinaby, Islay	Argyl	NR 2	6 pin	V grave w sword, axe, belt etc		Fig 15. Shetelig 1954, 10-11, fig 8	RMS IL.384	1565
						Fanning 1983a no 3		
Barra or S Uist	Argyl		pin			RCAHMS 1984 no 29	Inv01.2B/01.219	1590
Barra or S Uist	Argyl		pin?			Fig 12.	Inv 01.210	1591
Barra or S Uist	Argyl		pin			Fig 23.	Inv 01.204	1593
Bealach Ban	Inv	NF 78	76 pin?	sand dunes		Fig 25.	RMS GT.202	1196
						Fig 23. Beveridge 1911, 230		
Bealach Ban	Inv	NF 78	76 pin	sand dunes		Beveridge 1911, 230	RMS GT.203	1197
Bealach Ban	Inv	NF 78	76 pin	sand dunes		Beveridge 1911, 230	RMS GT.207	1198
Bealach Ban	Inv	NF 78	76 pin	sand dunes		Beveridge 1911, 230	RMS GT.208	1199
Bealach Ban	Inv	NF 8	7 pin	kitchen middens in dunes		Beveridge 1911, 228	RMS GT.200	1211
				where pins occas found				
Bealach Ban, S Uist	Inv	NF 78	76 pin?	sand dunes		Beveridge 1911, 230	RMS GT.110	1195
Bealach Ban, Vallay	Inv	NF 78	76 pin	?from Dunes		Fig 13. ?Beveridge 1911, 230	RMS GT.209	300
Bellochan, N Uist	Inv	NF 83	70 pin					
Berie Sands, Valtos	Inv	NB 0	3 pin			Laing 1973, fig 7.61	RMS GT.111	1216
						Lacaille 1937, 295, fig 9	RMS FC.247	331
						Fanning 1983a, no 39		



SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Bernera Sands	Inv	NG 1	9	pin	Ersk Bev Coll 1921 s midden, Maol Bhan, W Sound of Berneray Upper stratum of small mound, assoc w structures	Laing 1973, fig 4.5	RMS FC.252	332
Berneray, Harris	Inv	NF 9	8	pin		Donations 1915, 11	RMS GT.274	1126
Berneray, Harris	Inv	NF c909	c830	pin		RCAHMS 1928, 45	RMS HR.607	1127
Birkle Hills	Caith	ND 3	6	pin	assoc finds: femur whorl, sandstone longit grooved weight, no pot	Donations 1867, fig 19.3	RMS GJ 189	556
Birsay	Ork	HY 23	28	pin	crannog	Fig 26.	RMS IL.352	634
Birsay	Ork	HY 23	28	pin		Laing 1973, fig 6.42	RMS FC.195	635
Birsay	Ork	HY 24	28	pin		Donations 1909, 9	RMS FC.194	1070
Birsay	Ork	HY 24	28	pin		Donations 1909	RMS FC.196	1071
Birsay	Ork	HY 24	28	pin		Fig 12.	RMS HT.99	637
Bishop's Loch	Lanar			pin			RMS HT.97	638
Bishop's Loch	Lanar			pin			RMS GP.339	893
Bonchester Fort	Rox	NT 5	1	pin		Curle 1910, 235, fig 3 Dunning 1934, fig 7.2 Piggot 1950, 122, fig 6.1		
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Fig 13.	RMS GT.233	1121
Boreray, Harris	Inv	NG 1	9	pin			RMS GT.234	1122
Boreray, Harris	Inv	NG 1	9	comb			RMS GT.326	1124
Boreray, Harris	Inv	NG 1	9	pin		Fig 28.	RMS GT.126	1128
Boreray, Harris	Inv	NG 1	9	pin		Fig 12.	RMS GT.127	1129
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Fig 30. Grieg 1940, 146 Fanning 1983a, no 34	RMS GT.238	1130
Boreray, Harris	Inv	NG 1	9	pin	sandhill site		RMS GT.129	1131
Boreray, Harris	Inv	NG 1	9	pin	sandhill site		RMS GT.130	1132
Boreray, Harris	Inv	NG 1	9	pin	sandhill site		RMS GT.131	1133
Boreray, Harris	Inv	NG 1	9	pin	sandhill site		RMS GT.237	1134
Boreray, Harris	Inv	NG 1	9	pin	sandhill site		RMS GT.239	1135
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Grieg 1940, 146 Fanning 1983a, no 35 Grieg 1940, 147	RMS GT.240	1136
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Fanning 1983a, no 51	RMS GT.241	1137
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Laing 1973, fig 4.15	RMS GT.242	1138
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Laing 1973, fig 4.38	RMS GT.243	1139
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Fig 27. Laing 1973, fig 4.41		
Boreray, Harris	Inv	NG 1	9	pin	sandhill site	Laing 1973, fig 4.47	RMS GT.244	1140
Boreray, N Uist	Inv	NG 1	9	pin?		Fig 24.	RMS GT.276	1123
Borness	Kirk	NX 6	4	pin	ex 1872-8		RMS HN.57	684
Borness	Kirk	NX 6	4	comb	ex 1872-8: unknown	finds incl human skulls, 1-handled combs, Cu alloy brooch w traces of enamel, chain, & Samian, Dr 27 finds incl human skulls, 1-handled combs, Cu alloy brooch w traces of enamel, chain & Samian, Dr 27 finds incl human skulls, 1-handled combs, Cu alloy brooch w enamel, Samian (Dr 27) & glass beads finds incl human skulls, 1-handled bombs, Cu alloy brooch w enamel, samian (Dr 27) & glass beads	RMS HN.48	685
Borness	Kirk	NX 6	4	pin?	occupation deposits in cave, ex 1872-8	Clarke 1876, 308, no 168	RMS HN.83	1250
Borness	Kirk	NX 6	4	pin	occupation deposits in cave, ex 1872-8	Corrie, Clarke & Hunt 1874	RMS HN.87	1251

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Borness	Kirk	NX 6 4	pin?	occupation deposits in cave, ex 1872-8	finds incl human skulls, 1-handled combs, Cu alloy brooch w traces enamel, samian (Dr 27), & glass beads	Corrie, Clarke & Hunt 1874 RMS EN.107	RMS EN.107	1252
Borness	Kirk	NX 6 4	pin?	occupation deposits in cave, ex 1972-8	finds incl human skulls, 1-handled combs, Cu alloy brooch w enamel, samian (Dr 27), & glass beads	Corrie, Clarke & Hunt 1874 RMS EN.110	RMS EN.110	1253
Borness	Kirk	NX 6 4	pin	occupation deposits in cave, ex 1972-4	finds incl human skulls, 1-handled combs, Cu alloy brooch w enamel, samian (Dr 27), & glass beads	Corrie, Clarke & Hunt 1974 RMS HN.115	RMS HN.115	1254
Borness	Kirk	NX 6 4	pin	occupation deposits in cave, ex 1872-8	finds incl human skulls, 1-handled combs, Cu alloy brooch w enamel, samian (Dr 27 ), & glass beads	Corrie, Clarke & Hunt 1874 RMS HN.116	RMS HN.116	1255
Borvemore, Harris Bowermadden	Inv Caith	NG 1 9 ND 254 635	pin comb	broch	assoc finds incl beads of blue vitreous paste w spirals of yellow	Donations 1872, 247 Anderson, J 1883, 232-3	RMS HR.1077 RMS GA.89	1125 619
Bowermadden	Caith	ND 254 635	pin	broch	assoc finds incl bead of blue vitreous paste w spirals of yellow	Fig 18. Stevenson 1955/ <sup>6</sup> fig B.12 Donations 1872, 247 D&E 1976	RMS GA.91	620
Boysack Mills	Angus	NO 626 491	pin	RH shoulder of body in coffin: grave in circ encl	uninformative RC date (GU-1301): ?attempt to move grave marker stone at a later date	pers comm D Reynolds		2000
Broch of Ayre	Ork	HY 470 013	pin-imp			Young 1953, pl IX.3 Graeme 1914, 46, fig 13 Fig 12.	RMS L1948.69	1447
Broch of Ayre?	Ork	HY	pin			Watt 1882, 448	RMS L1948.4	605
Broch of Borwick	Ork	HY 223 167	comb	'in the broch and outside'		Watt 1882, 448	K S70	1
Broch of Borwick	Ork	HY 223 167	comb	'in the broch and outside'		Watt 1882, 448	K S54	2
Broch of Bargar	Ork	HY 352 277	comb	intramural chamber of broch, discovered 1840	associated with silver vessels and other objects including amber: interpreted as Pictish hoard, now lost.	Graham-Campbell 1985	NL	2008
Broch of Burray	Ork	ND 490 988	pin			Fig 6. Stevenson 1955a, fig A.19 Farrer 1857, fig 4	RMS GC.7	1082
Broch of Burray	Ork	ND 490 988	pin			Fig 6. Stevenson 1955a, fig A.18	RMS GC.8 RMS GC.9	1083 1084
Broch of Burray	Ork	ND 490 988	pin				RMS GC.10	1085
Broch of Burray	Ork	ND 490 988	pin?				RMS GC.11	1086
Broch of Burray	Ork	ND 490 988	pin				RMS GC.12	1087
Broch of Burray	Ork	ND 490 988	pin				RMS GC.13	1088
Broch of Burray	Ork	NC 490 988	pin				RMS GC.14	1089
Broch of Burray	Ork	ND 490 988	pin			Fig 23.	RMS GC.15	1090



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Broch of Burray	Ork	ND 490	988	pin		Farrer 1857, 157, fig 2	RMS GC.16	1091
Broch of Burray	Ork	ND 490	988	pin			RMS GC.30	1092
Broch of Burray	Ork	ND 490	988	pin			RMS GC.31	1093
Broch of Burray	Ork	ND 490	988	pin?			RMS GC.32	1094
Broch of Burray	Ork	ND 490	988	comb	broch interior	Farrer 1857, 157, fig 3 Petrie 1890, 91, fig 2 Fig 6. Farrer 1857, 158, fig 5 Stevenson 1955a, fig A.45	RMS GC.6	1096
Broch of Burray	Ork	ND 490	988	pin			RMS GC.45	1095
Broch of Burrian	Ork	HY 763	514	pin			RMS GB.10	622
Broch of Burrian	Ork	HY 763	514	pin			RMS GB.201	623
Broch of Burrian	Ork	HY 763	514	pin			RMS GB.109	624
Broch of Burrian	Ork	HY 763	514	pin			RMS GB.129	625
Broch of Burrian	Ork	HY 763	514	pin			RMS GB.161	626
Broch of Burrian	Ork	HY 763	514	pin			RMS GB.164	627
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	Fig 6. MacGregor 1974, cat no 303	RMS GB.304	1315
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	Fig 6. MacGregor 1974, cat no 304	RMS GB.302	1316
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 305	RMS GB.305	1317
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 6	RMS GB.126	1318
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 12	RMS GB.115	1319
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 26	RMS GB.127	1320
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 17	RMS GB.101	1321
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 18	RMS GB.106	1322
Broch of Burrian	Ork	HT 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 15	RMS GB.107	1323
Broch of Burrian	Ork	HT 762	514	pin	'secondary' to broch	MacGregor 1974, cat no 9	RMS GB.120	1324
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 10	RMS GB.121	1325
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 16	RMS GB.109	1326
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 25	RMS GB.117	1327
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 8	RMS GB.131	1328
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 11	RMS GB.116	1329
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 19	RMS GB.105	1330
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	Fig 6. MacGregor 1974, cat no 21	RMS GB.130	1331
Broch of Burrian	Ork	HY 763	514	ant?	'secondary' to broch	MacGregor 1974, cat no 14	RMS GB.122	1332
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 5	RMS GB.113	1333
Broch of Burrian	Ork	HT 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 4	RMS GB.110	1334
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 1	RMS GB.119	1335
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 73	RMS GB.186	1336
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 28	RMS GB.139	1337
Broch of Burrian	Ork	HY 762	514	pin	'secondary' to broch	MacGregor 1974, cat no 29	RMS GB.137	1338
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 32	RMS GB.138	1339
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 30	RMS GB.173	1340
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 31	RMS GB.136	1341
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 36	RMS GB.132	1342
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 34	RMS GB.133	1343
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 35	RMS BG.134	1344
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 27	RMS GB.140	1345
Broch of Burrian	Ork	HY 763	514	pin	'secondary' to broch	MacGregor 1974, cat no 33	RMS GB.135	1346



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 37	RMS GB.108	1347
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 41	RMS GB.104	1348
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 40	RMS GB.103	1349
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		Fig 6. MacGregor 1974, cat no 24	RMS GB.123	1350
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 49	RMS GB.159	1351
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 47	RMS GB.212	1352
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		Fig 6. MacGregor 1974, cat no 22	RMS GB.124	1353
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 75	RMS GB.156	1354
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 76	RMS GB.158	1355
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 80	RMS GB.155	1356
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 81	RMS GB.153	1357
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 82	RMS GB.146	1358
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 83	RMS GB.151	1359
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 84	RMS GB.147	1360
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 85	RMS GB.150	1361
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 86	RMS GB.152	1362
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 78	RMS GB.169	1363
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 79	RMS GB.154	1364
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 87	RMS GB.149	1365
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 88	RMS GB.145	1366
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 77	RMS GB.142	1367
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 89	RMS GB.144	1368
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 90	RMS GB.143	1369
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 91	RMS GB.163	1370
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 92	RMS GB.205	1371
Broch of Burrian	Ork	HY 763	514 pin?	'secondary' to broch		MacGregor 1974, cat no 93	RMS GB.160	1372
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 109	RMS GB.199	1373
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 110	RMS GB.200	1374
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 23	RMS GB.125	1375
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 20	RMS GB.111	1376
Broch of Burrian	Ork	HY 762	514 pin	'secondary' to broch		MacGregor 1974, cat no 7	RMS GB.128	1377
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 2	RMS GB.114	1378
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 3	RMS GB.112	1379
Broch of Burrian	Ork	HY 763	514 pin?	'secondary' to broch		MacGregor 1974, cat no 113	RMS GB.235	1380
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 74	RMS GB.157	1381
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 94	RMS GB.187	1382
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 95	RMS GB.188	1383
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 96	RMS GB.184	1384
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 97	RMS GB.183	1385
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 98	RMS GB.185	1386
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 99	RMS GB.185	1387
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 100	RMS GB.189	1388
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		Fig 6. MacGregor 1974, cat no 39	RMS GB.141	1389
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 112	RMS GB.36	1390
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 111	RMS GB.239	1391
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 114	RMS GB.244	1392
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 115	RMS GB.243	1393

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 116	RMS GB.243	1394
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 117	RMS GB.241	1395
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		Fig 6. MacGregor 1974, cat no 38	RMS GB.176	1396
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.197	1397
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.174	1398
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		MacGregor 1974, cat no 151	RMS GB.77	1399
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		Fig 30. MacGregor 1974, cat no 149	RMS GB.68	1400
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		MacGregor 1974, cat no 150	RMS GB.69	1401
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		Fig 29. MacGregor 1974, cat no 153	RMS GB.70	1402
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		Fig 30. MacGregor 1974, cat no 154		1403
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		Fog 30. MacGregor 1974, cat no 155	RMS GB.72	1404
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		Fig 30. MacGregor 1974, cat no 156	RMS GB.76	1405
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		MacGregor 1974, cat no 157	RMS GB.82	1406
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		MacGregor 1974, cat no 158	RMS GB.81	1407
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		MacGregor 1974, cat no 159	RMS GB.79	1408
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		MacGregor 1974, cat no 160	RMS GB.78	1409
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		Macgregor 1974, cat no 162	RMS GB.84	1410
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch			RMS GB.75	1411
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch			RMS GB.74	1412
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch			RMS GB.80	1413
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch			RMS GB.83	1414
Broch of Burrian	Ork	HY 763	514 comb	'secondary' to broch		Fig 29. MacGregor 1974, cat no 152	RMS GB.171	1415
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.208	1416
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.204	1417
Broch of Burrian	Ork	HY 763	514 pin?	'secondary' to broch			RMS GB.194	1418
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.195	1419
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.198	1420
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.196	1421
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.192	1422
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.206	1423
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.193	1424
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.177	1425
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.191	1426
Broch of Burrian	Ork	HY 763	514 pin?	'secondary' to broch			RMS GB.172	1427
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.203	1428
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.148	1429
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch			RMS GB.170	1430
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 42	RMS GB.102	1431
Broch of Burrian	Ork	HY 763	514 pin?	'secondary' to broch		MacGregor 1974, cat no 48	RMS GB.162	1432
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 50	RMS GB.202	1433
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 51	RMS GB.201	1434
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 52	RMS GB.175	1435
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch		MacGregor 1974, cat no 53	RMS GB.207	1436



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Broch of Burrian	Ork	HY 763	514 pin	'secondary' to broch unclear which broch at Deerness		MacGregor 1974, cat no 54	RMS GB.161 RMS CG.9	1437 628
Broch of Deerness	Ork	HY 5	06 comb					
Broch of Harray=Netlater	Ork	HY 323	174 pin	unclear whether the recently excavated Howe ?chapel site w irregular mound		Fig 26.	RMS GF.17	629
Broch of Howe	Ork	HY 2275	2109 pin					
Broch of Lamaness	Ork	HY 6	314 pin	?chapel site w irregular mound		RCAHMS 1946 II, no 180	RMS GH.9	730
Broch of Lamaness	Ork	HY 6	314 pin					
Broch of Lamaness	Ork	HY 6	314 comb	?chapel site w irregular mound		RCAHMS 1946 II, no 180	RMS GH.7	732
Broch of Lamaness	Ork	HT 6	314 pin					
Broch of Lamaness?	Ork	HY 61	38 pin	?chapel site w irregular mound		Fig 25. RCAHMS 1946 II, no 180	RMS GH.22	733
Broch of Ox_tro	Ork	HY 254	268 pin					
Broch of Ox_tro	Ork	HY 254	268 pin	Area II, u/s		Grieg 1940, 149, fig 67 Fanning 1983a, no 13	RMS CD.21 RMS CD.22	631 632
Broch of Ox_tro	Ork	HY 254	268 pin					
Brough of Birsay	Ork	HY 239	285 pin	Area II, u/s		Curle, C L 1982, cat no 1, illus 7	K 1982.87	35
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	late 8C AD -?	Curle, C L 1982, cat no 5, illus 7	K 1982.89	36
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish zone 3	late 8C AD -?	Fig 12. Curle, C L 1982, cat no 15, illus 7	K 1982.88	37
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, passage 2	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 20, illus 7	K 1982.90	38
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, passage 1	late 9 - 2nd 1/2 10 C AD	Curle, C L 1982, cat no 32, illus 7	K 1982.91	39
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish zone 3	late 8 C AD - ?	Curle, C L 1982, cat no 34	K 1982.92	40
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, midden b	late 9C - 2nd 1/2 10 C AD	Curle, C L 1982, cat no 42, illus 7	K 1982.93	41
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VIII	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 52, illus 7	K 1982.94	42
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	late 8 C AD - ?	Curle, C L 1982, cat no 57, illus 7	K 1982.95	43
Brough of Birsay	Ork	HY 239	285 pin	Area II u/s	late 8C AD- ?	Curle, C L 1982, cat no 62	K 1982.96	44
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4 ph b		Curle, C L 1982, cat no 73	K 1982.97	45
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4 ph a	taq late 8C AD	Curle, C L 1982, cat no 74	K 1982.98	46
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, room 8	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 102, illus 48	K 1982.55	47
Brough of Birsay	Ork	HY 239	285 pin	Area I, u/s	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 108, illus 48	K 1982.64	48
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, midden a		Curle, C L 1982, cat no 114	K 1982.65	49
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, room 11	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 119, ill 48	K 1982.66	50



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room V, ph 4b	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 121, illus 48	K 1982.56	51
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room IV	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 122, illus 48	K 1982.57	52
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, midden a	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 123	K 1982.58	53
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, passage 1	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 260, ill 38	K 1982.78	54
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VII	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 261, illus 38	K 1982.79	55
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, zone 1	late 8C AD -?	Fig 29. Curle, C L 1982, cat no 196, illus 10	K 1982.99	56
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, passage 1	late 9 - 2nd 1/2 10C AD	Fig 29. Curle, C L 1982, cat no 203, illus 10	K 1982.100	57
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, passage 1	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 208, illus 10	K 1982.103	58
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, Zone I	late 8C AD - ?	Fig 29. Curle, C L 1982, cat no 215, illus 9	K 1982.101	59
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, room IV	late 9 - 2nd 1/2 10C AD	Fig 31. Curle, C L 1982, cat no 224, illus 36	K 1982.102	60
Brough of Birsay	Ork	HY 239	285 Ccase	Area II, MN, doorway to rm 1	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 231, illus 49	K 1982.104	61
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, room II	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 135	K 1982.51	62
Brough of Birsay	Ork	HY 239	285 Cblank	Area II, MN, midden C	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no 245, illus 38	K 1982.75	63
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4, ph b	tag late 8C AD	Curle, C L 1982, cat no 332, illus 18	?	64
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4, ph a	tag late 8C AD	Curle, C L 1982, cat no 365, illus 22	?	65
Brough of Birsay	Ork	HY 239	285 pin	BB790070, site VIII, ph 3	weighted mean j	Fanning 1983a, no 12	RMS IL.488	1571
Brough of Birsay	Ork	HY 239	285 pin			Hunter 1986, 181, SF 5191, ill 77	?K	1781
Brough of Birsay	Ork	HY 239	285 pin	BB760778, site VII, ph 3	weighted mean j	Hunter 1986, 181, SF 1344, ill 77	?K	1782
Brough of Birsay	Ork	HY 239	285 comb	BB760764, site VII, ph 3	weighted mean j	Hunter 1986, 181, SF 1324, ill 77	?K	1783
Brough of Birsay	Ork	HY 239	285 comb	BB810506, site IX, ph 2.2	weighted mean g	Hunter 1986, 181, SF 5442, ill 77	?K	1184
Brough of Birsay	Ork	HY 239	285 pin	BB750669, site VII, ph 3	weighted mean j	Curle, C L 1982, cat no 47	BB74: QZ459	1785
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 5 ph 1a	tag late 8C AD	Curle, C L 1982, cat no 111 7	QX452	1819
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 5 ph 1b	tag late 8C AD	Curle, C L 1982, cat no 24, ill 7	BB74: QX453	1820
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 5 ph 1b	tag late 8C AD	Curle, C L 1982, cat no 127	BB74: QO434	1821
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 5 ph 2b	tag late 8C AD	Curle, C L 1982, cat no 48	BB74: QO437	1822

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 5 ph 2b	taq late 8C AD	Curle, C L 1982, cat no 35 BB74: QO440	1823	1823
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room V, ph 4a	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no BB74: QA308	1824	1824
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room V, ph 4b	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no BB74: PO202	1825	1825
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room V, ph 4b	late 9 - 2nd 1/2 10C AD	Curle, C L 1982, cat no BB74: PR209	1826	1826
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 5, layers to the E	taq late 8C AD	Curle, C L 1982, cat no 76 BB74: PT250	1827	1827
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Rm VIII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 2, RMS HB.2	1829	1829
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 3	78C AD	Curle, C L 1982, cat no 3, RMS HB.3	1830	1830
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, room 2	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 4, RMS HB.4	1831	1831
Brough of Birsay	Ork	HY 239	285 pin	Area III, house site C	Norse	Curle, C L 1982, cat no 6 RMS HB.6	1832	1832
Brough of Birsay	Ork	HY 239	285 pin	Area II, u/s		Fig 6. Curle, C L 1982, RMS HB.8	1833	1833
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4	78C AD	cat no 8, illus 7	1834	1834
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	78C AD	Fig 12. Curle, C L 1982, RMS HB.9	1835	1835
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	78C AD	cat no 9, illus 7	1836	1836
Brough of Birsay	Ork	HY 239	285 pin	Area II, u/s		Curle, C L 1982, cat no 11 RMS HB.11	1837	1837
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4, ph a	taq late 8C AD	Curle, C L 1982, cat no RMS HB.13	1838	1838
Brough of Birsay	Ork	HY 239	285 pin	Area III. House site D	Norse	13, illus 7	1839	1839
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4, ph a	taq late 8C AD	Curle, C L 1982, cat no RMS HB.14	1840	1840
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4, ph a	taq late 8C AD	Fig 13. Curle, C L 1982, RMS HB.17	1841	1841
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	78C AD	cat no 17, illus 7	1842	1842
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	78C AD	Curle, C L 1982, cat no RMS HB.18	1843	1843
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room IV	late 9-2nd 1/2 10C AD	18, illus 7	1844	1844
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room IV	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no RMS HB.19	1845	1845
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VII	late 9-2nd 1/2 10C AD	19, illus 7	1846	1846
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no RMS HB.21	1847	1847
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	78C AD	21, illus 7	1848	1848
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	78C AD	Curle, C L 1982, cat no RMS HB.22	1849	1849
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VII	late 9-2nd 1/2 10C AD	22, illus 7	1850	1850
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 23 RMS HB.23	1851	1851
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	78C AD	Curle, C L 1982, cat no 25 RMS HB.25	1852	1852
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	78C AD	Curle, C L 1982, cat no RMS HB.26	1853	1853
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	78C AD	26, illus 7	1854	1854
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	78C AD	Curle, C L 1982, cat no RMS HB.27	1855	1855
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VII	late 9-2nd 1/2 10C AD	27, illus 7	1856	1856
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 28 RMS HB.28	1857	1857
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	78C AD	Curle, C L 1982, cat no 29 RMS HB.29	1858	1858
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	78C AD	Curle, C L 1982, cat no RMS HB.30	1859	1859
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	78C AD	30, illus 7	1860	1860



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 5, ph 2b	?late 8C AD	Fig 13. Curle, C L 1982, cat no 31, illus 7	BB73: AM10	1852
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, passage 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 33	RMS HB.33	1853
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish	?8C AD	Curle, C L 1982, cat no 36	RMS HB.36	1854
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 2	?8C AD	Curle, C L 1982, cat no 37	RMS HB.37	1855
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 38	RMS HB.38	1856
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room I	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 39	RMS HB.39	1857
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	late 8C AD	Curle, C L 1982, cat no 40	RMS HB.40	1858
Brough of Birsay	Ork	HY 239	285 pin	ph b				
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	late 8C AD	Curle, C L 1982, cat no 41	RMS HB.41	1859
Brough of Birsay	Ork	HY 239	285 pin	ph b				
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	?8C AD	Curle, C L 1982, cat no 43	RMS HB.43	1860
Brough of Birsay	Ork	HY 239	285 pin	ph a				
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	?8C AD	Curle, C L 1982, cat no 44	RMS HB.44	1861
Brough of Birsay	Ork	HY 239	285 pin	ph a				
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 2	?8C AD	Curle, C L 1982, cat no 45	RMS HB.45	1862
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	tag late 8C AD	Curle, C L 1982, cat no 46	RMS HB.46	1863
Brough of Birsay	Ork	HY 239	285 pin	ph a				
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 49	RMS HB.49	1864
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	tag late 8C AD	Curle, C L 1982, cat no 50	RMS HB.50	1865
Brough of Birsay	Ork	HY 239	285 pin	ph a				
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room VIII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 51	RMS HB.51	1866
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 1	?8C AD	Curle, C L 1982, cat no 53	RMS HB.53	1867
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4	late 8C AD	Curle, C L 1982, cat no 54	RMS HB.54	1868
Brough of Birsay	Ork	HY 239	285 pin	ph b		54, illus 7		
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 2	?8C AD	Curle, C L 1982, cat no 55	RMS HB.55	1869
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4	late 8C AD	Curle, C L 1982, cat no 56	RMS HB.56	1870
Brough of Birsay	Ork	HY 239	285 pin	ph b				
Brough of Birsay	Ork	HY 239	285 pin	u/s				
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, passage 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 58	RMS HB.58	1871
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish	?8C AD	Curle, C L 1982, cat no 59	RMS HB.59	1872
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish		Curle, C L 1982, cat no 60	RMS HB.60	1873
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	late 8C AD	Curle, C L 1982, cat no 61	RMS HB.61	1874
Brough of Birsay	Ork	HY 239	285 pin	ph b				
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	late 8C AD	Curle, C L 1982, cat no 63	RMS HB.63	1875
Brough of Birsay	Ork	HY 239	285 pin	ph b				
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	late 8C AD	Curle, C L 1982, cat no 64	RMS HB.64	1876
Brough of Birsay	Ork	HY 239	285 pin	ph b				
Brough of Birsay	Ork	HY 239	285 pin	Area III. House site E	Norse	Curle, C L 1982, cat no 65	RMS HB.65	1877
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 1	?8C AD	Curle, C L 1982, cat no 66	RMS HB.66	1878
Brough of Birsay	Ork	HY 239	285 pin	Area III. House site E	Norse	Curle, C L 1982, cat no 67	RMS HB.67	1879
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4,	tag late 8C AD	Curle, C L 1982, cat no 68	RMS HB.68	1880
Brough of Birsay	Ork	HY 239	285 pin	ph a				
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room VII	late 9-end 1/2 10C AD	Curle, C L 1982, cat no 69	RMS HB.69	1881
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	tag late 8C AD	Curle, C L 1982, cat no 70	RMS HB.70	1882
Brough of Birsay	Ork	HY 239	285 pin	ph a				
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	late 8C AD	Curle, C L 1982, cat no 71	RMS HB.71	1883
Brough of Birsay	Ork	HY 239	285 pin	ph b				
Brough of Birsay	Ork	HY 239	285 pin	Area III. House site C	Norse	Curle, C L 1982, cat no 72	RMS HB.72	1884
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4	late 8C AD	Curle, C L 1982, cat no 75	RMS HB.75	1885
Brough of Birsay	Ork	HY 239	285 pin	ph b				



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Brough of Birsay	Ork	HY 239	285 pin	Area II, u/s	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 77	RMS HB.77	1886
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room VIII		Curle, C L 1982, cat no 84, illus 48	RMS HB.84	1887
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, passage 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 85, illus 48	RMS HB.85	1888
Brough of Birsay	Ork	HY 239	285 pin	Area II, u/s	late 8C AD	Curle, C L 1982, cat no 86, illus 48	RMS	1889
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, Zone 4 ph b		Curle, C L 1982, cat no 87, illus 48	RMS HB.87	1890
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 88, illus 48	RMS HB.88	1891
Brough of Birsay	Ork	HY 239	285 pin	Area II, UN, Room 13	2nd 1/2 10-12C AD	Curle, C L 1982, cat no 89, illus 48	RMS HB.89	1892
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, passage 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 90	RMS HB.90	1893
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room VI	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 91, illus 48	RMS HB.91	1894
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Passage 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 92, illus 48	RMS HB.92	1895
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 10	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 93, illus 48	RMS HB.93	1896
Brough of Birsay	Ork	HY 239	285 pin	Area II, u/s	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 94	RMS HB.94	1897
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room IV		Curle, C L 1982, cat no 95	RMS HB.95	1898
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Room I	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 98	RMS HB.98	1899
Brough of Birsay	Ork	HY 239	285 pin	Area II, UN, Room 14	2nd 1/2 10-12C AD	Curle, C L 1982, cat no 101, ill 48	RMS HB.101	1900
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 6	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 103, ill 48	RMS HB.103	1901
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 8	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 104, ill 48	RMS HB.104	1902
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 4	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 105, ill 48	RMS HB.105	1903
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 7	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 106, ill 48	RMS HB.106	1904
Brough of Birsay	Ork	HY 239	285 pin	Area II, LN, Passage 2	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 109, ill 48	RMS HB.109	1905
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 110, ill 48	RMS HB.110	1906
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 2	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 111, ill 48	RMS HB.111	1907
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 4	late 9-2nd 1/2 10 C AD	Curle, C L 1982, cat no 112, ill 48	RMS HB.112	1908
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Room 2	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 113, ill 48	RMS HB.113	1909
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 115, ill 48	RMS HB.115	1910
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 116, ill 48	RMS HB.116	1911
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 117, ill 48	RMS HB.117	1912
Brough of Birsay	Ork	HY 239	285 pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 118, ill 48	RMS HB.118	1913

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Midden b	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 120, ill 48	RMS HB.120 1914
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 130, ill 48	RMS HB.130 1915
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Room 11	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 131, ill 48	RMS HB.131 1916
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 132, ill 48	RMS HB.132 1917
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 133, ill 48	RMS HB.133 1918
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 134, ill 48	RMS HB.134 1919
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 136	RMS HB.136 1920
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Room 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 137	RMS HB.137 1921
Brough of Birsay	Ork	HY 239	285	pin	Area II, Pictish, Zone 4 ph b	late 8C AD	Curle, C L 1982, cat no 262, ill 38	RMS HB.262 1922
Brough of Birsay	Ork	HY 239	285	pin	Area II, LN, Room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 418, ill 39	RMS HB.418 1923
Brough of Birsay	Ork	HY 239	285	pin	Area II, Pictish, Zone 2	8C?	Curle, C L 1982, cat no 419	RMS HB.419 1924
Brough of Birsay	Ork	HY 239	285	pin	?Area II, Pictish, Zone 1 or LN, Area X immed above		Fig 13. Curle, C L 1982, cat no 421, ill 39	RMS HB.421 1925
Brough of Birsay	Ork	HY 239	285	pin	Area II, LN, Room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 422, ill 39	RMS HB.422 1926
Brough of Birsay	Ork	HY 239	285	pin	Area III. House site B	Norse	Curle, C L 1982, cat no 423, ill 39	RMS HB.423 1927
Brough of Birsay	Ork	HY 239	285	pin	Area III. House site C	Norse	Curle, C L 1982, cat no 424, ill 39	RMS HB.424 1928
Brough of Birsay	Ork	HY 239	285	pin	Area II, LN, passage 2	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 425, ill 39	RMS HB.425 1929
Brough of Birsay	Ork	HY 239	285	pin	Area II, UN, Room 13	2nd 1/2 10-12C AD	Curle, C L 1982, cat no 426, ill 39	RMS HB.426 1930
Brough of Birsay	Ork	HY 239	285	pin	Area II, MN, Room 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 427, ill 39	RMS HB.427 1931
Brough of Birsay	Ork	HY 239	285	pin	Area II, UN, Room 14	2nd 1/2 10-12C AD	Curle, C L 1982, cat no 428, ill 39	RMS HB.428 1932
Brough of Birsay	Ork	HY 239	285	pin	Area II, Pictish, Zone 1		Curle 1982, cat no 327, ill 18	RMS HB.327 1965
Brough of Birsay	Ork	HY 239	285	pin?	Area II, Pictish, Zone 1		Curle 1982, cat no 328, ill 18	RMS HB.328 1966
Brough of Birsay	Ork	HY 239	285	pin?	Area II, Pictish, Zone 1		Curle 1982	RMS HB.329 1967
Brough of Birsay	Ork	HY 239	285	pin	Area II, Pictish, Zone 1		Curle 1982, cat no 330, ill 18	RMS HB.330 1968
Brough of Birsay	Ork	HY 239	285	pin	Area II, Pictish, Zone 1		Curle 1982, cat no 331, ill 18	RMS HB.331 1969
Brough of Birsay	Ork	HY 239	285	pin	Area II, Pictish, Zone 2		Curle 1982, cat no 333	RMS HB.333 1970
Brough of Birsay	Ork	HY 239	285	pin	Area II, u/s		Curle 1982, cat no 334	RMS HB.334 1971
Brough of Birsay	Ork	HY 239	285	pin	Area II, u/s		Curle 1982, cat no 335	RMS HB.335 1972



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish	late 8C AD	Curle 1982, cat no 336 Fig 30. Curle, C L 1982, cat no 214, ill 9	RMS HB.336	1973
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish , Zone 4 Phase b			RMS HB.214	2009
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room V, ph 3b	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 216, ill 9	RMS HB.216	2010
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room VIII	late 9-2nd 1/2 10C AD	Fig 29. Curle, C L 1982, cat no 217, ill 9	RMS HB.217	2011
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Passage 2	late 9-2nd 1/2 10C AD	Fig 29. Curle, C L 1982, cat no 218, ill 9	RMS HB.218	2012
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, Zone 4, Ph b	late 8C AD	Fig 30. Curle, C L 1982, cat no 219, ill 9	RMS HB.219	2013
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room V, Ph 4a	late 9-2nd 1/2 10C AD	Fig 30. Curle, C L 1982, cat no 220, ill 9	RMS HB.220	2014
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Area X	late 9-2nd 1/2 10C AD	Fig 30. Curle, C L 1982, cat no 221, ill 9	RMS HB.221	2015
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room VII	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 222	RMS HB.222	2016
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room I	late 9-2nd 1/2 10C AD	Fig 31. Curle, C L 1982, cat no 223	RMS HB.223	2017
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room VII	late 9-2nd 1/2 10C AD	Fig 31. Curle, C L 1982, cat no 225, ill 36	RMS HB.225	2018
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room I	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 226, ill 36	RMS HB.226	2019
Brough of Birsay	Ork	HY 239	285 comb	u/s	late 9-2nd 1/2 10 C AD	Fig 31. Curle, C L 1982, cat no 227, ill 36	RMS HB.227	2020
Brough of Birsay	Ork	HY 239	285 comb	Area II, MN, Room 2		Curle, C L 1982, cat no 228	RMS HB.228	2021
Brough of Birsay	Ork	HY 239	285 comb	Area II, House site C	2nd 1/2 10C -12C AD	Curle, C L 1982, cat no 229, ill 49	RMS HB.229	2022
Brough of Birsay	Ork	HY 239	285 comb	Area II, Upper Norse horizon, Room 13		Curle, C L 1982, cat no 230, ill 49	RMS HB.230	2023
Brough of Birsay	Ork	HY 239	285 Ccase	Area II, MN, Room 6	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 232, ill 49	RMS HB.232	2024
Brough of Birsay	Ork	HY 239	285 Ccase	Area II, MN, Midden a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 233, ill 49	RMS HB.233	2025
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room V, Ph 4a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 193, ill 10	RMS HB.193	2026
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room V, Ph 4a	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 194, ill 10	RMS HB.194	2027
Brough of Birsay	Ork	HY 239	285 comb	Area II, u/s	78C AD	Curle, C L 1982, cat no 195, ill 10	RMS HB.195	2028
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, Zone 1		Fig 30. Curle, C L 1982, cat no 197, ill 10	RMS HB.197	2029
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, Zone 1	78C AD	Fig 30. Curle, C L 1982, cat no 198, ill 10	RMS HB.198	2030
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, Zone 1	78C AD	Curle, C L 1982, cat no 199, ill 10	RMS HB.199	2031
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room VI	late 9-2nd 1/2 10C	Fig 30. Curle, C L 1982, cat no 200, ill 10	RMS HB.200	2032
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room IV	late 9-2nd 1/2 10C	Fig 31. Curle, C L 1982, cat no 201, ill 10	RMS HB.201	2033



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room I	late 9-2nd 1/2 10C	Fig 31. Curle, C L 1982, cat no 202, ill 10	RMS HB.202	2034
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, Zone 1	78C AD	Fig 31. Curle, C L 1982, cat no 204, ill 10	RMS HB.204	2035
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room 1	late 9-2nd 1/2 10C AD	Fig 30. Curle, C L 1982, cat no 205, ill 10	RMS HB.205	2036
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Passage 1	late 9-2nd 1/2 10C AD	Fig 31. Curle, C L 1982, cat no 206, ill 10	RMS HB.206	2037
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Passage 1	late 9-2nd 1/2 10C AD	Fig 31. Curle, C L 1982, cat no 207, ill 10	RMS HB.207	2038
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Passage 1	late 9-2nd 1/2 10C AD	Fig 31. Curle, C L 1982, cat no 209, ill 10	RMS HB.209	2039
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Passage 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 210	RMS HB.210	2040
Brough of Birsay	Ork	HY 239	285 comb	Area II, Pictish, zone 4	78C AD	Curle, C L 1982, cat no 211	RMS HB.211	2041
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, passage 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 212	RMS HB.212	2042
Brough of Birsay	Ork	HY 239	285 comb	Area II, LN, Room 1	late 9-2nd 1/2 10C AD	Curle, C L 1982, cat no 213	RMS HB.213	2043
Brough of Birsay	Ork	HY 239	285 pin	Area II, Pictish, zone 4	78C AD	Curle, C L 1982, cat no 12, ill 7	RMS HB.12	2148
Bruathach a Tuath	Inv	NF 8	5 pin			Fig 7. Stevenson 1955a, fig B.13	RMS GS.190	371
Bruathach a Tuath	Inv	NF 8	5 pin			Kilbride-Jones 1980b, fig 61.1	RMS GS.191	372
Bruathach na Tigh	Inv	NF 734	207 pin	midden		Lethbridge 1952, 184	RMS GS.192	1102
Bruthach a Sithean	Inv	NF 733	202 pin			Lethbridge 1952, 183-4, fig 4.2	RMS GS.100	1141
Bruthach a Sithean	Inv	NF 733	202 pin			Lethbridge 1952, 183-4, fig 4.2	RMS GS.101	1142
Bruthach a Sithean	Inv	NF 733	202 pin			Fig 23. Lethbridge 1952, 183-4, fig 4.2	RMS GS.102	1143
Bruthach a Sithean	Inv	NF 733	202 pin			Lethbridge 1952, 183-4, fig 4.2	RMS GS.85	1144
Bruthach a Sithean	Inv	NF 733	202 pin			Lethbridge 1952, 183-4, fig 4.2	RMS GS.86	1145
Bu	Ork	HY 269	093 pin?	L17, ph IIb	GU-1152	Hedges 1987 I, cat no 4, fig 1.14	BU 78.57	1621
Bu	Ork	HY 269	093 pin?	L17, ph IIb	GU-1152	Hedges 1987 I, cat no 5	BU 7.72	1622
Bu	Ork	HY 269	093 pin	L14, ph IIIb	tpq GU-1153	Hedges 1987 I, cat no 7, fig 1.14	BU 78.268	1623
Buckquoy	Ork	HY 243	282 pin	ph 1	'early Pictish', 7C on stratig grounds	Ritchie, A 1977, cat no 1, fig 4	K 1976.40	66
Buckquoy	Ork	HY 243	282 skewer	ph 1	'early Pictish', 7C	Ritchie, A 1977, cat no 2, fig 4	K 1976.86	67
Buckquoy	Ork	HY 243	282 pin	ph 1	'early Pictish', 7C	Ritchie, A 1977, cat no 3, fig 4	K 1976.44	68
Buckquoy	Ork	HY 243	282 pin	ph III	?early 9C, nothing specifically datable	Ritchie, A 1977, cat no 4	K 1976.70	69

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Buckquoy	Ork	HY 243	282 pín	ph III	?early 9C, nothing specifically datable ?9/10C	Ritchie, A 1977, cat no 5	K 1976.71	70
Buckquoy	Ork	HY 243	282 pín	ph IV		Ritchie, A 1977, cat no 6, fig 4	K 1976.78	71
Buckquoy	Ork	HY 243	282 pín	ph II	'late Pictish', early 8C	Ritchie, A 1977, cat no 7, fig 4	K 1976.37	72
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 8, fig 4	K 1976.85	73
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 9, fig 4	K 1976.80	74
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 10, fig 4	K 1976.76	75
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 11	K 1976.81	76
Buckquoy	Ork	HY 243	282 pín	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 12	K 1976.96	77
Buckquoy	Ork	HY 243	282 pín	ph III	'early Norse', ?early 9C	Ritchie, A 1977, cat no 13	K 1976.72	78
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 14, fig 4	K 1976.88	79
Buckquoy	Ork	HY 243	282 pín	Ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 15, fig 4	K 1976.89	80
Buckquoy	Ork	HY 243	282 pín	Ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 16, fig 4	K 1976.81	81
Buckquoy	Ork	HY 243	282 pín	ph III	'early Norse', ?early 9C	Ritchie, A 1977, cat no 17, fig 4	K 1976.69	82
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 18, fig 4	K 1976.84	83
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 19, fig 4	K 1976.77	84
Buckquoy	Ork	HY 243	282 pín	ph II	'Late Pictish', early 8C	Ritchie, A 1977, cat no 20, fig 20	K 1976.39	85
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 21, fig 4	K 1976.82	86
Buckquoy	Ork	HY 243	282 pín	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 22	K 1976.98	87
Buckquoy	Ork	HY 243	282 pín	ph II	'Late Pictish', early 8C	Ritchie, A 1977, cat no 23, fig 4	K 1976.45	88
Buckquoy	Ork	HY 243	282 pín	ph II	'Late Pictish', early 8C	Ritchie, A 1977, cat no 24, fig 5	K 1976.38	89
Buckquoy	Ork	HY 243	282 pín	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 25, fig 5	K 1976.99	90
Buckquoy	Ork	HY 243	282 pín	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 26, fig 5	K 1976.95	91
Buckquoy	Ork	HY 243	282 pín	ph I	'early Pictish', 7C	Ritchie, A 1977, cat no 27	K 1976.36	92
Buckquoy	Ork	HY 243	282 pín	Ph II	'Late Pictish', early 8C	Ritchie, A 1977, cat no 28	K 1976.75	93
Buckquoy	Ork	HY 243	282 pín	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 29	K 1976.74	94
Buckquoy	Ork	HY 243	282 pín	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 30	K 1976.92	95
Buckquoy	Ork	HY 243	282 pín	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 31	K 1976.93	96
Buckquoy	Ork	HY 243	262 pín	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 32	K 1976.94	97
Buckquoy	Ork	HY 243	282 pín?	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 33	K 1976.90	98
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 47, fig 7	K 1976.108	99
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 48, fig 7	K 1976.107	100



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 49, fig 7	K 1976.114	101
Buckquoy	Ork	HY 243	282 comb	ph III	'Early Norse', ?early 9C	Ritchie, A 1977, cat no 51	K 1976.102	103
Buckquoy	Ork	HY 243	282 comb	ph III	'Early Norse', ?early 9C	Ritchie, A 1977, cat no 52	K 1976.100	104
Buckquoy	Ork	HY 243	282 comb	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 53, fig 7	K 1976.104	105
Buckquoy	Ork	HY 243	282 comb	ph IV	'Middle Norse', ?9/10C	Ritchie, A 1977, cat no 54, fig 7	K 1976.105	106
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 55, fig 7	K 1976.112	107
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 56, fig 7	K 1976.116	108
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 56, fig 7	K 1976.109	109
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 57, fig 7	K 1976.111	110
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 58	K 1976.110	111
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 59	K 1976.2106	112
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 60	K 1976.112	113
Buckquoy	Ork	HY 243	282 comb	ph V	'Late Norse', ?early 10C	Ritchie, A 1977, cat no 61	K 1976.113	114
Buckquoy	Ork	HY 243	282 comb			?	K 1976.106	115
Buckquoy	Ork	HY 243	282 comb			Ritchie, A 1977, fig 11	K 1976.171	116
Buckquoy	Ork	HY 243	282 comb?			Ritchie, A 1977, cat no 120, fig 11	K 1976.165	117
Buckquoy	Ork	HY 243	282 pin	ph VI	3rd 1/4 10C	Fanning 1983a, no 31		
				Norse grave with male sk & other material	Ag penny of Eadmund (AD 940-6)			
					Ring pin dating to 1st 1/2 10C			
Buckquoy	Ork	HY 243	282 comb	ph 1	'Early Pictish' 7C	Ritchie, A 1977, cat no 50, fig 7	K 1976.49	102
Buiston Crannog	Ayrsh	NS 41	43 pin			Donations 1881, 111	RMS HV.53	686
Buiston Crannog	Ayrsh	NS 41	43 pin			Duncan 1982, fig 53, pl 17	RMS HV.54	687
Buiston Crannog	Ayrsh	NS 41	43 pin			Donations 1881, 111	RMS HV.55	688
Buiston Crannog	Ayrsh	NS 41	43 pin			Duncan 1982, fig 53, pl 17	RMS HV.56	689
Buiston Crannog	Ayrsh	NS 41	43 pin			Donations 1881, 111	RMS HV.57	690
Buiston Crannog	Ayrsh	NS 41	43 pin			Duncan 1982, fig 53	RMS HV.58	691
Buiston Crannog	Ayrsh	NS 41	43 pin?			Duncan 1982, fig 54, pl 17	RMS HV.58	691
Buiston Crannog	Ayrsh	NS 41	43 pin			Donations 1881, 111	RMS HV.59	692
Buiston Crannog	Ayrsh	NS 41	43 pin			Duncan 1982, fig 54	RMS HV.60	693
Buiston Crannog	Ayrsh	NS 41	43 pin			Donations 1881, 111	RMS HV.61	694
Buiston Crannog	Ayrsh	NS 41	43 pin			Duncan 1982, fig 60	RMS HV.61	694
						Fig 6. Donations 1881, 111		
Buiston Crannog	Ayrsh	NS 41	43 pin			Duncan 1982, fig 53	RMS HV.62	695
						Donations 1881, 111		
						Duncan 1982, fig 53		



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.63	696
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 53, pl 17 Fig 6. Donations 1881, 111	RMS HV.64	697
Buiston Crannog	Ayrsh	NS 41	43	pin?		Duncan 1982, fig 93, pl 17		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.65	698
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.66	699
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 54		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.67	700
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 53		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.68	701
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 54		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.69	702
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 53		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.70	703
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 54		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.71	704
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 53		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.72	705
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 53, pl 17		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.73	706
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 54, pl 17		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.45	707
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 55, pl 17		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.46	708
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 55, pl 17		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 111	RMS HV.47	709
Buiston Crannog	Ayrsh	NS 41	43	comb		Duncan 1982, fig 55, pl 17 Fig 32. Donations 1881, 111, fig 9	RMS HV.48	710
Buiston Crannog	Ayrsh	NS 41	43	comb		Duncan 1982, fig 52 Fig 32. Donations 1881, 111	RMS HV.49	711
Buiston Crannog	Ayrsh	NS 41	43	comb	midden outside stockade, beyond ?doorway	Duncan 1092, fig 52 Fig 32. Donations 1881, 111	RMS HV.50	712
Buiston Crannog	Ayrsh	NS 41	43	comb		Munro 1882, fig 218		
Buiston Crannog	Ayrsh	NS 41	43	comb		Duncan 1982, fig 52		
Buiston Crannog	Ayrsh	NS 41	43	comb		Donations 1881, 111	RMS HV.51	713
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 51		
Buiston Crannog	Ayrsh	NS 41	43	pin		Donations 1881, 112, fig 11	RMS HV.88	714
Buiston Crannog	Ayrsh	NS 41	43	pin		Duncan 1982, fig 30 Stevenson 1955a, fig A.1		
Buiston Crannog	Ayrsh	NS 41	43	pin		Fig 6. Donations 1881, 112	RMS HV.89	715
Buiston Crannog	Ayrsh	NS 41	43	pin?		Duncan 1982, fig 30 Stevenson 1955a fig A.2		
Buiston Crannog	Ayrsh	NS 41	43	pin?		Fig 6. Duncan 1982, fig 31	RMS HV.90	716

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Burrian	Ork	HY	comb	mound near Burrian	EIA reuse of cairn chambers	Calder 1937, 126	RMS GA.111	616
Burrian	Ork	HY	comb	mound near Burrian			RMS GA.110	617
Calf of Eday	Ork	HY 579 386	pin?	long cairn, chamber A, high occupational level			RMS EO.669	118
Carn nan Bharraich	Argyl	NR 360 883	pin			Fig 28. Laing 1973, fig 5.31	RMS FC.237	330
Carn-nan-Bharraich	Argyl	NR 360 883	pin	V burial mound, incl other obj		Grieg 1940, 45	RMS FC.186&a	1568
Carn-nan-Bharraich	Argyl	NR 360 883	pin	female V grave w oval brooches		Fanning 1983a, no 6 Fig 15. Grieg 1940, 42, fig 24 Fanning 1983a no 46 RCAHMS 1984, no 294	RMS IL.331	1581
Castle Hill, S Howrat	Ayrsh	NS 28 53	Cblank	?fort interior or defences NB site includes two ph of occupation, R and 8/9C AD: late penann brooch		Smith, J 1919, 126 RCAHMS 1984, no 294	RMS HH.362	546
Ceardach Ruadh	Inv	NG 775 617	pin	pins sometimes found assoc w cists and bones		Beveridge 1911, 229		1801
Clatchard Craig	Fife	NO 24 17	pin	FF level 3interior of fort	8C AD on basis of brooch moulds from similar context	Close-Brooks 1986, cat no 114, illus 28	SF 15	1808
Clatchard Craig	Fife	NO 24 17	pin	FF level 4: upper enclosure of fort	8C AD on basis of brooch mould from similar context	Close-Brooks 1986 cat no 87, illus 24	SF 34	1459
Clatchard Craig	Fife	NO 24 17	pin	G level 2	8C AD on basis of brooch moulds from similar context	Close-Brooks 1986, cat no 79, illus 24	SF 29	1814
Clatchard Craig	Fife	NO 24 17	pin	G level 2	8C AD on basis of brooch moulds from similar context	Close-Brooks 1986, cat nos 77-8, illus 24	SF 12	1815
Clatchard Craig	Fife	NO 24 17	pin	F level 2	8C AD on basis of brooch moulds from similar context	Close-Brooks 1986, cat no 80	SF 2	1816
Clatchard Craig	Fife	NO 24 17	pin	G level 2	8C AD on basis of brooch moulds from similar contexts	Close-Brooks 1986, cat no 81	SF 8	1817
Clickhimin	Shet	HU 464 408	pin	Panel III	'IA fort'	Hamilton 1968a, cat no 128, fig 38.13	L CIN.75120	1457
Clickhimin	Shet	HU 464 408	pin	Panel XV, Section CGL III	Iron Age farmstead	Hamilton 1968a, 41, fig 18.3	L	1706
Clickhimin	Shet	HU 464 408	pin	Panel XV, Section CGL III panel VII	Iron Age farmstead 'Iron Age fort'	Hamilton 1968a, 41 Hamilton 1968a, 87, no 140, fig 38.12	L L	1707 1708
Clickhimin	Shet	HU 464 408	pin	panel IX	'Iron Age Fort'	Hamilton 1968a, 87, no 141	L	1709
Clickhimin	Shet	HU 464 408	pin		'Iron Age Fort	Hamilton 1968a, 87, no 142, fig 38.8	L	1710
Clickhimin	Shet	HU 464 408	pin	panel XIII	'Iron Age Fort'	Hamilton 1968a, 89, no 170	L	1711
Clickhimin	Shet	HU 464 408	pin	Panel XIII	'Iron Age Fort'	Hamilton 1968a, 89, no 171, fig 39.3	L	1712
Clickhimin	Shet	HU 464 408	pin	panel X	'Iron Age Fort'	Hamilton 1968a, 90, no 173, fig 39.1, pl XXVc	L	1713
Clickhimin	Shet	HU 464 408	pin	panel IX	'Iron Age Fort'	Hamilton 1968a, 87, no 145, fig 38.16	L	1714

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Clickhimin	Shet	HU 464	408 pin	panel IX	'Iron Age Fort'	Hamilton 1968a, 87, no 146, fig 38.17	L	1715
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 21, fig 49.8	L CIN.7962a	1716
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 22, fig 49.6	L CIN.7962b	1717
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 23, fig 49.11	L CIN.7962c	1718
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 24, fig 49.10	L CIN.7962d	1719
Clickhimin	Shet	HU 464	408 pin	double contexts, panel VIII in wheelhouse	'broch'/'wheelhouse' -NB ascribed 2 contexts, cf Hamilton 1968 ,116 and 143,	Hamilton 1968a, 116, no 25, fig 49.9	L CIN.7962e	1720
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 26, fig 49.7	L CIN.7962f	1721
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 27 L	L	1722
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 28 L	L	1723
Clickhimin	Shet	HU 464	408 pin	'broch'		Hamilton 1968a, 116, no 39, fig 50.2	L	1724
Clickhimin	Shet	HU 464	408 pin	Panel IV, 'broch'	Panel 18, Section HH1 10, 'wheelhouse' Panel 19, Section JJ1 7, 'wheelhouse' Panel 19, Section JJ1 7, 'wheelhouse' hut floor opposite broch entrance, 'wheelhouse' hut floor opposite broch entrance, 'wheelhouse' Panel XIV, 'wheelhouse' panel VIII, 50, 'wheelhouse' 'Iron Age Fort', Panel X, pre-broch section GGL III 'Broch': no further detail	Hamilton 1968a, 120, no 57, fig 50.1	L	1725
Clickhimin	Shet	HU 464	408 pin	Panel 18, Section HH1 10, 'wheelhouse'		Hamilton 1968a, 137, no 37, fig 60.4	L	1726
Clickhimin	Shet	HU 464	408 pin	Panel 19, Section JJ1 7, 'wheelhouse'		Hamilton 1968a, 137, no 43, fig 61.1	L	1727
Clickhimin	Shet	HU 464	408 pin	Panel 19, Section JJ1 7, 'wheelhouse'		Hamilton 1968a, 137, no 44, fig 61.2	L	1728
Clickhimin	Shet	HU 464	408 pin	hut floor opposite broch entrance, 'wheelhouse'		Hamilton 1968a, 140, no 80, fig 60.3	L	1460
Clickhimin	Shet	HU 464	408 pin	hut floor opposite broch entrance, 'wheelhouse'		Hamilton 1968a, 140, no 81 L	L	1730
Clickhimin	Shet	HU 464	408 pin	Panel XIV, 'wheelhouse'		Hamilton 1968a, 143, no 158, fig 38.13, pl XXXIIia	L	1731
Clickhimin	Shet	HU 464	408 pin	panel VIII, 50, 'wheelhouse'		Hamilton 1968a, 143, no 159, fig 50.6	L	1732
Clickhimin	Shet	HU 464	408 pin-imp	'Iron Age Fort', Panel X, pre-broch section GGL III		Hamilton 1968, fig 44.9	?L	1963
Clickhimin	Shet	HU 464	408 pin-imp	'Broch': no further detail		Hamilton 1968, fig 51.1	?L	1964
Cnoc a'Comhdhalach	Inv	NF 770	741 pin			Beveridge 1911, pl facing 206	RMS GT.31	267
Cnoc a'Comhdhalach	Inv	NF 770	741 pin			Beveridge 1911, 2nd plate following p 206	RMS GT.32	1104
Cnoc a'Comhdhalach	Inv	NF 770	741 pin			Fanning 1983a, no 10	RMS GT.33	1105
Coll	Argyl	NM 1	5 pin			Fig 28.	RMS HD.345	1249
Coll	Inv	NM 19	57 pin	L M Mann Coll		Fig 27.	GAGM Coll 2	1746
Coll	Inv	NM 19	57 pin	L M Mann Coll			GAGM Coll 2	1747
Coll	Inv	NM 19	57 pin	L M Mann Coll			GAGM Coll 2	1748
Coll and Tiree	Argyl		pin				RMS HD.334	1247



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Coll and Tiree	Argyl	NM 0	pin			Fig 27.	RMS HD.349	1248
Coll and Tiree	Argyl	NR 3	pin			Grieg 1940, 166, fig 82	RMS HD.350-1	1258
Colonsay	Argyl	NR 3	pin			Fanning 1983a, no 4	RMS FG 27	269
Colonsay	Argyl	NR 3	pin			Fig 26. Fanning 1983a, no 45	RMS FC.140	270
Colonsay	Argyl	NR 3	pin				RMS FC.27	333
Cornaig Sands, Tiree	Argyl	NM 0	pin				GAGM '55-9631	1755
Cornaig, Tiree	Argyl	NR 3	pin				GAGM N/N	1777
Coupar Angus	Perth	NJ 19	pin				private	1453
Covesea	Moray	NJ 19	pin	Layer 1, D5	BA-N finds, but 2-4C AD finds predominate, coins range ad 353-365	Childe 1935, 234 Fig 17. Benton 1931, fig 16.3	RMS HM.67	646
Covesea	Moray	NJ 19	pin	layer 1, A5	BA-N finds, but 2-4C AD finds predominate, coins range ad 353-365	Stevenson 1955a, fig B.4 Fig 18. Benton 1931, fig 16.5	RMS HM.68	647
Covesea	Moray	NJ 19	pin	layer 1, C7	BA-N finds, but 2-4C AD predominates, coins range 353-365	Stevenson 1955a, fig B.5 Fig 19. Benton 1931, fig 16.1 or 7	RMS HM.69	648
Covesea	Moray	NJ 19	pin	layer 1, C8	BA-N finds, but 2-4C AD predominates, coins range 353-365	Stevenson 1955a, fig B.10 Fig 7. Benton 1931, fig 16.2	RMS HM.70	649
Covesea	Moray	NJ 19	pin	u/s		Stevenson 1955a fig B.6 Fig 7 & 19. Benton 1931, fig 16.4	RMS HM.71	650
Covesea	Moray	NJ 19	pin	layer 1, C6	BA-N finds, but 2-4C AD predominates, coins range 353-365	Stevenson 1955a, fig B.7 Fig 19. Benton 1931, fig 16.7	RMS HM.72	651
Covesea	Moray	NJ 19	pin	u/s		Stevenson 1955a, fig B.9 Fig 19. Benton 1931, fig 16.8	RMS HM.73	652
Covesea	Moray	NJ 19	pin	layer 1, C8	BA-N finds, but 2-4C AD predominates, coins range 353-65	Stevenson 1955a, fig B.11 Fig 7. Benton 1931, fig 16.9	RMS HM.74	653
Covesea	Moray	NJ 19	pin	layer 1, C7, 'Romano-British layer'	BA-N finds, but 2-4C AD predominates, coins range 353-65	Stevenson 1955a, fig B.8 Benton 1931, fig 9.9	RMS HM.75	654
Covesea	Moray	NJ 19	pin					655
Covesea	Moray	NJ 19	pin					656
Covesea	Moray	NJ 19	pin					657
Covesea	Moray	NJ 19	pin					658
Covesea	Moray	NJ 19	pin	layer 1, A6, found beside bank of red hair	BA-N finds, but 2-4C AD predominates, coins range 353-65	Benton 1931, fig 19.13 Benton 1931, fig 18.1	RMS HM.116	739
Covesea	Moray	NJ 19	pin	layer 1, A6, found beside bank of red hair	BA-N finds, but 2-4C AD predominates, coins range 353-65	Benton 1931, fig 18.2	RMS HM.117	740
Covesea	Moray	NJ 19	pin	layer 1, B6	BA-N finds, but 2-4C AD predominates coins range 353-65	Benton 1931, fig 18.3	RMS HM.118	741

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Covesea	Moray	NJ 19	71	pin	layer 1, A5	BA-N finds, but 2-4C AD predominate, coins range 353-65	Benton 1931, fig 18.5	RMS HM.119 742
Covesea	Moray	NJ 19	71	pin	grid ref = B3	Fig 23.	RMS HM.121	743
Covesea	Moray	NJ 19	71	pin	layer 1, B7	Fig 12. Benton 1931, fig 18.10	RMS HM.120	744
Covesea	Moray	NJ 19	71	pin		?Benton 1931, fig 18.6	RMS HM.122	745
Covesea	Moray	NJ 19	71	pin			RMS HM.124	746
Covesea	Moray	NJ 19	71	comb	layer 1, D4	Benton 1931, fig 9.1	RMS HM.132	747
Craig Phadraig	Inv	NH 64	45	pin			RMS HH.890	897
Craig of Boyne	Banf			pin	kitchen midden, side of Craig of Boyne	Donations 1870, 263	RMS HR.131	737
Craig of Boyne	Banf			pin	kitchen midden, side of Craig of Boyne	Donations 1870, 263	RMS HR.132	738
Crosskirk	Caith	ND 025	701	pin	Broch, amid slabs ph 3, QNW	Fairhurst 1984, cat no 70, H 117, ill 68		1624
Crosskirk	Caith	ND 025	701	comb	Period 3, F8, disturbed midden under a platform	Fig 29. Fairhurst 1984, cat no 632, 121, ill 72	H A.1979.571	1625
Crosskirk	Caith	ND 025	701	pin	Broch, under late pavement, ph 2, QSW	Fairhurst 1984, cat no 201, 117, ill 68	H	1626
Crosskirk	Caith	ND 025	701	pin	outside broch entrance, period 4(?), F9	Fairhurst 1984, cat no 256, 117	H	1627
Crosskirk	Caith	ND 025	701	pin	broch behind casing, ph 2, QSW	Fairhurst 1984, cat no 261, 117, ill 68	H	1628
Crosskirk	Caith	ND 025	701	pin	Ext wall face enclosure 1, period 3 (?), Ell	Fairhurst 1984, cat no 412, 117, ill 68	H	1629
Crosskirk	Caith	ND 025	701	pin	under floor Enclosure 1, period 3, E9	Fairhurst 1984, cat no 459, 117, ill 68	H	1630
Crosskirk	Caith	ND 025	701	pin	enclosure IVb, period 3, E9	Fairhurst 1984, cat no 520, 117	H	1631
Crosskirk	Caith	ND 025	701	pin	settlement outside broch entrance, ?period 3, F9	Fairhurst 1984, cat no 664, 117, ill 68	H	1632
Crosskirk	Caith	ND 025	701	pin	external face of rampart W of gate, period 4, H7	Fairhurst 1984, cat no 752, 117, ill 68	H	1633
Culbin	Nairn	NJ 9	6	pin			H B.1951.969	1652
Culbin	Nairn	NJ 9	6	pin			H B.1951.969	1653
Culbin	Nairn	NJ 9	6	pin			H B.1951.970	1654
Culbin Sands	Nairn	NJ 9	6	pin			RMS BI.?	748
Culbin Sands	Nairn	NJ 9	6	pin			RMS FC.174	749

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Culbin Sands	Nairn	NJ 9	6	pin		Grieg 1940, 145	RMS u/reg	1443
Culbin Sands	Nairn	NJ 9	6	pin		Fanning 1983a, no 28	RMS u/reg	1444
Culbin Sands	Nairn	NJ 9	6	pin		Fanning 1983a, no 55	RMS	1577
Culbin Sands	Nairn	NJ 9	6	pin			RMS	1585
Culbin Sands	Nairn	NJ 9	6	pin/peg			GAGM '44-66	1749
Culbin Sands	Nairn	NJ 9	6	pin			GAGM '44-66w	1754
Doune Hill	Moray	NH 9	4	pin		Grieg 1940, 162, fig 76	RMS FC.134	720
Doune Hill	Moray	NH 9	4	pin		Fanning 1983a, no 48		
Doune Hill	Moray	NH 9	4	pin		Grieg 1940, 162, fig 76	RMS FC.132	1572
Doune Hill	Moray	NH 9	4	pin		Fanning no 14		
Doune Hill, Regulas	Moray	NH 9	4	pin		Grieg 1940, 161-2, fig 76	RMS FC.131	1580
Doune Hill, Regulas	Moray	NH 9	4	pin		Fanning 1983a, no 43		
Doune Hill, Regulas	Moray	NH 9	4	pin		Grieg 1940, 162, fig 76	RMS FC.133	1582
Drimore	Inv	NF 756	409	comb	occupation layer of house	Fanning 1983a, no 47		
Drimore	Inv	NF 756	409	pin?	late 9C/early 10C	Maclaren 1974, 17, no 38, fig 2	GAGM A.7832ak	1750
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17, no 34	GAGM A.7832ag	1752
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Fig 23. Maclaren 1974, 17, no 33	GAGM A.7832af	1753
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17 no 323	GAGM A.7832ae	138
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17 no 32,	GAGM A.7832ad	139
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	pl 2		
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17 no 30,	GAGM A.7832ac	140
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	pl 2		
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17 no 29,	GAGM A.7832ab	141
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	pl 2		
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17 no 28,	GAGM A.7832aa	142
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	pl 2		
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17 no 27,	GAGM A.7832z	237
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	pl 2		
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17, no 24,	GAGM A.7832w	1778
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	pl 2		
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17, no 25,	GAGM A.7832x	1779
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	pl 2		
Drimore	Inv	NF 756	409	pin	occupation layer of Norse house	Maclaren 1974, 17, no 26,	GAGM A.7832y	1780
Dun Ardtreck	Argyl	NG 335	357	pin	most of finds 'secondary'	pl 2		
Dun Beg Vault	Argyl		pin		most of finds not earlier than 2C AD on basis of R pot (MacKie 1965c, 277)	H A.1969.6		1691
Dun Cnoc a'Chomhalach	Inv	NF 770	741	pin-imp	just below turf, top of fort, presumed post fort	Beveridge 1903, 105-7	H A.1965.660	1690
Dun Cuier	Inv	NF 664	034	pin	interior, ash spread of hearth 2	Young 1953, pl IX.1	RMS GT.284	1445
	Inv	NF 664	034	pin	other finds incl pp dice 20	Beveridge 1911, 200-206		
						Young 1956, fig 14.24, pl 20	RMS GU.283	373



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl parallelopiped dice	Young 1956, fig 14.25, pl 20	RMS GU.284	374
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.26, pl 20	RMS GU.285	375
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.226, pl 20	RMS GU.286	376
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.29, pl 20	RMS GU.288	377
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice		RMS GU.289	378
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Fig 26.	RMS GU.287	379
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice		RMS GU.290	380
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.32, pl 20	RMS GU.291	381
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.35, pl 20	RMS GU.292	382
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.34, pl 20	RMS GU.293	383
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 13.36, pl 20	RMS GU.294	384
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.37, pl 20	RMS GU.295	385
Dun Cuier	Inv	NF 664	034 pin	interior, ash spread of hearth 2	other finds incl pp dice	Young 1956, fig 14.38, pl 20	RMS GU.296	386
Dun Cuier	Inv	NF 664	034 pin	footings of stone working bench, central area	assoc w whalebone handle (fig 14.41)	Fig 29. Young 1956, fig 13.1, pl 28.2	RMS GU.297	1146
Dun Cuier	Inv	NF 664	034 comb	vicinity of hearth 2		Fig 29. Young 1956, fig 13.2, pl 28.2	RMS GU.269	1147
Dun Cuier	Inv	NF 664	034 comb	vicinity of hearth 2		Fig 30. Young 1956, fig 13.3, pl 20.3	RMS GU.270	1148
Dun Cuier	Inv	NF 664	034 comb	vicinity of hearth 2		Young 1956, pl 20.3B	RMS GU.272	1150
Dun Cuier	Inv	NF 663	034 comb	vicinity of hearth 2		Young 1956, pl 20.3A	RMS GU.273	1151
Dun Cuier	Inv	NF 664	034 comb	vicinity of hearth 2		Fig 30. Young 1956, fig 13.4, pl 20.4	RMS GU.274	1154
Dun Cuier	Inv	NF 664	034 pin-imp	in angle of inner extension entrance & main wall		Young 1956, 312, 310, fig 12	RMS GU.254	1440
Dun Lagaidh	Argyl	NH 143	913 pin	on dun floor	GaK-1947: NB date too late?	Mackie 1968, 6, SF 125.LADQ	H A.1973.30	1692
Dun Lagaidh	Argyl	NH 143	913 pin			Fig 26.	H A.1973.40	1693
Dun Mor Vaul	Argyl	NM 042	493 pin	context alpha-1, ph 2c: B construction chamber	tpq GaK-1097	Mackie 1974, fig 14, no 202	H A.1965.155	1682
Dun Mor Vaul	Argyl	NM 042	493 pin	Context Iota, ph 3a, early broch floor	tpq GaK-1097	Mackie 1974, SF 417.7m, fig 16, no 284	H A.1965.260	1683
Dun Mor Vaul	Argyl	NM 042	493 pin	context Phi, ph 5, sand and rubble in broch	tpq GaK-1521	Mackie 1974, SF 259.FC	H A.1965.605	1684
Dun Mor Vaul	Argyl	NM 042	493 pin	context Kappa, ph 3b: hearth occupation	tpq GaK-1097	Mackie 1974, SF 441.JT	H A.1965.240	1685

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Dun Mor Vault	Argyl	NM 042	493 pin	context Omlcon, ph 4b: capping on outer wall	GaK-1521	Mackie 1974, SF 319.GV	H A.1965.451	1686
Dun Mor Vault	Argyl	NM 042	493 pin	context Sigma, ph 4b: earth in outer court	GaK-1521	Mackie 1974, SF 399.HO	H A.1965.674	1687
Dun Mor Vault	Argyl	NM 042	493 pin	context Iota, ph 3a: primary broch floor	tpq GaK-1097	Mackie 1974, SF 482.KV	H A.1965.675	1688
Dun Mor Vault	Argyl	NM 042	493 comb	context Gamma 2, gallery segment IX	lies on top of bovine jaw dated by GaK-1520	Mackie 1974, fig 19, no 50, pl XIIIG, SF 196.DN	H A.1965.631	1689
Dun Mor Vault	Argyl	NM 042	493 pin-imp	Context Eta-2, SE quadrant	directly on OGS, probably dating to end 6C BC. Grain from deposit immediately above (GaK-1098)	Mackie 1974, 129-30, fig 12, no 87, SF 539.LR	H	1700
Dun Mor Vault	Argyl	NM 042	493 pin-imp	context Nu, square NE/6U, - 9.45', sub-wall midden	ph 1B, GaK-1225	Mackie 1974, 130, fig 11, no 16, pl XIA, SF 283.FP	H	1701
Dun Mor Vault	Argyl	NM 042	493 pin-imp	context Nu, square NE/6U, sub-wall midden, ph 1B	GaK-1225	Mackie 1974, 130, fig 9, no 19, HP.13	H	1702
Dun Mor Vault	Argyl	NM 042	493 pin-imp	Context Iota, SW quadrant, ph 3A		Mackie 1974, 130, fig 16, no 280, JM.29	H	1703
Dun Mor Vault	Argyl	NM 042	493 pin-imp	context Beta-3, gallery baulk VIII/IX, ph 4B	GaK-1521	Mackie 1974, 130, LK.	H	1704
Dun Mor Vault	Argyl	NM 042	493 pin-imp	context Gamma-6, gallery baulk VII/VI, ph 5	tpq GaK-1521	Mackie 1974, 130, KB.	H	1705
Dun Olabhat	Argyl	NB 750	753 pin?	context 19		Armit 1986, fig 4c	Armit SF 25	1587
Dun Olabhat	Argyl	NB 750	753 pin?	context 12			Armit	1588
Dun Olabhat	Argyl	NB 750	753 pin	context 19, same as pot fig 5			Armit SF 14	1589
Dun Scurrial	Inv		pin			Young 1956, fig 14.33, pl 20	RMS GU.367	1152
Dun Scurrial	Inv		pin			Fig 16. Ritchie, J N G 1971, fig 2.3	RMS GU.299	1153
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base stack w fort on	finds cover early C AD - MA, incl Samian ware, Form 29	Kilbride-Jones 1980b, fig 58.1	Gallanach	1294
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds cover early C AD - MA, incl samian ware, Form 2.9	Ritchie, J N G 1971, fig 2.9	Gallanach	1295
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds cover early C AD - MA, incl samian, Form 29	Ritchie, J N G 1971, fig 2.10	Gallanach	1296
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds cover early C AD - MA, incl samian, Form 29	Ritchie, J N G 1971, fig 2.11	Gallanach	1297
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds, incl samian (Form 29), cover early C AD-MA	Ritchie, J N G 1971, fig 2.12	RMS HD.404	1298
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds, incl samian (Form 29), cover early C AD - MA	Ritchie, J N G 1971, fig 2.13	RMS HD.403	1299
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds, incl samian (Form 29), cover early c AD - MA	Ritchie, J N G 1971, fig 2.14	Gallanach	1300
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds, incl samian (Form 29), cover early C AD - MA	Ritchie, J N G 1971, fig 2.15	Gallanach	1301
Dun an Fheurain	Argyl	NM 824	266 pin	midden at base of stack w fort	finds, incl samian (Form 29), cover early C AD-MA	Ritchie, J N G 1971, fig 2.16	Gallanach	1302







APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Dundurn	Perth	NW 70	23 pin?	u/s		Alcock 1980 Alcock & Driscoll 1985, fig 3	H	1797
Dundurn	Perth	NW 70	23 pin?	DN 425, ph 2A	tpq 2 C-14 dates w range of cal AD 420-769 (HAR-2519, GU-1042)	Alcock et al forth Alcock & Driscoll 1985, fig 3	H	1798
Dundurn	Perth	NO 70	23 pin	DN 205	undated	Alcock et al forth	SF 304	1961
Dundurn	Perth	NO 70	23 pin	DN 207	undated	Alcock et al forth	SF 049	2003
Dundurn	Perth	NO 70	23 pin	DN 106: period 3B	undated	Alcock et al forth	SF 015	1962
Dunkeld	Perth	NO 02	42 pin		post 800 AD	Alcock et al forth Grieg 1940, 157, fig 73 Fanning 1983a, no 29	RMS FC.235	722
Dunollie	Argyl	NM 85	31 comb	Cont 119, pre-Rampart A phase	weighted mean m	Duncan 1982, fig 51 Alcock and Alcock 1987, cat no 108	SF 139	1305
Dunollie	Argyl	NM 85	31 comb	Cont 209, phase 2	tpq weighted mean m, tag = weighted mean n	Duncan 1982, fig 51 Alcock and Alcock 1987, cat no 109	SF 083	1306
Dunollie	Argyl	NM 85	31 pin	Cont 116, Ph 2	tpq weighted mean m, tag weighted mean n	Duncan 1982, fig 54 Alcock and Alcock 1987, cat no 112	SF 126	1307
Dunollie	Argyl	NM 85	31 pin	cont 117, overlies hearth 118	weighted mean m	Duncan 1982, fig 53 Alcock and Alcock 1987, cat no 110	SF 099	1308
Dunollie	Argyl	NM 85	31 pin	cont 117, ph 1	weighted mean m	Duncan 1982, fig 53 Alcock and Alcock 1987, cat no 111	SF 127	1309
Dunollie	Argyl	NM 85	31 pin	cont 118, = hearth, ph 1	weighted mean m	Duncan 1982, fig 44	SF 135	1310
Dunollie	Argyl	NM 85	31 pin	cont 305, secondary context, post-ph 4	coins 1629-39, jetton 1580-1610	Alcock and Alcock 1987, cat no 86	SF 022	1311
Dunollie	Argyl	NM 85	31 pin	cont 308, ph 3, secondary context	weighted mean m	Duncan 1982, fig 44 Alcock and Alcock 1987, cat no 87	SF 079	1312
Dunollie	Argyl	NM 85	31 pin	cont 114, ph 1	weighted mean m	Duncan 1982, fig 44 Alcock and Alcock 1987, cat no 88	SF 109	1313
Dunollie	Argyl	NM 85	31 pin	found w human skull		Donations 1864, 16 no 19	SF 104	1314
Earl's Palace, Birsay Ork	Argyl	NM 85	31 pin			Grieg 1940, 169, fig 84	RMS FC.135	615
Edgerston Fort	Rox	NT 680	124 pin	unrecorded	3 ph occupation multivallate fort, prob 2nd 1/2 1C AD. Hut circle & encl, 2C AD (samian, coins etc) late medieval layer above the samian ware, possibly early medieval	Fanning 1983a, no 27 unpublished ex 1928-39 RCAMS 1956 no 457	RMS MH.816	896
Edinburgh Castle	Loth		comb	EC 88, Area H, F191		Current Archaeology 112 (1988)	Edin Castle	2139
Elsay	Caith	ND 387	520 pin	broch	finds incl 1-handled comb	Donations 1909, 17	RMS GA.805	557

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Elsay	Caith	ND 387	520 comb	broch	finds incl 1-handled comb	Donations 1909, 17	RMS GA.808	558
Elsay	Caith	ND 387	520 comb	broch	finds incl 1-handled comb	Donations 1909, 17	RMS GA.809	559
Everley	Caith	ND 370	683 pin?	broch	finds incl Samian, Dr 27 & Donations 1909, 15-16		RMS GA.688	560
Everley	Caith	ND 370	683 pin	broch	finds incl Samian, Dr 27 & Donations 1909, 15-16		RMS GA.?687	561
Everley	Caith	ND 370	683 pin	broch	finds incl Samian, Dr 27 & Donations 1909, 15-16		RMS GA.747	562
Farm of Galilee	Ork	HY 75	45 comb				K 554	264
Fendom Sands	Ross	NH 8	8 pin			Laing 1973, fig 6.44	RMS BK.117	806
Finyarhoose Brae	Ork	HY 761	540 pin			Orkney SMR no 220	RMS FC.180	1066
Finyarhoose Brae	Ork	HY 761	540 pin			Orkney SMR no 220	RMS FC.181	1067
Finyarhoose Brae	Ork	HY 761	540 pin			Fig 25. Laing 1973, fig 4.9	RMS FC.182	1068
Foill, Coll	Inv	NM 1	5 pin			Orkney SMR no 220		
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll		Fig 12.	RMS HD.335	1246
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.166	1222
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.167	1223
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.152	1225
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.153	1226
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.154	1227
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll				
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.155	1228
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.156	1229
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.157	1230
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll				
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.158	1231
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.159	1232
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll				
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.160	1233
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll				
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.161	1234
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.162	1235
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.163	1236
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.164	1237
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.165	1238
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.150	1239
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll			RMS GNA.151	1240
Foshigarry	Inv	NF 745	763 pin	Ersk Bev Coll				
Foshigarry	Inv	NF 745	763 pin?	Ersk Bev Coll			RMS GNA.304	1241
Foshigarry	Inv	NF 745	763 pin?	Ersk Bev Coll				
Foshigarry	Inv	NF 745	763 pin?	Ersk Bev Coll			RMS GNA.168	1243
Foshigarry	Inv	NF 745	763 pin?	Ersk Bev Coll			RMS GNA.76	1245
Freswick	Caith	ND 37	67 comb	found by F T Wainwright August 1960			GAGM A.779	1751
Freswick Links	Caith	ND 376	676 pin	red ash heap				
						Donations 1939, 335	RMS IL.529	563
						Curle, A O, 1939, pl 48.8		
						Batey 1987a, 192, 8.1.15		

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SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Freswick Links	Caith	ND 376	676 pin	surface find		Donations 1939, 335 Curle, A O, 1939, pl 48.9 Batey 1987a, 192, 8.1.16 Donations 1939, 335	RMS IL.530	564
Freswick Links	Caith	ND 376	676 pin	red ash heap		Curle, A O, 1939, pl 48.7 Batey 1987a, 192, 8.1.17, fig 35h	RMS IL.531	565
Freswick Links	Caith	ND 376	676 pin	surface find		Curle, A O, 1939, pl 48.10 Donations 1939, 335	RMS IL.532 RMS IL.533	566 567
Freswick Links	Caith	ND 376	676 pin	surface of south gulley		Batey 1987a, 192, 8.1.19 Donations 1948, 332	RMS IL.691	568
Freswick Links	Caith	ND 376	676 pin			Batey 1987a, 193, 8.1.27 Fig 24.Donations 1938, 322	RMS IL.686	569
						Stevenson 1955, 284, fig A.25		
Freswick Links	Caith	ND 376	676 pin			Batey 1987a,193, 8.1.22 Fig 13. Donations 1948, 332	RMS IL.687	570
						Batey 1987a, 193, 8.1.23, fig 36a		
Freswick Links	Caith	ND 376	676 pin			Fig 13. Donations 1948, 322, no 5	RMS FC.259	571
						Batey 1987a, 190, 8.1.2, fig 35b		
Freswick Links	Caith	ND 376	676 pin			Donations 1948, 322 Stevenson 1955a, fig A.23	RMS FC.258	572
						Batey 1987a, 190, 8.1.1, fig 35a		
Freswick Links	Caith	ND 376	676 pin			Donations 1948, 322, no 5	RMS FC.260	573
Freswick Links	Caith	ND 376	676 pin			Batey 1987a, 190, 8.1.3 Fig 27. Donations 1948, 332, no 5	RMS IL.685	574
Freswick Links	Caith	ND 376	676 pin			Batey 1987a, 193, 8.1.21 Fig 12. Donations 1974, 327	RMS IL.747	575
						Batey 1987a, 194, 8.1.31, fig 36b		
Freswick Links	Caith	ND 376	676 pin			Donations 1950, 230 Fanning 1983a, no 56	RMS IL.709	576
						Batey 1987a, 116, 4.8.12, pl 23c		
Freswick Links	Caith	ND 376	676 pin			Donations 1950, 230 Laing 1973, 64, fig 7.68	RMS IL.710	577
						Batey 1987a, 116, 4.8.13, fig 26a		
Freswick Links	Caith	ND 376	514 pin				RMS GA.840	581
Freswick Links	Caith	ND 37	67 pin?				RMS HR.938	754
Freswick Links	Caith	ND 37	67 pin			Donations 1948, 319, no 32	RMS HR.940	755
				from BA strata thrown up by Black Watch trenches		Batey 1987a, 191, 8.1.10		



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Freswick Links	Caith	ND 37	67	pin	from BA strata thrown up by Black Watch trenches	Donations 1948, 319, no 32	RMS HR.939	756
Freswick Links	Caith	ND 37	67	pin		Batey 1987a, 191, 8.1.9 Fig 6. Stevenson 1955a, fig A.24	RMS HR.1000	757
Freswick Links	Caith	ND 37	67	pin		Donations 1950, 230 Batey 1987a, 195, 8.1.43 Fig 6 & 24. Donations 1959, 230 no 38	RMS HR.1002	758
Freswick Links	Caith	ND 37	67	pin		Batey 1987a, 191, 8.1.12 Fig 6. Donations 1950, 230	RMS HR.1001	759
Freswick Links	Caith	ND 37	67	pin		Batey 1987a,191, 8.1.11, Donations 1950, 230 no 38	RMS HR.1003	760
Freswick Links	Caith	ND 37	67	pin		Batey 1987a, 191, 8.1.13 Fig 24. Donations 1950, 230 no 38	RMS HR.1004	761
Freswick Links	Caith	ND 37	67	pin		Batey 1987a, 192, 8.1.14	RMS HR.1005	762
Freswick Links	Caith	ND 37	67	pin			RMS HR.1006	763
Freswick Links	Caith	ND 37	67	pin			RMS HR.1007	764
Freswick Links	Caith	ND 37	67	pin			RMS HR.1008	765
Freswick Links	Caith	ND 37	67	pin			RMS HR.1034	766
Freswick Links	Caith	ND 37	67	pin			RMS FC.261	767
Freswick Links	Caith	ND 37	67	comb	N middens	Donations 1948, 332, no 5 Batey 1987a, 190, 8.1.4, fig 35c	RMS HR.806	768
Freswick Links	Caith	ND 37	67	comb	from middens	Donations 1926, 10 Batey 1987a, 209. 8.9.4, fig 39d	RMS HR.811	769
Freswick Links	Caith	ND 37	67	comb	N middens	Donations 1926, 10 Batey 1987a, 205, 8.8.2 Donations 1926, 10	RMS HR.812	770
Freswick Links	Caith	ND 37	67	pin		Batey 1987a, 209, 8.9.4, fig 39d	RMS HD.511	771
Freswick Links	Caith	ND 37	67	pin		Fig 24. Donations 1935, 438	RMS HD.504	772
Freswick Links	Caith	ND 37	67	pin		Batey 1987a, 191, 8.1.8 Donations 1935, 247 no 1	RMS FC.254	773
Freswick Links	Caith	ND 37	67	pin	found in ruined structure on Links	Batey 1987a, 191, 8.1.7, fig 35f		
Freswick Links	Caith	ND 37	67	pin		Donations 1947, 196 no 4 Batey 1987a, 107, 2.2.1, pl 20B,C	RMS FC.257	774
Freswick Links	Caith	ND 37	67	pin		Fig 6. Donations 1948, 322		
Freswick Links	Caith	ND 37	67	pin		Laing 1973, fig 4.2 Batey 1987a, 114		
Freswick Links	Caith	ND 37	67	pin	found near earthhouse	Fig 13. Donations 1928, 82	RMS HR.824	775
						Batey 1987a, 114, 4.8.3, pl 23d		

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Freswick Links	Caith ND 37	67	pin	found near earthhouse		Donations 1928, 82 Batey 1987a, 114, 4.8.4, pl 23d	RMS HR.825	776
Freswick Links	Caith ND 37	67	pin			Donations 1950, 230 Laing 1973, 70, fig 5.26 Batey 1987a, 115, 4.8.5, pl 23c	RMS HR.994	777
Freswick Links	Caith ND 37	67	pin			Donations 1950, 230 Laing 1973, fig 5.27 Batey 1987a, 115, 4.8.6, fig 25f	RMS HR.995	778
Freswick Links	Caith ND 37	67	pin			Donations 1950, 230 Laing 1973, fig 5.29 Batey 1987a, 115, 4.8.7, fig 25g	RMS HR.996	779
Freswick Links	Caith ND 37	67	pin			Donations 1950, 230 Laing 1973, fig 5.28 Batey 1987a, 115, 4.8.8	RMS HR.997	780
Freswick Links	Caith ND 37	67	pin			Donations 1950, 230 Batey 1987a, 115, 4.8.9	RMS HR.998	781
Freswick Links	Caith ND 37	67	pin			Donations 1950, 230 Laing 1973, fig 6.39 Batey 1987a, 115, 4.8.10, fig 25h	RMS HR.999	782
Freswick Links	Caith ND 37	67	pin			Donations 1948, 332 Batey 1987a, 193, 8.1.25	RMS IL.689	792
Freswick Links	Caith ND 37	67	pin			Donations 1948, 332 Batey 1987a, 193, 8.1.24	RMS IL.688	793
Freswick Links	Caith ND 37	67	pin			Donations 1948, 332 Batey 1987a, 193, 8.1.26	RMS IL.690	794
Freswick Links	Caith ND 37	67	pin			Donations 1943, 196 Batey 1987a, 194, 8.1.30	RMS IL.714	795
Freswick Links	Caith ND 37	67	pin	eroded from sands			Freswick	1600
Freswick Links	Caith ND 37	67	pin	eroded from sands			Freswick	1601
Freswick Links	Caith ND 37	67	pin	eroded from sands			Freswick	1603
Freswick Links	Caith ND 37	67	pin	eroded from sands			Freswick	1602
Freswick Links	Caith ND 37	67	pin			Fig 24. Fig 25. Batey 1984, fig 41.F		
Freswick Links	Caith ND 37	67	pin	eroded from sands		Batey 1984, fig 41.D	Freswick	1604
Freswick Links	Caith ND 37	67	pin	eroded from sands		Fig 26. Batey 1984, fig 41.G	Freswick	1605
Freswick Links	Caith ND 37	67	pin	eroded from sands		Batey 1984, fig 41.H	Freswick	1606
Freswick Links	Caith ND 37	67	pin?	eroded from sands			Freswick	1607
Freswick Links	Caith ND 37	67	pin	eroded from sands			Freswick	1608
Freswick Links	Caith ND 37	67	pin	eroded from sands			Freswick	1609
Freswick Links	Caith ND 37	67	pin	eroded from sands			Freswick	1610
Freswick Links	Caith ND 37	67	comb	eroded from sands			Freswick	1611
Freswick Links	Caith ND 37	67	comb	eroded from sands			Freswick	1612
Freswick Links	Caith ND 37	67	comb	eroded from sands			Freswick	1613
Freswick Links	Caith ND 37	67	comb	eroded from sands			Freswick	1614
Freswick Links	Caith ND 37	67	comb	eroded from sands		Fig 25.	Freswick	1615



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Freswick Links	Caith ND 37	67	comb	eroded from sands		Fig 15. Batey 1984, pl 25.A-B	Freswick	1616
Freswick Links	Caith ND 37	67	comb	eroded from sands		Fig 26. Batey 1984, fig 31.D	Freswick	1617
Freswick Links	Caith ND 37	67	pin	eroded from sands		Batey in litt	Freswick	1618
Freswick Links	Caith ND 37	67	pin	eroded from sands		Donations 1939, 335	Freswick	1619
Freswick Links	Caith ND 37	67	pin	eroded from sands		Curle 1939, 102, plL.7		
Freswick Links	Caith ND 37	67	pin	Area 3, phase Y episode 20: disturbed		Batey 1987a, 115, 4.8.11, fig 25d		
Freswick Links	Caith ND 37	67	pin	west end of building 3, slightly above floor level		Batey 1987a, 117, 4.8.82, pl 25A,B		
Freswick Links	Caith ND 37	67	pin			Donations 1939, 335	RMS IL.465	2006
Freswick Links	Caith ND 37	67	pin			Curle 1939, 98, pl 48.10		
Freswick Links	Caith ND 37	67	pin			Batey 1987a, 192, 8.1.18, fig 35i		
Freswick Links	Caith ND 37	67	pin	surface of gulley at south		Donations 1939, 335	RMS IL.543	2046
Freswick Links	Caith ND 37	67	pin			Curle 1939, 99, pl 48.2		
Freswick Links	Caith ND 37	67	pin			Batey 1987a, 192, 8.1.20, fig 35j		
Freswick Links	Caith ND 37	67	pin			Donations 1948, 322	RMS IL.692	2047
Freswick Links	Caith ND 37	67	pin			Batey 1987a, 193, 8.1.28		
Freswick Links	Caith ND 37	67	pin			Donations 1948, 322	RMS IL.693	2048
Freswick Links	Caith ND 37	67	pin			Batey 1987a, 194, 8.1.29		
Freswick Links	Caith ND 37	67	pin	found cleaning wall to NW of building I		Curle notebook ms 28a (Soc RMS FR.1		1789
Freswick Links	Caith ND 37	67	pin			Antiq Scot MSS 461)		
Freswick Links	Caith ND 37	67	pin			Batey 1987a, 195, 8.1.44		
Freswick Links	Caith ND 37	67	pin	found between paving slabs		Childe notebook 12	RMS IL.664/5	1729
Freswick Links	Caith ND 37	67	comb			Batey 1987a, 195, 8.1.44		
Freswick Links	Caith ND 37	67	comb			Donations 1930, 14	RMS HD.480	2086
Freswick Links	Caith ND 37	67	comb			Batey 1987, 8.8.1, pl 33a		
Freswick Links	Caith ND 37	67	comb			Donations 1980, 535	RMS HR.1465	2087
Freswick Links	Caith ND 37	67	comb			Batey 1987, 8.8.3		
Freswick Links	Caith ND 37	67	comb	Building III, W end, slightly above floor level	Norse	Donations 1939, 335	RMS IL.652	2088
Freswick Links	Caith ND 37	67	comb	on top of longhouse wall opposite end of build IV	Norse	Curle 1939, 96, pl 47.2		
Freswick Links	Caith ND 37	67	comb			Batey 1987, 206, 8.8.4		
Freswick Links	Caith ND 37	67	comb			Donations 1939, 335	RMS IL.653	2089
Freswick Links	Caith ND 37	67	comb			Curle 1939, 96, pl 47.4		
Freswick Links	Caith ND 37	67	comb			Batey 1987, 206, 8.8.5		
Freswick Links	Caith ND 37	67	comb			Donations 1948, 322	RMS IL.677	2090
Freswick Links	Caith ND 37	67	comb			Batey 1987, 206, 8.8.6		
Freswick Links	Caith ND 37	67	comb			Donations 1948, 322	RMS IL.677	2091
Freswick Links	Caith ND 37	67	comb			Batey 1987, 206, 8.8.7		
Freswick Links	Caith ND 37	67	comb	hearth of building VI near kerb on S side		Donations 1939, 335	RMS IL.523	2095
Freswick Links	Caith ND 37	67	comb			Curle 1939, 96, pl 47.3		
Freswick Links	Caith ND 37	67	comb			Batey 1987, 209, 8.9.5		
Freswick Links	Caith ND 37	67	comb			Donations 1942, 134		
Freswick Links	Caith ND 37	67	comb			Batey 1987, 209, 8.9.6, pl 36a	RMS IL.656	2096



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Freswick Links	Caith	ND 37	67	comb		Donations 1948, 322	RMS IL.676	2097
Freswick Links	Caith	ND 37	67	comb		Batey 1987, 210, 8.9.7 Donations 1950, 230	RMS IL.708	2098
Freswick Links	Caith	ND 37	67	comb		Batey 1987, 210, 8.9.8, fig 40D	RMS IL.748	2099
Freswick Links	Caith	ND 37	67	CCase	midden over primary floor to NW of building III	Donations 1974, 327 Batey 1987, 210, 8.9.9, pl 36b	RMS IL.524	2100
Freswick Sands	Caith	ND 38	66	pin		Donations 1939, 335	RMS HR.523	783
Freswick Sands	Caith	ND 38	66	pin		Curle 1939, 96-7, pl 47.1	RMS u/reg	784
Freswick Sands	Caith	ND 38	66	pin?		Batey 1987, 212, 8.10.1, pl 37a	RMS u/reg	785
Freswick Sands	Caith	ND 38	66	pin?			RMS u/reg	786
Freswick Sands	Caith	ND 38	66	pin			RMS FC.251	790
Freswick Sands Broch	Caith	ND 38	66	pin		Laing 1973, 62, fig 5.32 Laing 1975a, 328, fig 124.23a	RMS CA.756	787
Freswick Sands Broch	Caith	ND 38	66	pin		Batey 1987a, 114, 4.8.1 Fig 6 & 27. Donations 1909, 16	RMS CA.772	788
Freswick Sands Broch	Caith	ND 38	66	pin?		Batey 1987a, 190, 8.1.5, fig 35d	RMS CA.758	789
Freswick Sands Broch	Caith	ND 38	66	pin		Fig 26. Fig 13. Donations 1909, 16	RMS CA.757	791
Freswick Sands Broch	Caith	ND 37	67	comb		Batey 1987a, 190-1, 8.1.6, fig 35e	RMS GA.762	2092
Freswick Sands Broch	Caith	ND 37	67	comb		Donations 1909, 16 Batey 1987, 208, 8.9.1, pl 35a	RMS GA.763-5,67	2093
Freswick Sands Broch	Caith	ND 37	67	comb		Donations 1909, 16 Batey 1987, 208, 8.9.2, fig 39c	RMS GA.763-5,67	2094
Galson	Inv	NB 437	594	pin		Donations 1909, 16 Batey 1987, 209, 8.9.3	RMS HR.677	1163
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.680	1164
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.681	1165
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9 Fig 25. Edwards 1924, fig 9	RMS HR.682	1166
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.683	1167
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.692	1168
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.693	1169
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.694	1170
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.705	1171
Galson	Inv	NB 437	594	pin		Edwards 1924, fig 9	RMS HR.706	1172
Galson	Inv	NB 437	594	pin?		Edwards 1924, fig 9	RMS HR.707	1173

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Galson	Inv	NB 437	594 pin	midden w other pins	Ag penny of Eadgar (AD 957-975) Ag penny of Eadgar (AD 957-975)	Edwards 1924, fig 9	RMS HR.764	1174
Galson	Inv	NB 437	594 pin			Fig 25. Edwards 1924, fig 9.16	RMS HR.769	1175
Galson	Inv	NB 437	594 pin			Fig 24. Edwards 1924, fig 9	RMS HR.890	1176
Galson	Inv	NB 437	594 pin			Edwards 1924, fig 9.213	RMS HR.1100	1177
Galson	Inv	NB 437	594 pin?			Edwards 1924, fig 9	RMS HR.1101	1178
Galson	Inv	NB 437	594 comb			Edwards 1924, fig 9.11	RMS HR.771	1179
Galson	Inv	NB 437	594 comb			Edwards 1924, fig 9.10	RMS HR.772	1180
Galson	Inv	NB 437	594 comb			Edwards 1924, fig 9.9	RMS HR.691	1181
Galson	Inv	NB 437	594 comb			Edwards 1924, fig 9.8	RMS HR.702	1182
Galson	Inv	NB 437	594 pin?			Edwards 1924	RMS HR.766	1183
Galson	Inv	NB 437	594 pin?			Edwards 1924	RMS HR.767	1184
Galson	Inv	NB 437	594 pin			Edwards 1924	RMS HR.768	1185
Galson	Inv	NB 437	594 pin			Edwards 1924, 198	RMS HR.678	1186
Galson	Inv	NB 437	594 pin			Fanning 1983a, no 21	RMS HR.679	1187
Galson	Inv	NB 437	594 pin			Fig 15. Edwards 1924, 198		
Galson, Borge	Inv	NB 437	594 pin	midden w other pins	finds incl painted pebble & 4C R coin finds incl painted pebble and 4C R coin finds incl painted pebble & 4C R coin finds incl painted pebble & 4C R coin finds incl painted pebble & 4C R coin finds incl painted pebble & 4C R coin finds incl painted pebble & 4C R coin finds incl painted pebble & 4C R coin	Fanning 1983a, no 54	RMS HR.887	1188
	Inv	NB 437	594 pin			Fig 13. Laing 1973, fig 6.45		
	Inv	NB 437	594 pin			Baden-Powell & Elton 1937, 351, fig 2		
	Inv	NF 772	743 pin			Fig 25. Edwards 1924, fig 9	RMS HR.676	1162
	Inv	NF 772	743 pin			Beveridge & Callander 1932	RMS GT.494	1155
	Inv	NF 772	743 pin			Beveridge & Callander 1932	RMS GT.495	1156
	Inv	NF 772	743 pin			Beveridge & Callander 1932	RMS GT.496	1157
	Inv	NF 772	743 comb			Beveridge & Callander 1932	RMS GT.492	1158
	Inv	NF 772	743 pin			Fig 28. Beveridge & Callander 1932, 37	RMS GT.489	1159
	Inv	NF 772	743 pin			Beveridge and Callander 1932, 41	RMS GT.490	1160
	Inv	NF 772	743 pin?			Fanning 1983a, no 52	RMS GT.491	1161
	Inv	NF 766	754 pin			Beveridge & Callander 1932, 36		
	Inv	NF 766	754 pin				RMS GT.40	387
	Inv	NF 766	754 pin				RMS GT.42	388
	Inv	NF 766	754 pin			Beveridge 1911, 207, pl facing 206	RMS GT.44	389
	Inv	NF 766	754 pin			Beveridge 1911, 207, pl facing 206	RMS GT.657	390
Ghegan Rock, Seacliff	ELoth	NT 60	84 comb	kitchen midden, found before 1865-70	assoc material incl 'part of the neck and handle of a Roman amphora'	Fig 29. Laidaly 1870, 375-77 MacGregor, M 1976, no 274 Warner 1983, 168-69	RMS HD.78	215

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Glenluce Sands Gnoc Geilbst Golspie	Gall Inv	NX 19 57	pin				RMS BH u/reg	867
			pin				RMS GT.219	1210
	Suth	NH 824 998	pin	garden of 3 Ben Braggie Drive, Golspie	8/9C on stylistic parallels	Close-Brooks 1975, pl 27a	RMS 7FC.301	727
Gullane	ElOTH	NT 4 8	pin	cave 1		Cree 1909, 243-56	RMS HM.11	811
Gullane	ElOTH	NT 4 8	pin	cave 1		Cree 1909, fig 5.2	RMS HR.546	812
Gullane	ElOTH	NT 4 8	pin	Cave no 2, in deposit 4' from edge of hearth		Cree 1909, 261, fig 11	RMS HM.18	813
Gullane	ElOTH	NT 4 8	pin	Muirfield, Gullane		Fanning 1983a, no 42		
Gurness	Ork	HT 382 269	pin	B/PB (1)		Hedges 1987 II, cat no 109, fig 2.26	RMS HR.880	814
							RMS GA30.141	119
Gurness	Ork	HY 382 269	pin	u/s		Hedges 1987 II, cat no 115	RMS GA77.219	120
Gurness	Ork	HY 382 269	pin	B (1)		Hedges 1987 II, cat no 102, fig 2.26	RMS GA32.337	121
Gurness	Ork	HY 382 269	pin	B (9)		Hedges 1987 II, cat no 103, fig 2.26	RMS GA33.454	122
Gurness	Ork	HY 382 269	pin	B/PB (2)		Hedges 1987 II, cat no 101, fig 2.26	RMS GA33.399	123
Gurness	Ork	HY 382 269	pin	u/s		Hedges 1987 II, cat no 95, fig 2.26	RMS GA31.195	124
Gurness	Ork	HY 382 269	pin	u/s		Hedges 1987 II, cat no 114	RMS GA77.218	125
Gurness	Ork	HY 392 269	pin	B/PB (1)		Hedges 1987 II, cat no 110	RMS GA30.34	126
Gurness	Ork	HY 382 269	pin	B/PB (1)		Hedges 1987 II, cat no 108, fig 2.26	RMS GA30.154	127
Gurness	Ork	HY 382 269	pin	B/PB (1)		Hedges 1987 II, cat no 98, fig 2.25	RMS GA32.305	128
Gurness	Ork	HY 382 269	pin	PB 3		Hedges 1987 II, cat no 119, fig 2.26	RMS GA33.396	129
Gurness	Ork	HY 382 269	pin	B (1)		Hedges 1987 II, cat no 122, fig 2.26	RMS GA32.336	130
Gurness	Ork	HY 382 269	pin	B/PB (2)		Hedges 1987 II, cat no 117	HBM GA36.379	131
Gurness	Ork	HY 382 269	pin	B/PB (2)		Hedges 1987 II, cat no 99, fig 2.24	HBM GA37.507	132
Gurness	Ork	HY 382 269	pin	B (13)		Hedges 1987 II, cat no 112	HBM GA38.680	133
Gurness	Ork	HY 382 269	pin	u/s		Hedges 1987 II, cat no 97, fig 2.24	HBM GA77.150	134
Gurness	Ork	HY 382 269	pin	u/s		Hedges 1987 II, cat no 96, fig 2.24	HBM GA77.151	135
Gurness	Ork	HY 382 269	pin	u/s		Hedges 1987 II, cat no 113	HBM GA77.477	136
Gurness	Ork	HY 382 269	pin?	u/s		Hedges 1987 II, cat no 116	HBM GA77.480	145
Gurness	Ork	HY 382 269	pin	B (10)		Hedges 1987 II, cat no 100, fig 2.24	HBM CA34.103	146
Gurness	Ork	HY 382 269	pin	B/PB (2)		Hedges 1987 II, cat no 111	HBM GA35.250	147
Gurness	Ork	HY 382 269	pin	PB (3)		Hedges 1987 II, cat no 105, fig 2.24	HBM GA35.80	148
Gurness	Ork	HY 382 269	pin	PB (3)		Hedges 1987 II, cat no 106, fig 2.25	HBM GA35.59	149
Gurness	Ork	HY 382 269	pin	B/PB (2)		Hedges 1987 II, cat no 104, fig 2.24	HBM GA35.200	150
Gurness	Ork	HY 382 269	pin	B/PB (2)		Fig 23. Hedges 1987 II, cat no 118	HBM BA35.110	151



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Gurness	Ork	HY 382	269 pin	B/PB (2)		Hedges 1987 II, cat no 120, fig 2.26	HBM GA35.191	152
Gurness	Ork	HY 382	269 pin	-		Hedges 1987 II, cat no 235, fig 2.39	HBM GA77.134	154
Gurness	Ork	HY 382	269 pin	B/PB (7)		Hedges 1987 II, cat no 236, fig 2.39	HBM GA38.605	155
Gurness	Ork	HY 382	269 pin	B (4)		Hedges 1987 II, cat no 237, fig 2.39	HBM GA38.620	156
Gurness	Ork	HY 382	269 pin	B (10)		Hedges 1987 II, cat no 238, fig 2.39	HBM GA34.16	157
Gurness	Ork	HY 382	269 pin?	B/PB (2)		Hedges 1987 II, cat no 239	HBM GA36.418	158
Gurness	Ork	HY 382	269 pin	PB (12)		Fanning 1983a, no 23	RMS u/reg	614
						Hedges 1987 II, cat no 234, fig 2.39		
Gurness	Ork	HY 382	268 pin		Norse	Robertson 1969		1448
Gurness	Ork	HY 382	269 pin	Viking grave VII		Hedges 1987 II, 73		1733
Gurness	Ork	HY 382	269 pin		'Pictish'	Hedges 1987 I, 84		1734
Gurness	Ork	HY 382	269 pin	floor of Shamrock paving to S of Shamrock and annex		Hedges 1987 I, 84		1735
Gurness	Ork	HY 382	269 pin	B (10)		Hedges 1987 II, 246, no 816, fig 2.84	HBM GA 34.68	1736
Gurness	Ork	HY 382	269 pin	B (10)		Hedges 1987 II, 246, cat no 817, fig 2.84	HBM GA 34.68	1737
Gurness	Ork	HY 382	269 pin	B (10)		Hedges 1987 II, 246, cat no 818, fig 2.84	HBM GA 34.96	1738
Gurness	Ork	HY 382	269 pin	PB (2)		Hedges 1987 II, 247, cat no 819, fig 2.84	HBM GA 77.117	1739
Gurness	Ork	HY 382	269 pin	PB (2)		Hedges 1987 II, 247, cat nos 820-1, fig 2.84	HBM GA 77.116	1740
Gurness	Ork	HY 382	269 pin	PB (2)		Hedges 1987 II, 247, cat no 822, fig 2.85	HBM GA 77.116	1741
Gurness	Ork	HY 382	269 pin	PB (2)		Hedges 1987 II, 247, cat no 823, fig 2.85	HBM GA 77.116	1742
Gurness	Ork	HY 382	269 pin	PB (2)		Hedges 1987 II, 247, cat no 824, fig 2.85	HBM GA 77.116	1743
Hebrides	Inv		pin			Fanning 1983a, no 36	H B.1951.2094	1657
Hebrides	Inv		pin			Donations 1857, 176	H B.1951.2094	1658
Heisker	Inv	NL 57	86 pin	'a burying ground'		Chalmers 1868, 110-4	RMS FC.138	271
Hill of Crichtie	Aber	NJ 95	44 pin	under lge stone, 'cist-like' arrangement, ex 1856	assoc finds of Donside type terret & spearbutt (MacGregor, M 1976, no 177): ? 3 or 4C	Ralston & Inglis 1984, no 34	ABDUA 15645	1462
Hillhead	Caith	ND 376	514 pin?	broch		Donations 1909, 17-18	RMS GA.844	578
Hillhead	Caith	ND 376	514 pin?	broch		Donations 1909, 17-18	RMS GA.843	579
Hillhead	Caith	ND 376	514 pin	broch		Donations 1909, 17-18	RMS GA.839	580
Hillhead	Caith	ND 376	514 comb	broch		Donations 1909, 17-18	RMS GA.833	582
Hillhead	Caith	ND 376	514 pin?	broch		Donations 1909, 17-18	RMS GA.838	583
Hillhead	Caith	ND 376	514 pin?	broch		Donations 1909, 17-18	RMS GA.845	584

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Hillswick	Shet	HU 2	770 pin?	upper part of shell layer, kitchen midden	assoc finds incl 1-handled combs	Coughtrey 1872, 122	RMS HR.104	618
Howe	Ork	HY 275	109 pin	early ph 8	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 2113	K 1982.202	3
Howe	Ork	HY 275	109 pin	broch wkshp, floor 4, ph 7/8	tpq weighted mean c	Smith et al forth, cat no 2145	K 1982.202	4
Howe	Ork	HY 275	109 pin	late ph 8, Pictish abandonment	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 2557	K 1982.202	5
Howe	Ork	HY 275	109 pin	late ph 8, Pictish abandonment	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 2559	K 1982.202	6
Howe	Ork	HY 275	109 pin	late ph 7, SE building wkshop	tpq weighted mean c	Smith et al forth, cat no 2902	K 1982.202	7
Howe	Ork	HY 275	109 pin	late ph 7	tpq weighted mean c	Smith et al forth, cat no 2919	K 1982.202	8
Howe	Ork	HY 275	109 pin	late ph 8	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 4129	K 1982.202	9
Howe	Ork	HY 275	109 pin	early ph 8, NE building	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 4211	K 1982.202	10
Howe	Ork	HY 275	109 pin	early ph 8, NE build	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 4307	K 1982.202	11
Howe	Ork	HY 275	109 pin	late ph 7, E yd wkshop	tpq weighted mean c	Smith et al forth, cat no 4463	K 1982.202	12
Howe	Ork	HY 275	109 pin	late ph 7, E yard wkshop	tpq weighted mean c	Smith et al forth, cat no 4790	K 1982.202	13
Howe	Ork	HY 275	109 pin	ph 7, ditches	weighted mean c	Smith et al forth, cat no 4890, illus 18	K 1982.202	14
Howe	Ork	HY 275	109 pin	early ph 7, NE build	weighted mean c	Smith et al forth, cat no 5067	K 1982.202	15
Howe	Ork	HY 275	109 pin	later ph 7, NE build	tpq weighted mean c	Smith et al forth, cat no 5179	K 1982.202	16
Howe	Ork	HY 275	109 pin	late ph 7, SE yard wkshop	tpq weighted mean c	Smith et al forth, cat no 5186	K 1982.202	17
Howe	Ork	HY 275	109 pin	u/s		Smith et al forth, cat no 5822	K 1982.202	18
Howe	Ork	HY 275	109 pin	ph 7/8, shell midden	tpq weighted mean c	Smith et al forth, cat no 6887	K 1982.202	19
Howe	Ork	HY 275	109 pin	ph 5/6,levelling rubble,S area	GU-1759, GU-1758	Smith et al forth, cat no 7100, illus 18	K 1982.202	20
Howe	Ork	HY 275	109 pin	ph 4, floor	GU-1805	Smith et al forth, cat no 7398	K 1982.202	21
Howe	Ork	HY 275	109 pin	late ph 8, stage 8	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 7832	K 1982.202	22
Howe	Ork	HY 275	109 pin	late ph 7, S wkshop	tpq weighted mean c	Smith et al forth, cat no 7855	K 1982.202	23
Howe	Ork	HY 275	109 pin	early ph 8, S wkshop	GU-1749, GU-1756 GU-1757	Smith et al forth, cat no 7856	K 1982.202	24
Howe	Ork	HY 275	109 pin	ph 7/8	tpq weighted mean c	Smith et al forth, cat no 7877	K 1982.202	25
Howe	Ork	HY 275	109 pin			Smith et al forth, cat no 7833	K 1982.202	26

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Howe	Ork	HY 275	109 pin	ph 9	tpq ph 8 = GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 4415	K 1982.202	27
Howe	Ork	HY 275	109 pin	late ph 7, E yard wkshop	tpq weighted mean c	Smith et al forth, cat no 4722, fig 18	K 1982.202	28
Howe	Ork	HY 275	109 pin	ph 6	tpq weighted mean b, taq	Smith et al forth, cat no 5340, fig 18	K 1982.202	29
Howe	Ork	HY 275	109 pin	early ph 7, SE build, S area	weighted mean c	Smith et al forth, cat no 7108, fig 18	K 1982.202	30
Howe	Ork	HY 275	109 pin	late ph 7, SE yard	weighted mean c	Smith et al forth, cat no 7833	K 1982.202	31
Howe	Ork	HY 275	109 pin	ph 8, context 107	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 114, fig 21	K 1982.202	32
Howe	Ork	HY 275	109 pin	ph 5/6, context 1064	GU-1759, GU-1758	Smith et al forth, cat no 4821, fig 21	K 1982.202	33
Howe	Ork	HY 275	109 pin	ph 9, context 1	tpq ph 8 = GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 5058, fig 21	K 1982.202	34
Howe	Ork	HY 275	109 pin			Smith et al forth, cat no ?4598	K 1982.202	159
Howe	Ork	HY 275	109 comb	ph 7	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 4376, fig 22	K 1982.202	160
Howe	Ork	HY 275	109 comb	phase 8		Smith et al forth, cat no 308	K 1982.202	161
Howe	Ork	HY 275	109 comb	phase 8		Smith et al forth, cat no 307	K 1982.202	162
Howe	Ork	HY 275	109 comb	late ph 8, context 79		Smith et al forth, cat no 798	K 1982.202	163
Howe	Ork	HY 275	109 comb	late ph 8, context 79		Smith et al forth, cat no 1138, fig 22	K 1982.202	164
Howe	Ork	HY 275	109 comb			Smith et al forth, cat no 872	K 1982.202	165
Howe	Ork	HY 275	109 pin?			Smith et al forth, cat no 4924	K 1982.202	166
Howe	Ork	HY 275	109 pin	ph 8, context 405	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 382	K 1982.202	167
Howe	Ork	HY 275	109 pin	early ph 7, context 1265, NE building	weighted mean c	Smith et al forth, cat no 5502, fig 28	K 1982.202	168
Howe	Ork	HY 275	109 pin	late ph 8, context 291	GU-1749, GI-1756, GU-1757	Smith et al forth, cat no 284, fig 28	K 1982.202	169
Howe	Ork	HY 275	109 pin?	ph 8, context 922	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 2725	K 1982.202	170
Howe	Ork	HY 275	109 pin	ph 8, context 1410	GU-1749, GU-1756, GU-1757	Smith et al forth, cat no 4842	K 1982.202	171
Howe	Ork	HY 275	109 pin	ph 5/6, context 1868	GU-1759, GU-1758	Smith et al forth, cat no 7101, fig 30	K 1982.202	172
Howe	Ork	HY 275	109 pin	ph 7, context 876	weighted mean c	Smith et al forth, cat no 2369	K 1982.202	173
Howe	Ork	HY 275	109 pin?	ph 7, context 1962	weighted mean c	Smith et al forth, cat no 7245	K 1982.202	174
Howe	Ork	HY 275	109 pin	ph 7, context 985	weighted mean c	Smith et al forth, cat no 2688, fig 31	K 1982.202	1579



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Howe	Ork	HY 275	109 pin	ph 7, context 973	weighted mean c	Smith et al forth, cat no 2929	K 1982.202	1661
Howe	Ork	HY 275	109 pin	ph 7/8, context 729	tpq weighted mean c	Smith et al forth, cat no 2014, fig 30	K 1982.202	175
Howe	Ork	HY 275	109 pin	ph 7, context 1403	weighted mean c	Smith et al forth, cat no 4598	K 1982.202	177
Howe	Ork	HY 275	109 pin	ph 7, context 1475	weighted mean c	Smith et al forth, cat no 4775, fig 30	K 1982.202	178
Howe	Ork	HY 275	109 pin	ph 7; context 1456	weighted mean c	Smith et al forth, cat no 4932, fig 31	K 1982.202	153
Howe	Ork	HY 275	109 pin	ph 7, context 1271	weighted mean c	Smith et al forth, cat no 5446, fig 30	K 1982.202	144
Howe	Ork	HY 275	109 pin	ph 7, context 1332	weighted mean c	Smith et al forth, cat no 7097, fig 31	K 1982.202	143
Howe	Ork	HY 275	109 pin	ph 7, context 1306		Smith et al forth, cat no 4396, fig 30	K 1982.202	1809
Howe	Ork	HY 275	109 pin	ph 8, context 493		Smith et al forth, cat no 1729, fig 31	K 1982.202	1810
Howe	Ork	HY 275	109 pin	ph 8, context 1041		Smith et al forth, cat no 2833, fig 30	K 1982.202	1811
Howe	Ork	HY 275	109 pin	ph 9, context 816		Smith et al forth, cat no 2927, fig 30	K 1982.202	1812
Howe	Ork	HY 275	109 pin	ph 9, context 1268		Smith et al forth, cat no 4314, fig 31	K 1982.202	1813
Howe	Ork	HY 276	109 comb	context 61, phase 7	weighted mean c	Smith et al forth, cat no 4907, fig 22	K	2007
Howmae	Ork	HY 758	523 pin?				RMS GO.232	1475
Howmore, S Uist	Inv	NF 76	36 pin				RMS GT.375	1207
Hurley Hawkin	Angus	NO 332	328 pin	broch floor nr hearth	assoc R finds cover late 1-early 3C. NB disturbed nature of contexts. ?Early 2-early 3C AD for broch occupation	Taylor 1982, 226, cat no 5, fig 6	RMS	1438
Hurley Hawkin	Angus	NO 332	328 pin	broch filling	tpq broch occupation	Taylor 1982, cat no 23, fig 6	RMS	1439
Hurley Hawkin	Angus	NO 332	328 pin	base of filling of ditch 2	?early 2-early 3C AD	Taylor 1982, cat no 1	7H	238
Hurley Hawkin	Angus	NO 332	328 pin	broch filling		Taylor 1982, cat no 25, fig 6	7H	1805
Hurley Hawkin	Angus	NO 332	328 pin	1865 ex, presumed from broch filling		Taylor 1982, cat no 114, fig 8	RMS GA.444	1806
Illeray, N Uist	Inv	NF 7787	7629 pin			Donations 1887, 288	RMS GT.940	1106
Illeray, N Uist	Inv	NF 7787	7629 pin				RMS GT.941	1107
Illeray, N Uist	Inv	NF 7787	7629 pin				RMS GT.942	1108
Illeray, N Uist	Inv	NF 78	63 pin				RMS GT.943	1213
Illeray, N Uist	Inv	NF 78	63 pin				RMS GT.944	1214
Illeray, N Uist	Inv	NF 78	63 pin				RMS GT.945	1215
Illeray, N Uist	Inv	NF 78	63 pin				RMS GT.946	1217
Illeray, N Uist	Inv	NF 787	629 pin				RMS GT.939	1446
Isle of Eigg	Inv	NM 47	86 pin			Fig 13.	RMS BN.51	1112
						Donations 1887, 288		
						Grieg 1940, 168, fig 83		
						Fanning 1983a, no 22		

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Ivar's Knowe, Sanday Ork	HY	715	433	comb	?burnt mound or adjacent kitchen middens	RCAHMS 1946 II, no 478	K 233	265
Jarlshof	Shet	HU	398	095	pin	Gl369. Upper slope midden, V ph I, 1st 1/2 9C AD Sq 4B/D.	RMS HSA.1	907
Jarlshof	Shet	HU	398	095	pin	9/312 Upper slope midden. Sq 73B.	RMS HSA.2	908
Jarlshof	Shet	HU	398	095	pin	416. Upper slope midden. Sq 82C.	RMS HSA.3	909
Jarlshof	Shet	HU	398	095	pin	1460. Yard paving S of house I. Sq 62C.	RMS HSA.4	910
Jarlshof	Shet	HU	398	095	pin	9/366. Upper slope midden. Sq 73C.	RMS HSA.5	911
Jarlshof	Shet	HU	398	095	pin	1489. Yard paving SW of house I. Sq 71A.	RMS HSA.6	912
Jarlshof	Shet	HU	398	095	pin	249. Base of upper slope midden. Sq 73B.	RMS HSA.7	913
Jarlshof	Shet	HU	398	095	pin	430. Base of upper slope midden. Sq 82C.	RMS HSA.8	914
Jarlshof	Shet	HU	398	095	pin	431. Upper slope midden. Sq 82C.	RMS HSA.9	915
Jarlshof	Shet	HU	398	095	pin	427. Upper slope midden. Sq 82C.	RMS HSA.10	916
Jarlshof	Shet	HU	398	095	pin	906. Yard paving SW of house I. Sq 80B.	RMS HSA.11	917
Jarlshof	Shet	HU	398	095	pin	499 Midden scatter on floor pre-V cattle compound	RMS HSA.12	918
Jarlshof	Shet	HU	398	095	pin	Gl040. Yard paving SW of house 1. Sq 71B/D	RMS HSA.13	919
Jarlshof	Shet	HU	398	095	pin	807. Midden scatter on yard paving. Sq 80D	RMS HSA.14	920
Jarlshof	Shet	HU	398	095	pin	728. Midden scatter on yard paving. Sq 80D	RMS HSA.15	921
Jarlshof	Shet	HU	398	095	pin?	Midden deposits to W of house I. Sq 81B	RMS HSA.16	922
Jarlshof	Shet	HU	398	095	pin	9/57. Base of lower slope midden. Sq 74B	RMS HSA.17	923
Jarlshof	Shet	HU	398	095	pin	902. Midden scatter on paving. Sq 80B	RMS HSA.18	924
Jarlshof	Shet	HU	398	095	pin	440A. Upper slope midden. Sq 82C	RMS HSA.19	925
Jarlshof	Shet	HU	398	095	pin	907. Midden scatter on paving W of house I	RMS HSA.20	926
Jarlshof	Shet	HU	398	095	pin	Gl269. House I midden. Sq 89A/B	RMS HSA.21	927
Jarlshof	Shet	HU	398	095	pin	360. Upper slope midden. Sq 73C	RMS HSA.22	928
Jarlshof	Shet	HU	398	095	pin		RMS HSA.23	929



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Jarlshof	Shet	HU 398	095	pin	361. Upper slope midden. V ph I, 1st 1/2 9C AD Sq 73C/D	Hamilton 1956, 126 no 200	RMS HSA.24	930
Jarlshof	Shet	HU 398	095	pin	905. Midden refuse yard V ph I, 1st 1/2 9C AD paving SW house I. Sq 80B	Hamilton 1956, 126 no 211	RMS HSA.25	931
Jarlshof	Shet	HU 398	095	pin	901. Midden refuse yard V ph I, 1st 1/2 9C AD paving SW house I. Sq 80D	Hamilton 1956, 126 no 212, fig 59, type 5	RMS HSA.26	932
Jarlshof	Shet	HU 398	095	pin	1042. Upper slope midden. V ph I, 1st 1/2 9C AD Sq 81A	Hamilton 1956, 126 no 213	RMS HSA.27	933
Jarlshof	Shet	HU 398	095	pin	1259. Middle level. Sq V ph III, late 9/early 10C AD 86D	Hamilton 1956, 148 no 83, fig 69.4	RMS HSA.28	934
Jarlshof	Shet	HU 398	095	pin	1371. Lower level. Sq V ph III, late 9/early 10C AD 84A	Hamilton 1956, 148 no 84, fig 69.3	RMS HSA.29	935
Jarlshof	Shet	HU 398	095	pin	F100	Hamilton 1956, 181 no 15	RMS HSA.30	936
Jarlshof	Shet	HU 398	095	pin		Curle 1935, 292, fig 22.9	RMS HSA.31	937
Jarlshof	Shet	HU 398	095	pin		Curle 1935, 292, fig 22.10	RMS HSA.32	938
Jarlshof	Shet	HU 398	095	pin	F 984, House 1C and 8	Hamilton 1956, 186 no 44	RMS HSA.33	939
Jarlshof	Shet	HU 398	095	pin	1275. Sq 76A	Fig 13. Hamilton 1956, 167 no 48	RMS HSA.34	940
Jarlshof	Shet	HU 398	095	pin	363. Upper slope midden. V ph I, 1st 1/2 9C AD Sq 73C	Hamilton 1956, 127 no 216, fig 59, type 6	RMS HSA.35	941
Jarlshof	Shet	HU 398	095	pin	1041. Upper slope midden N V ph I, 1st 1/2 9C AD of bath house. Sq 81B	Hamilton 1956, 127 no 217	RMS HSA.36	942
Jarlshof	Shet	HU 398	095	pin	876. Upper slope midden. V ph I, 1st 1/2 9C AD Sq 80C/D	Hamilton 1956, 127 no 218	RMS HSA.37	943
Jarlshof	Shet	HU 398	095	pin	358. Upper slope midden. V ph I, 1st 1/2 9C AD Sq 73C	Hamilton 1956, 127 no 219	RMS HSA.38	944
Jarlshof	Shet	HU 398	095	pin			RMS HSA.39	945
Jarlshof	Shet	HU 398	095	pin	G 1294. Midden 2 (base). V ph III, late 9/early 10C AD	Hamilton 1956, 151 no 26, fig 69.1	RMS HSA.40	946
Jarlshof	Shet	HU 398	095	pin	Sq 81A/C	Curle A O 1935, 292, fig 22.8	RMS HSA.41	947
Jarlshof	Shet	HU 398	095	pin			RMS HSA.43	948
Jarlshof	Shet	HU 398	095	pin	F985. Midden 2. Sq 81A	Hamilton 1956, 151 no 27	RMS HSA.42	949
Jarlshof	Shet	HU 398	095	pin			RMS HSA.44	950
Jarlshof	Shet	HU 398	095	pin	G1287. Midden 2. Sq 81C	Hamilton 1956, 151 no 25	RMS HSA.45	951
Jarlshof	Shet	HU 398	095	pin	692. Upper floor of house V ph V, early 11-13C AD 6. Sq 90B	Fig 27. Hamilton 1956, 167 no 49	RMS HSA.46	952
Jarlshof	Shet	HU 398	095	pin?		Curle, A O, 1935, 292, fig 22.13	RMS HSA.47	953
Jarlshof	Shet	HU 398	095	pin?		Curle, A O 1935, 292, fig 22.14	RMS HSA.48	954
Jarlshof	Shet	HU 398	095	pin?		Hamilton 1956, 173 no 3	RMS HSA.49	955
Jarlshof	Shet	HU 398	095	pin	432. Upper slope midden. V ph I, 1st 1/2 9C AD Sq 82C	Hamilton 1956, 126 no 214	RMS HSA.50	956
Jarlshof	Shet	HU 398	095	pin	877. Upper slope midden S V ph I, 1st 1/2 9C AD of bathhouse. Sq 80C	Hamilton 1956, 126 no 215	RMS HSA.51	957
Jarlshof	Shet	HU 398	095	pin	485	Hamilton 1956, 149 no 12	RMS HSA.52	958



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Jarlshof	Shet	HU 398	095	pin	house IG (outhouse) V ph VI, ?13C AD	Hamilton 1956, 173 no 3	RMS HSA.55	959
Jarlshof	Shet	HU 398	095	pin?			RMS HSA.54	960
Jarlshof	Shet	HU 398	095	pin			RMS HSA.53	961
Jarlshof	Shet	HU 398	095	pin			RMS HSA.59	962
Jarlshof	Shet	HU 398	095	pin			RMS HSA.60	963
Jarlshof	Shet	HU 398	095	pin			RMS HSA.63	964
Jarlshof	Shet	HU 398	095	pin	500. Midden scatter floor pre-V cattle compound. 248. Upper slope midden. Sq 73B	Sq 91B/D. V ph I, 1st 1/2 Fig 25. Hamilton 1956, 126 no 205 Fig 12. Hamilton 1956, 126 no 206	RMS HSA.64	965
Jarlshof	Shet	HU 398	095	pin	485. Base of lower slope midden. Sq 74B	V ph I, 1st 1/2 9C AD Fig 25. Hamilton 1956, 126 no 208	RMS HSA.65	966
Jarlshof	Shet	HU 398	095	pin	G1017. Midden. Sq 81B/D	V ph I, 1st 1/2 9C AD Fig 25. Hamilton 1956, 126 no 209	RMS HSA.66	967
Jarlshof	Shet	HU 398	095	pin	F985. Midden 1. Sq 81A	V ph III, late 9/early 10C Hamilton 1956, 115 no 24 AD	RMS HSA.67	968
Jarlshof	Shet	HU 398	095	pin	1359. Upper level. Sq 76A	V ph III, late 9/early 10C Fig 25. Hamilton 1956, 148 no 89 AD	RMS HSA.68	969
Jarlshof	Shet	HU 398	095	pin			RMS HSA.69	970
Jarlshof	Shet	HU 398	095	pin			RMS HSA.70	971
Jarlshof	Shet	HU 398	095	pin	G1016. Midden 2. Sq 81B	V ph III, late 9/early 10C Hamilton 1956, 151 no 19 AD	RMS HSA.71	972
Jarlshof	Shet	HU 398	095	pin	726. Midden 2. Sq 80D	Curle 1935, 294, fig 26.2 V ph III, late 9/early 10C Fig 25. Hamilton 1956, 151 no 15 AD	RMS HSA.72	973
Jarlshof	Shet	HU 398	095	pin			RMS HSA.73	974
Jarlshof	Shet	HU 398	095	pin	714. Upper slope midden. Sq 8D	V ph I, 1st 1/2 9C AD Hamilton 1956, 126 no 210	RMS HSA.74	975
Jarlshof	Shet	HU 398	095	pin	1302. Middle level. Sq 93B	V ph III, late 9/early 10C Hamilton 1956, 148 no 87 AD	RMS HSA.76	977
Jarlshof	Shet	HU 398	095	pin	G1014. Midden 2. Sq 81B/D	V ph III, late 9/early 10C Fig 23. Hamilton 1956, 151 no 22 AD	RMS HSA.77	978
Jarlshof	Shet	HU 398	095	pin	house, near floor level in s section	Curle A O 1935, 294, fig 26.3	RMS HSA.78	979
Jarlshof	Shet	HU 398	095	pin			RMS HSA.81	982
Jarlshof	Shet	HU 398	095	pin	1367. Middle level. Sq 84A	V ph III, late 9/early 10C Fig 23. Hamilton 1956, 148 no 90 AD	RMS HSA.79	980
Jarlshof	Shet	HU 398	095	pin?	1228. Base of midden. Sq 76C	fig 69.7	RMS HSA.80	981
Jarlshof	Shet	HU 398	095	pin			RMS HSA.82	983
Jarlshof	Shet	HU 398	095	pin	1290. Low level. Sq 76A	V ph III, late 9/early 10C Hamilton 1956, 148 no 92, AD	RMS HSA.83	984
Jarlshof	Shet	HU 398	095	pin	G1330. Midden 2. Sq 80B	V ph III, late 9/early 10C Hamilton 1956, 148 no 95, AD	RMS HSA.84	985
Jarlshof	Shet	HU 398	095	pin	1229. Base of midden. Sq 76C	V ph III, late 9/early 10C Hamilton 1956, 151 no 14, AD	RMS HSA.85	986
Jarlshof	Shet	HU 398	095	pin	484A. Middle level. Sq 74B	V ph III, late 9/early 10C Hamilton 1956, 148 no 93, AD	RMS HSA.86	987
Jarlshof	Shet	HU 398	095	pin	G1310. Midden 2. Sq 81A/C	V ph III, late 9/early 10C Hamilton 1956, 148 no 94 AD	RMS HSA.87	988
Jarlshof	Shet	HU 398	095	pin		V ph III, late 9/early 10C Hamilton 1956, 151 no 13, AD	RMS HSA.88	989

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Jarlshof	Shet	HU 398	095	pin	935. Midden 1. Sq 80B	V ph III, late 9/early 10C Fig 25. Hamilton 1956, 151 no 16	RMS HSA.89	990
Jarlshof	Shet	HU 398	095	pin		Fig 25.	RMS HSA.90	991
Jarlshof	Shet	HU 398	095	pin	1261. Middle level. Sq 86D	V ph III, late 9/early 10C Fig 26. Hamilton 1956, 148 no 80	RMS HSA.91	992
Jarlshof	Shet	HU 398	095	pin	945. Midden 1. Sq 80D	V ph III, late 9/early 10C Fig 12. Hamilton 1956, 151 no 21	RMS HSA.92	993
Jarlshof	Shet	HU 398	095	pin		Fig 25.	RMS HSA.93	994
Jarlshof	Shet	HU 398	095	pin	Gl015. Midden. Sq 81B/D	V ph I, 1st 1/2 9C AD	RMS HSA.94	995
Jarlshof	Shet	HU 398	095	pin	Gl015. Midden. Sq 81B/D	V ph I, 1st 1/2 9C AD	RMS HSA.95	996
Jarlshof	Shet	HU 398	095	pin			RMS HSA.96	997
Jarlshof	Shet	HU 398	095	pin			RMS HSA.97	998
Jarlshof	Shet	HU 398	095	pin			RMS HSA.98	999
Jarlshof	Shet	HU 398	095	pin			RMS HSA.99	1000
Jarlshof	Shet	HU 398	095	pin			RMS HSA.100	1001
Jarlshof	Shet	HU 398	095	pin			RMS HSA.101	1002
Jarlshof	Shet	HU 398	095	pin			RMS HSA.102	1003
Jarlshof	Shet	HU 398	095	pin			RMS HSA.103	1004
Jarlshof	Shet	HU 398	095	pin	1337. Sq 86C	V ph V, early 11-13C AD	RMS HSA.105	1005
Jarlshof	Shet	HU 398	095	pin	9/480. In grey sand	Sq 74B. V ph V, early	RMS HSA.106	1006
					overlying lower slope	11-13C AD		
					midden			
Jarlshof	Shet	HU 398	095	pin			RMS HSA.107	1007
Jarlshof	Shet	HU 398	095	pin			RMS HSA.108	1008
Jarlshof	Shet	HU 398	095	pin			RMS HSA.109	1009
Jarlshof	Shet	HU 398	095	pin			RMS HSA.110	1010
Jarlshof	Shet	HU 398	095	pin			RMS HSA.111	1011
Jarlshof	Shet	HU 398	095	pin			RMS HSA.112	1012
Jarlshof	Shet	HU 398	095	pin	483. Base of lower slope	V ph I, 1st 1/2 9C AD	RMS HSA.113	1013
					midden. Sq 74B			
Jarlshof	Shet	HU 398	095	pin			RMS HSA.114	1014
Jarlshof	Shet	HU 398	095	pin	Gl018. Midden 2. Sq 81B	V ph III, late 9/early 10C Hamilton 1956, 151 no 31, AD	RMS HSA.125	1015
Jarlshof	Shet	HU 398	095	pin		fig 69.2	RMS HSA.126	1016
						Fig 27. Curle 1935, 292,		
						fig 22.3		
Jarlshof	Shet	HU 398	095	pin	Gl339. Midden 2. Sq 80D	V ph III, late 9/early 10C Fig 26. Hamilton 1956, 151 no 30	RMS HSA.127	1017
						AD		
Jarlshof	Shet	HU 398	095	pin		Fig 27. Curle, A O 1935, 292, fig 22.4	RMS HSA.128	1018
Jarlshof	Shet	HU 398	095	pin		Curle, A O 1935, 292, fig 22.5	RMS HSA.129	1019
Jarlshof	Shet	HU 398	095	pin	1148. Lower level. Sq 67C	V ph III, late 9/early 10C Hamilton 1956, 148 no 98, AD	RMS HSA.130	1020
Jarlshof	Shet	HU 398	095	pin		fig 69.10		
Jarlshof	Shet	HU 398	095	pin			RMS HSA.131	1021
Jarlshof	Shet	HU 398	095	pin			RMS HSA.132	1022
Jarlshof	Shet	HU 398	095	pin			RMS HSA.133	1023
Jarlshof	Shet	HU 398	095	pin			RMS HSA.115	1024
Jarlshof	Shet	HU 398	095	pin	Gl088. Between paving	V ph VII, 13-14C AD. NB	RMS HSA.116	1025
					stones of path	Hamilton dates pin on		
						comparative grounds to		
						10-11C		



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SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Jarlshof	Shet	HU 398	095	pin	F348. Outhouse. Sq 45B	Hamilton 1956, 136 no 22 Hamilton 1956, 151 no 29	RMS HSA.117	1026
Jarlshof	Shet	HU 398	095	pin	1406. Peat ash beneath alley Midden 2. Sq 99B		RMS HSA.118	1027
Jarlshof	Shet	HU 398	095	pin	V ph III, late 9/early 10C Hamilton 1956, 151 no 20		RMS HSA.119	1028
Jarlshof	Shet	HU 398	095	pin			RMS HSA.120	1029
Jarlshof	Shet	HU 398	095	pin			RMS HSA.121	1030
Jarlshof	Shet	HU 398	095	pin			RMS HSA.122	1031
Jarlshof	Shet	HU 398	095	pin			RMS HSA.123	1032
Jarlshof	Shet	HU 398	095	pin	GL252. Midden 1. Sq 81A/B	Hamilton 1956, 148 no 97, fig 69.2	RMS HSA.124	1033
Jarlshof	Shet	HU 398	095	pin	1295. Top level. Sq 93B		RMS HSA.134	1034
Jarlshof	Shet	HU 398	095	pin	Curle, A O 1935, 292 fig, 22.1		RMS HSA.135	1035
Jarlshof	Shet	HU 398	095	pin			RMS HSA.136	1036
Jarlshof	Shet	HU 398	095	pin			RMS HSA.137	1037
Jarlshof	Shet	HU 398	095	pin			RMS HSA.138	1038
Jarlshof	Shet	HU 398	095	pin			RMS HSA.139	1039
Jarlshof	Shet	HU 398	095	pin	'Room III at floor level'	HSA.145 = Curle, A O 1936a, 265	RMS HSA.140	1040
Jarlshof	Shet	HU 398	095	pin			RMS HSA.141	1041
Jarlshof	Shet	HU 398	095	pin			RMS HSA.142	1042
Jarlshof	Shet	HU 398	095	pin			RMS HSA.143	1043
Jarlshof	Shet	HU 398	095	pin			RMS HSA 145-9	1044
Jarlshof	Shet	HU 398	095	pin	floor of store room or byre - passage-house levels	Fig 13. Hamilton 1956, fig 39.2	RMS HSA 150-1	1045
Jarlshof	Shet	HU 398	095	pin			RMS HSA.152	1046
Jarlshof	Shet	HU 398	095	pin			RMS HSA.4169	1047
Jarlshof	Shet	HU 398	095	pin	610.Sandy surface mound beneath upper slope midden	Hamilton 1956, 127 no 230, pl 24.c	RMS HSA.4150	1048
Jarlshof	Shet	HU 398	095	pin	1467 midden scatter in sand outside settle,layer2A	Hamilton 1956, fig 37.16 Hamilton 1956, fig 37.15 Hamilton 1956, 64 no 11, fig 34	RMS HSA.4147	1049
Jarlshof	Shet	HU 398	095	pin			RMS HSA.4148	1050
Jarlshof	Shet	HU 398	095	pin			RMS HSA.4163	1051
Jarlshof	Shet	HU 398	095	pin	'found in filling in'	Curle, A O 1935, 306, fig 28.1	RMS HSA.856	1052
Jarlshof	Shet	HU 398	095	pin			RMS HSA.855	1053
Jarlshof	Shet	HU 398	095	pin	934A. Midden overlying cobbling. Sq 71A	Fanning 1983b, no 50	RMS HSA.850	1054
Jarlshof	Shet	HU 398	095	pin	V ph III. 10C (Hamilton)	Hamilton 1956, 152 no 35, pl 29	RMS HSA.847	1055
Jarlshof	Shet	HU 398	095	pin	1289. Base of lower slope midden. Sq 76C	Fanning 1983a no 19	RMS HSA.844	1056
Jarlshof	Shet	HU 398	095	pin	F918. Upper slope midden. Sq 80C	Hamilton 1956, 127 no 232, fig 60.2	RMS HSA.846	1057
Jarlshof	Shet	HU 398	095	pin	1150. Close to camp fire. Base lower slope midden	Fig 15. Hamilton 1956, 127 no 231, fig 60.1 Fanning 1983a no 41 Hamilton 1956, 128 no 235, fig 60.4	RMS HSA.851	1058



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Jarlshof	Shet	HU 398	095	pin	F983. Upper slope midden S of house I. Sq 71C	V ph I, 1st 1/2 9C AD	Hamilton 1956, 128 no 234, RMS HSA.882 fig 60.5	1059
Jarlshof	Shet	HU 398	095	pin	'floor level of building in front of room 1'		Curle, A O 1936, RMS HSA.854 264, fig 11.7	1060
Jarlshof	Shet	HU 398	095	pin	alleyway		Curle, A O 1936a, RMS HSA.853 264, fig 11.6	1061
Jarlshof	Shet	HU 398	095	pin	interior of house and adjacent wall-heads		?Curle, AO 1935, 306, fig 45.1	1062
Jarlshof	Shet	HU 398	095	pin			Fig 27. Hamilton 1956, 128, no 233	1063
							Curle, A O 1934, 305, fig 28.2	
Jarlshof	Shet	HU 398	095	pin	1405. Upper slope midden beneath outhouse range	Sq.45A. V ph I, 1st 1/2 9C AD	Fig 27. Hamilton 1956, 128 no 237, fig 60.6	1064
Jarlshof	Shet	HU 398	095	pin				
Jarlshof	Shet	HU 398	095	pin	Norse levels, house 1		Hamilton 1956, 129	1065
Jarlshof	Shet	HU 398	095	pin	upper slope midden	V Ph I, 1st 1/2 9C	Hamilton 1956, 124, no 174, pl 22a.1	1575
Jarlshof	Shet	HU 398	095	comb	upper slope midden. Sq 82C	V Ph I, 1st 1/2 9C	Hamilton 1956, 124, no 175, pl 22a.5	2107
Jarlshof	Shet	HU 398	095	comb	upper slope midden. Sq 73B	V Ph I, 1st 1/2 9C	Hamilton 1956, 124, no 176, pl 22a.4	2108
Jarlshof	Shet	HU 398	095	comb	upper slope midden. Sq 80D	V Ph I, 1st 1/2 9C	Hamilton 1956, 124, no 177 RMS	2110
Jarlshof	Shet	HU 398	095	comb	1415. Low level. Sq 83B	V ph III, late 9/early 10C AD	Hamilton 1956, 148, no 101. fig 69.11	2111
Jarlshof	Shet	HU 398	095	comb	F987. Midden refuse overlying floor of stables	V ph III, late 9/early 10C	Hamilton 1956, 148, no 102 RMS	1828
Jarlshof	Shet	HU 398	095	comb	G621. Low level. Sq 84A	V ph III, late 9/early 10C AD	Hamilton 1956, 148, no 103, pl 30.3	2112
Jarlshof	Shet	HU 398	095	comb	F859. Low level. Sq 84D	V ph III, late 9/early 10C AD	Hamilton 1956, 148, no 104 RMS	2113
Jarlshof	Shet	HU 398	095	comb	1270C. Upper midden. Sq 86D	V ph III, late 9/early 10C AD	Hamilton 1956, 148, no 105, fig 69.12	2114
Jarlshof	Shet	HU 398	095	comb	1270C. Upper midden. Sq 86D	V ph III, late 9/early 10C AD	Hamilton 1956, 148, no 106 RMS	2115
Jarlshof	Shet	HU 398	095	comb	G1231. Middle level. Sq 86D	V Ph III, late 9/early 10C AD	Hamilton 1956, 148, no 107 RMS	2116
Jarlshof	Shet	HU 398	095	comb	9/459. Sq 83D	V ph III, late 9/early 10C AD	Hamilton 1956, 150, no 16, RMS pl 30.5	2117
Jarlshof	Shet	HU 398	095	comb	G495. Hearth overlying house floor	V ph III, late 9/early 10C AD	Hamilton 1956, 153, no 76, RMS pl 30.4	2118
Jarlshof	Shet	HU 398	095	CCase	1354. Yellow peat layer overlying lower slope.	V ph V, early 11-13C AD	Hamilton 1956, 167, no 53, RMS fig 77.8	2119
Jarlshof	Shet	HU 398	095	comb	1274. As for Hamilton 1956, no 53. Sq 76A	V ph V, early 11-13C AD	Hamilton 1956, 167, no 54, RMS fig 77.9	2120
Jarlshof	Shet	HU 398	095	comb	G620. Post lower slope midden. Sq 84A	V ph V, early 11-13C AD	Hamilton 1956, 167, no 55, RMS fig 77.7	2121
Jarlshof	Shet	HU 398	095	comb	9/68. Grey sand overlying midden beneath house 5	V ph V, early 11-13C AD	Hamilton 1956, 167, no 56 RMS	2122
Jarlshof	Shet	HU 398	095	comb	F596. Above pre-Viking hut at Viking level	V ph V, early 11-13C AD	Hamilton 1956, 167, no 57, RMS pl 32.1	2123

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Jarlshof	Shet	HU 398	095	comb	F744. Found in clearance to W of broch	V ph V, early 11-13C AD	Hamilton 1956, 167, no 58	RMS 2124
Jarlshof	Shet	HU 398	095	comb	1271. Sq 76B	V ph V, early 11-13C AD	Hamilton 1956, 167, no 59, fig 77.6	RMS 2125
Jarlshof	Shet	HU 398	095	comb	954. Black earth over paving assoc w houses 5,6,7	V ph V, early 11-13 AD	Hamilton 1956, 167, no 60, pl 32.2	RMS 2126
Jarlshof	Shet	HU 398	095	comb	1282. Yellow ash layer overlying lower slope	V ph V, early 11-13C AD	Hamilton 1956, 167, no 61, pl 32.3	RMS 2127
Jarlshof	Shet	HU 398	095	comb	G66. Top layer. Sq 86C	V ph V, early 11-13C AD	Hamilton 1956, 167, no 62	RMS 2128
Jarlshof	Shet	HU 398	095	comb	270. Found above beach in 1936, NW sector	V ph V, early 11-13C AD	Hamilton 1956, 167, no 63	RMS 2129
Jarlshof	Shet	HU 398	095	comb	9/170. Top soil assoc w late Norse houses	V ph V, early 11-13C AD	Hamilton 1956, 169, no 64, pl 32.4	RMS 2130
Jarlshof	Shet	HU 398	095	comb	1338. Black earth above paving assoc w hses 5,6,7	V ph V, early 11-13C AD	Hamilton 1956, 168, no 65	RMS 2131
Jarlshof	Shet	HU 398	095	comb	G551. Yellow ash layer over lower midden slope	V ph V, early 11-13C AD	Hamilton 1956, 168, no 66	RMS 2132
Jarlshof	Shet	HU 398	095	comb	midden deposit in room 1 of house IG	V ph VI, ?13C	Hamilton 1956, 173, no 1	RMS 2133
Jarlshof	Shet	HU 398	095	comb	Floor level in room 3, house IG (outhouse)	V ph VII, ?13-14C AD	Hamilton 1956, 173, no 2	RMS 2134
Jarlshof	Shet	HU 398	095	comb	House I, phase III	V ph VII, ?13-14C AD	Hamilton 1956, 179, no 1, fig 82	RMS 2135
Jarlshof	Shet	HU 398	095	comb	House I, phase III	V ph VII, ?13-14C AD	Hamilton 1956, 180, no 2	RMS 2136
Jarlshof	Shet	HU 398	095	comb	House I, phase III	V ph VII, ?13-14C AD	Hamilton 1956, 180, no 3	RMS 2137
Jarlshof	Shet	HU 398	095	comb	House I, phase III	V ph VII, ?13-14C AD	Hamilton 1956, 180, no 4	RMS 2138
Jarlshof	Shet	HU 398	095	comb	Hof area midden	V ph I, 1st 1/2 9C AD	Hamilton 1956, 134, pl 22a.1	RMS 2139
Jarlshof	Shet	HU 398	095	comb	Hof area midden	V ph I, 1st 1/2 9C AD	Hamilton 1956, 134, pl 22a.6	RMS 2140
Jarlshof	Shet	HU 398	095	comb		V ph VII, ?13-14C AD	Hamilton 1956, 186, no 45,	RMS 2141
Jarlshof	Shet	HU 398	095	comb	midden refuse filling house 1C	V ph VII, ?13-14C AD	Hamilton 1956, 186, no 46,	RMS 2142
Jarlshof	Shet	HU 398	095	comb	base of midden of midden refuse W of house 7	V ph VII, ?13-14C AD	Hamilton 1956, 186, no 47,	RMS 2143
Jarlshof	Shet	HU 398	095	comb	G 1224	V ph VII, ?13-14C AD	Hamilton 1956, 186, no 48	RMS 2144
Jarlshof	Shet	HU 398	095	comb		V ph VII, ?13-14C AD	Hamilton 1956, 187, no 49,	RMS 2145
Jarlshof	Shet	HU 398	095	comb	9/271	V ph VII, ?13-14C AD	Hamilton 1956, 187, no 50	RMS 2146
Jonathan's Cave, Weemys	Fife	NT 345	972	pin	layer 2, on or above floor level	GU-1369 AD. Aassoc finds incl jet armlets, jet bead, jet spindle whorl, rotary quern	Mackie & Glaister 1981, 15, fig 7	?H 1788
Jonathan's Cave, Weemys	Fife	NT 3456	9724	pin	layer 2, on or above floor level	GU-1369. Aassoc finds incl jet armlets, jet bead, jet spindle whorl & rotary quern	Mackie & Glaister 1981, 15 ?H	1787
Kaines Hill	Midlo	NT 2	6	pin			RMS HH.675	894



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Kaimes Hill	Midlo	NT 2	6	'5 feet deep'	intermittent occupation 3C onwards	RCAHMS 1971, no 243	RMS HH.746	895
Keil Cave	Kinty	NR 671	071				RMS HM.359	547
Keil Cave	Kinty	NR 671	071	'5 feet deep'	intermittent occupations 3C onwards	RCAHMS 1971, no 243	RMS HM.358	548
Keil Cave	Kinty	NR 671	071	'5 feet deep'	intermittent occupation 3C onwards	RCAHMS 1971, no 243	RMS HM.360	549
Keil Cave	Kinty	NR 671	071	parts at top & bottom of occupation horizon	intermittent occupation 3C onwards	Fig 29. Ritchie, J 1967, cat no 2, fig 2.2, pl VI	RMS HM.354	550
Keil Cave	Kinty	NR 671	071		intermittent occupation 3C onwards	RCAHMS 1971, no 243		
Keil Cave	Kinty	NR 671	071	comb	intermittent occupation 3C onwards	Fig 29. Ritchie, J 1967, cat no 3, fig 2.3, pl VI	RMS HM.355	551
Keil Cave	Kinty	NR 671	071		intermittent occupation 3C onwards	RCAHMS 1971, no 243		
Keil Cave	Kinty	NR 671	071	comb	intermittent occupation 3C onwards	Fig 29. Ritchie, J 1967, cat no 4, fig 2.4, pl VI	RMS HM.356	552
Keil Cave	Kinty	NR 671	071	pin	intermittent occupation suggested from 3C onwards	RCAHMS 1971, no 243	Campbeltown	1791
Keil Cave	Kinty	NR 671	071		finds incl 4C pot, penann br, glass beads and weaving tablet	Ritchie, J 1967, cat no 16, fig 2		
Keil Cave	Kinty	NR 671	071	pin	intermittent occupation suggested from 3C onwards	Ritchie, J 1967, cat no 17, fig 2	Campbeltown	1792
Keil Cave	Kinty	NR 671	071	comb	finds incl 4C pot, penannbr, glass beads & weaving tablet	Fig 19. Ritchie, J 1967, cat no 18, fig 2	Campbeltown	1793
Keil Cave	Kinty	NR 671	071		intermittent from 3C onwards suggested. Finds incl 4C pot. penann br, glass beads & weaving tablet			
Keil Cave	Kinty	NR 671	071	pin	intermittent occupation from 3C suggested. Finds incl 4C pot, penann br, glass beads & weaving tablet	Ritchie, J 1967, cat no 20, fig 2	Campbeltown	1794
Keiss ?South	Caith	ND 354	612	pin	finds incl 1-handled comb, painted pebbles & Samian, Dr 18/31 or 31 & 37 (2C AD)	Anderson 1901, 125-26	RMS GA.455	585
Keiss ?South	Caith	ND 354	612	pin	finds incl 1-handled comb, painted pebbles & Samian, Dr 18/31 or 31 & 37 (2C AD)	Anderson 1901, 125-26	RMS GA.454	586
Keiss ?South	Caith	ND 354	612	pin	finds incl 1-handled comb, painted pebbles, & Samian, Dr 18/31 or 31 & 37 (2C AD)	Anderson 1901, 125-26	RMS GA.453	587
Keiss ?South	Caith	ND 354	612	pin?	finds incl 1-handled combs, painted pebbles & Samian, Dr 18/31 or 31 & 37 (2C AD)	Anderson 1901, 125-26	RMS GA.452	588



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NCR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Keiss ?South	Caith	ND 354	612 pin	broch	finds incl 1-handled combs, painted pebbles & Samian, DR 18/31 or 31 & 37 (2C AD)	Anderson 1901, 125-26	RMS GA.456	589
Keiss ?South	Caith	ND 354	612 pin	broch	finds incl 1-handled combs, painted pebbles & Samian, Dr 18/31 or 18 & 37 (2C AD)	Anderson 1901, 125-26	RMS GA.457	590
Keiss North	Caith	ND 354	612 pin	broch	finds incl amber bead	Donations 1909, 13	RMS GA.601	592
Keiss West	Caith	ND 349	615 pin?	broch	finds incl 1-handled comb & Samain, Dr 37 (2C AD)	Donations 1909, 12-13	RMS GJ.123	591
Keiss West	Caith	ND 349	615 pin?	broch	finds incl samian & 1-handled combs	Donations 1909, 12-13	RMS GJ.123	796
Keiss West	Caith	ND 349	615 pin?	broch	finds incl samian & 1-handled comb	Donations 1909, 12-13	RMS GJ.131	797
Keiss West	Caith	ND 349	615 pin?	broch	finds incl samian & 1-handled comb	Donations 1909, 12-13	RMS GA.452	802
Kerrera, Lorn	Argyl	NM 844	311 pin	'earth-house' - precise nature uncertain	not typical IA house. Relics incl several other pins, but not clear whether in primary occupation layer (RCAHMS 1972,22)	Lethbridge 1956, 94-5 RCAHMS 1974, 22 Donations 1978, 382, fig 1	RMS	1786
Kettleburn	Caith	ND 349	519 ball	broch	finds incl 1-handled comb & Celtic Cu alloy tweezers (MacGregor, M 1976, no 276)	Anderson, J 1883, 200-16	RMS GI.32	593
Kettleburn	Caith	ND 349	519 pin	broch	finds incl 1-handled comb & Celtic Cu alloy tweezers (MacGregor, M 1976, no 276)	Anderson, J 1883, 200-16	RMS GI.33	594
Kettleburn	Caith	ND 349	519 ball	broch	finds incl 1-handled comb & Celtic Cu-alloy tweezers (MacGregor, M 1976, no 276)	Anderson, J 1883, 200-16	RMS GI.34	595
Kettleburn	Caith	ND 349	519 comb	broch	finds incl 1-handled combs & Celtic Cu alloy tweezers (MacGregor, M 1976, no 276)	Anderson, J 1883, 200-16	RMS GI.37	600
Kildonan, S Uist	Inv	NF 726	286 pin			Fanning 1983a, no 25	RMS GS.200	391
Kildonan, S Uist	Inv	NF 726	286 pin			Laing 1973, fig 1.18	RMS GS.202	392
Kildonan, S Uist	Inv	NF 726	286 pin			Fig 24. Laing 1973, fig 7.67	RMS GS.201	393
Kildonan, S Uist	Inv	NF 726	286 pin			Fig 25. Laing 1973, fig 4.6	RMS GS.203	394
Kildonan, S Uist	Inv	NF 726	286 pin			Fig 24. Laing 1973, fig 4.3	RMS GS.204	395
Kildonan, S Uist	Inv	NF 726	286 pin			Fig 13.	RMS GS.205	396
Kildonan, S Uist	Inv	NF 726	286 pin			Fig 12.	RMS LI976.13	397
Kildonan, S Uist	Inv	NF 726	286 pin				RMS LI976.14	398

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Kildonan, S Uist	Inv	NF 726	286	pin			RMS L1976.15	399
Kildonan, S Uist	Inv	NF 726	286	pin			RMS L1976.16	400
Kildonan, S Uist	Inv	NF 726	286	pin			RMS L1976.18	401
Kildonan, S Uist	Inv	NF 726	286	pin			RMS L1976.18	402
Kilminster	Caith	ND 32	56	pin		Fig 24.	RMS HD.433	807
Kilminster	Caith	ND 32	56	pin		Fig 28.	RMS HD.434	808
Kilminster	Caith	ND 32	56	pin			RMS u/reg	809
Kilminster	Caith	ND 32	56	pin			RMS u/reg	810
Kiloran Bay	Argyl	NR 39	99	pin	V burial	Grieg 1940, 58, fig 30	RMS L1924.21	1583
Kirbister, Birsay	Ork	HY 28	25	pin		Fanning 1983a, no 49	RMS FC.241	1072
Kirbister, Birsay	Ork	HY 36	07	pin		Donations 1935, 15	RMS FC.240	1073
Kirkbrae, Hoxay	Ork	HY		comb		Fig 25.	RMS GA.43	1076
						Scot Antiq Scot MSS:		
						Petrie Notebook 12, 113		
Kirkcudbright	Kirk			pin	V grave, St Outhbert's Churchyard	Grieg 1940, 13, fig 1	Kirkcudbrigh	1573
						Fanning 1983a, no 17		
Knap, Lewis	Inv	NB 3	3	pin		Fig 24.	RMS FC.231	268
Knap, Lewis	Inv	NB 3	3	pin	shell mound	Fig 15.	RMS FC.228	326
Knap, Lewis	Inv	NB 3	3	pin	shell mound		RMS FC.229	327
Knap, Lewis	Inv	NB 3	3	pin	shell mound		RMS FC.7228	328
						Fig 13. Laing 1973, fig 6.51		
Knap, Lewis	Inv	NB 3	3	pin		Purchases 1915, fig 1		
Lanarkshire?	Lanar			pin		Fanning 1983a, no 57	RMS FC.230	1586
				pin		Donations 1882, 151	RMS FC.137	613
						Grieg 1940, 155		
Langbank	Renf			comb		Fanning 1983a, no 33	RMS HC.105	659
					1903 discovered on crannog assoc w small penannular brooch of 2C AD type	Callander 1929, 320		
						M MacGregor 1976, no 275		
Laws of Monifieth	Angus	NO 492	348	comb		Warner 1983, 168, fig 76		
Laws of Monifieth	Angus	NO 492	348	pin		Donations 1883, 301, fig 1	RMS GN.24	553
						Donations 1864, 322	RMS GN.30	554
						Donations 1883, 301, fig 2		
						Kilbride-Jones 1980b, fig 58.4		
Laws of Monifieth	Angus	NO 492	348	pin		Fig 16. Donations 1883, 301, fig 3	RMS GN.32	555
Leckie	Stirl	NS 693	940	pin	ph 5, secondary deposits	Dunning 1934, fig 7.3	H 1930.529	1648
					GX-2780, tpq AD 140-160 on basis of samian pottery from ph 4			
Leckie	Stirl	NS 693	940	pin	broch floor, ph 3	Mackie 1982	H 1980.10/1	1649
Leckie	Stirl	NS 693	940	pin	broch floor, ph 3	Mackie 1982	H 1980.11	1650
					GX-2779, tpq AD 125-150 from samian			
					GX-2779, tpq AD 125-150 from samian			
Ledaig Moss	Argyl	NM 9	3	comb			RMS HT.20	641
Ledaig Moss	Argyl	NM 9	3	comb		Fig 32.	RMS HT.21	642
Ledaig Moss	Argyl	NM 9	3	comb			RMS HT.22	643
Lingro	Ork	HY 435	088	pin		Anderson 1883	RMS GE.39	735
Lingro	Ork	HY 434	088	pin-imp		Young 1953, pl IX.2-3	RMS GE.54 ++	1449

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Lingro	Ork	HY 435	088	pin	broch		H B.1914.680	137
Lingro	Ork	HY 435	088	?			H B.1914.685	1659
Lingro	Ork	HY 434	088	pin	shown in plan as found in/on NE broch wall	Soc Antiq Scot MSS 32, ORD/182/16		1800
Lismore	Argyl	NM 84	41	pin			RMS FC.143	322
Lismore	Argyl	NM 84	41	pin			RMS FC.142	323
Lismore	Argyl	NM 84	41	pin		Fig 13. Laing 1973, fig 4.16	RMS FC.141	324
Loch Bornich, S Uist	Inv	NF 73	29	pin		Fanning 1983a, no 26	RMS GS.223	1576
Loch Inch-Crindil	Gall			comb			RMS HT.10	640
Loch Spouts Crannog	Ayrsh	NS 28	05	pin		RMS HW.30		639
					finds incl flint scrapers, Munro 1882			
					polished lignite ring,			
					bronze key, Celtic Cu			
					alloy orn (MacGregor, M			
					1973, no 263), misc glass			
					beads, 2C Samian & med pot			
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 107	1974
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 96	1975
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 93	1976
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 90	1977
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 89	1978
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 85	1979
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 84	1980
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 83	1981
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 82	1982
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 69	1983
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 27B	1984
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 27A	1985
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 26	1986
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 24	1987
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 22	1988
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 20	1989
Loch na Berie	Inv	NB 103	352	pin	?wall filling last LAIA structure		EdinUni 17B	1990



### APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Loch na Berie	Inv	NB 103	352	pin	?	?	EdinUni 17A	1991
Loch na Berie	Inv	NB 103	352	pin	?	?	EdinUni 7	1992
Loch na Berie	Inv	NB 103	352	pin	?	?	EdinUni 5	1993
Loch na Berie	Inv	NB 103	352	pin	?	?	EdinUni 21	1994
Loch na Berie	Inv	NB 103	352	comb	?	?	EdinUni 88	1995
Loch na Berie	Inv	NB 103	352	comb	?	?	EdinUni 100	1996
Loch na Berie	Inv	NB 103	352	comb	?	?	EdinUni 100	1997
Loch na Berie	Inv	NB 103	352	comb	?	?	EdinUni 100	1998
Lochlee Crannog	Ayrsh			pin		Fig 15. Munro 1882, fig 144	Kilmarnock	1578
Luce Sands	Gall	NX 1	5	pin		Fanning 1983a, no 32		868
Machair Leathann	Inv	NF 80	75	pin		Fig 13. Laing 1973, fig 4.13	RMS BH962221	
Machrins, Colonsay	Argyl	NR 35	93	pin		Beveridge 1911, 127		1802
Meikleour Midhowe	Perth Ork	HY 372	306	pin		Ritchie, J N G 1981, 273, fig 5	RMS	1570
Midhowe	Ork	HY 372	306	pin		Fanning no 8a		
Midhowe	Ork	HY 372	306	pin		RCAHMS 1984	RMS GP.106	892
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.1	RMS GAM.22	176
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.5	RMS GAM.23	183
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.4	RMS GAM.24	184
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.3	RMS GAM.25	179
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.2	RMS GAM.26	180
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.2	RMS GAM.27	181
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.2	RMS GAM.28	182
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.2	RMS GAM.131	185
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.2	RMS GAM.132	186
Midhowe	Ork	HY 372	306	pin		Callander & Grant 1934, fig 28.2	RMS GAM.133	187

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Midhowe	Ork	HY 372	306 comb	path outside door of broch		Callander & Grant 1934, fig 32.1	RMS GAM.1	188
Midhowe	Ork	HY 372	306 pin			Callander & Grant 1934, 500, fig 44.1	RMS GAM.1150	1450
Midhowe	Ork	HY 372	306 pin			Callander & Grant 1934, 500, fig 44.2	RMS GAM.1151	1451
Midhowe	Ork	HY 372	306 pin			Callander & Grant 1934, 500, fig 44.3	RMS GAM.1152	1452
Midhowe	Ork	HY 372	306 comb				RMS GAM.163	1458
Midtown, Freswick	Caith	ND 36	67 pin	found in field near a farm u/s at Midtown		Fig 28. Donations 1926, 20-21	RMS FC.239	729
						Batey 1987, 337		
Milliya Skera	Shet	HP 6	0 pin	in situ on Norse site	14C context		L A-13-78-6	1468
Milliya Skera	Shet	HP 6	0 comb				L ARC.65493	1469
Milliya Skera	Shet	HP 6	0 comb				L A39-79-4	1470
Milliya Skera	Shet	HP 6	0 comb				L A39-79-3	1471
Milliya Skera	Shet	HP 6	0 comb				L A13-78-1	1472
Milliya Skera	Shet	HP 6	0 comb				L A36-79-1	1473
Milliya Skera	Shet	HP 6	0 comb				L A13-78-7	1474
Moredun	ELoth	NT 286	695 pin			Curle 1932, 396	RMS EQ.275	1442
Mote of Mark	Kirk	NX 84	54 pin		assoc w E ware	Curle, A O 1914, 161, fig 15.11	RMS HH.230	869
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware	Curle, A O 1914, 162, fig 23	RMS HR.7292	870
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware	Curle, A O 1914, fig 15.1	RMS HR.292	871
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware	Curle 1914, fig 15.2	RMS HH.161	872
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.156	873
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.150	874
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.165	875
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware	Curle, A O 1914, 147, fig 14.3	RMS HH.169	876
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.158	877
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.200	878
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.152	879
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.153	880
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.159	881
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.170	882
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.160	883
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.160	884
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.151	885
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS 87063	886
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.164	887
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.166	888
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.157	889
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.167	890
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware		RMS HH.165	891
Mote of Mark	Kirk	NX 84	54 pin	vicinity of clay floor	assoc w E ware	Curle, A O 1914, fig 14.2, 147	RMS HH.?	1463
N Berwick	Ber	NT 54	85 pin	dark soil assoc w ?struct, rock shelter	in situ deposits incl buff-coloured pot & animal bones. 4 diff levels of hearth below pin level upper jaw small child mixed up in deposit	Laidlay 1870, 428-30, fig 4	RMS FC.236	723
						Richardson 1907, 428		
						Kilbride-Jones 1980b, fig 61.4		



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
N Ronaldsay	Ork	HY 7	5	comb			K 1980.56	266
N Uist	Inv	NF 83	70	pin			RMS NA.281	334
N Uist	Inv	NF 83	70	pin			RMS NA.282	335
N Uist	Inv	NF 83	70	pin			RMS NA.283	336
N Uist	Inv	NF 83	70	pin			RMS NA.284	337
N Uist	Inv	NF 83	70	pin			RMS NA.285	338
N Uist	Inv	NF 83	70	pin			RMS NA.286	339
N Uist	Inv	NF 83	70	pin			RMS NA.287	340
N Uist	Inv	NF 83	70	pin			RMS u/reg	341
N Uist	Inv	NF 83	70	pin			RMS u/reg	342
N Uist	Inv	NF 83	70	comb			RMS u/reg	343
N Uist	Inv	NF 83	70	comb			RMS u/reg	344
Ness Broch	Caith	ND 381	667	pin?	broch	Anderson, J 1901, 143 Donations 1909, 15-6	RMS GA.737	798
Ness Broch	Caith	ND 381	667	pin	broch	Fig 12. Anderson, J 1901, 143	RMS GA.738	799
Ness Broch	Caith	ND 381	667	pin	broch	Donations 1909, 15-6 Anderson, J 1901, 143	RMS GA.739	800
Ness Broch	Caith	ND 381	667	pin	broch	Donations 1909, 15-6 Fig 16. Anderson, J 1901, 143	RMS GA.747	801
Newark Broch	Ork	HY 716	425	pin	opening into intramural chamber	Kilbride-Jones 1980b, 191, fig 58.8 Statistical Account 1845, 138-39		1790
North Eildon Hill	Eloth	NT 55	34	pin			RMS HH.684	815
Old Cattlefld,Vallay	Inv	NF 78	76	pin?			RMS GT.149	295
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.361	304
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.362	305
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.365	306
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.369	307
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.390	310
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.786	311
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.141	314
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.142	315
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.140	316
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.146	317
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.363	320
Old Cattlefld,Vallay	Inv	NF 78	76	pin			RMS GT.406	321
Old Cattlefold, Vallay	Inv	NF 78	76	comb		Laing 1973, fig 7.66	RMS GT.356	1200
Old Cattlefold, Vallay	Inv	NF 78	76	comb			RMS GT.358	1201
Old Cattlefold, Vallay	Inv	NF 78	76	comb			RMS GT.364	1202
Orkney				pin			RMS GA.154	603
Orkney				pin?			RMS GA.155	604
Orkney	Ork			pin			RMS GA.21	612
Orkney	Ork	HY		pin		Laing 1973	RMS FC.146	621



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Orkney	Ork	HY	pin			Fig 32.	RMS GA.19	1074
Orkney	Ork	HY	comb				RMS GA.42	1075
Orkney	Ork	HY	Cblank				RMS GA.26	1077
Orkney or Shetland			?				H B.1914.1035	1660
Orkney?	Ork		pin				RMS L1948.39	606
Orkney?	Ork		pin				RMS L1948.42	607
Orkney?	Ork		pin				RMS L1948.43	608
Orkney?	Ork		pin			Fig 12.	RMS L1948.40	609
Orkney?	Ork		pin				RMS L1948.37	610
Orkney?	Ork		ball				RMS L1948.58	611
Oronsay?	Argyl		pin			Fanning 1983a, no 16 Proc Soc Antiq Scot 48, 293	GAGM '55-96	1745
Pabbay, S Uist	Inv	NF 7	2	pin		Donations 1901, 278, fig 2	RMS FC.175	1113
Paible, Taransay	Inv	NB 02	01	pin			RMS BN.5	1114
Perth	Perth	NO 11	23	pin		Fig 27.	RMS FC.139	899
Peterkirk, Sanday	Ork	HY	comb				H B.1914.806	1678
Plate Hill	Argyl		pin				GAGM N/N	1744
Pool	Ork	HY 619	378	pin	context 420, ph 4g		B SF 2570	1476
Pool	Ork	HY 619	378	pin	context 499, ph 4d/e		B SF 3006	1477
Pool	Ork	HY 619	378	pin	context 444, ph 5c		B SF 2819	1478
Pool	Ork	HY 619	378	pin	context 290, ph 5d	Fig 25.	B SF 1522	1479
Pool	Ork	HY 610	378	pin	weighted mean k tag ph 4f = GU-1999	Fig 24.	B SF 4317	1480
Pool	Ork	HY 619	378	pin	tpq weighted mean 1 GU-1806, GU-1810, GU-2005-6		B SF 1863	1481
Pool	Ork	HY 619	378	pin	GU-1806, GU-1810, GU-2005-6	Fig 24.	B SF 1601	1482
Pool	Ork	HY 610	378	pin	GU-1806, GU-1810, GU-2005-6	Fig 24.	B SF.1854	1483
Pool	Ork	HY 619	378	pin	tpq weighted mean 1	Fig 25.	B SF 1947	1484
Pool	Ork	HY 619	378	pin	weighted mean k	Fig 24.	B SF 2464	1485
Pool	Ork	HY 610	378	pin	tpq weighted mean 1	Fig 26.	B SF 1948	1486
Pool	Ork	HY 619	378	pin	GU-1806, GU-1810, GU-2005-6	Fig 26.	B SF 2176	1487
Pool	Ork	HY 619	378	pin	GU-1806, GU-1810, GU-2005-6	Fig 26.	B SF 1870	1488
Pool	Ork	HY 619	378	pin	tpq weighted mean 1		B SF 2315	1489
Pool	Ork	HY 610	378	pin	tpq weighted mean 1		B SF 993	1490
Pool	Ork	HY 619	378	pin	GU-1806, GU-1810, GU-2005-6	Fig 25.,	B SF 1966	1491
Pool	Ork	HY 619	378	pin	tpq ph 4a = GU-1997	Fig 24.	B SF 2161	1492
Pool	Ork	HY 619	378	pin	GU-1806, GU-1810, GU-2005-6	Fig 27.	B SF 3133	1493
Pool	Ork	HY 619	378	pin	context 376, ph 5d	Fig 24.	B SF 1826	1494
Pool	Ork	HY 619	376	pin	context 398, ph 5c	Fig 27.	B SF 1252	1495
Pool	Ork	HY 619	378	pin	context 724, ph 4b	Fig 12.	B SF 2469	1496
Pool	Ork	HY 619	378	pin	context 376, ph 5d			
Pool	Ork	HY 619	376	pin	context 311, ph 6c			
Pool	Ork	HY 619	378	pin	context 506, ph 5c			
Pool	Ork	HY 619	378	pin	tpq weighted mean 1, tag: GU-1806, GU-1810, GU-2005-6	Fig 27.	B SF 1436	1497

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Pool	Ork	HY 619	378	pin	context 330, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 2008	1498
Pool	Ork	HY 619	378	pin	context 416, ph 5c	tpq: weighted mean 1	B SF 2051	1499
Pool	Ork	HY 619	378	pin	context 298, ph 4g	weighted mean k	B SF 2339	1500
Pool	Ork	HY 619	378	pin	context 420, ph 4g	weighted mean k	B SF 2484	1501
Pool	Ork	HY 610	378	pin	context 411, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 2569	1502
Pool	Ork	HY 619	378	pin	context 58, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 331	1503
Pool	Ork	HY 619	378	pin	context 341, ph 5d	GU-1806, GU-1810	B SF 2032	1504
Pool	Ork	HY 619	378	pin	context 80, ph 5d	GU-2005-6	B SF 655	1505
Pool	Ork	HY 619	378	pin	context 341, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 2033	1506
Pool	Ork	HY 619	378	pin	context 80, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 714	1507
Pool	Ork	HY 619	378	pin	context 276 = topsoil	GU-1806, GU-1810, GU-2005-6	B SF 1309	1508
Pool	Ork	HY 619	378	pin	context 8, ph 5d	GU-2005-6	B SF 111	1509
Pool	Ork	HY 619	378	pin?	context 703, ph 4a	GU-1997	B SF 3075	1510
Pool	Ork	HY 619	378	pin	context 341, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 2085	1511
Pool	Ork	HY 619	378	pin	context 270 = top soil	GU-1806, GU-1810, GU-2005-6	B SF 1153	1512
Pool	Ork	HY 619	378	pin	context 367, ph 5d	GU-2005-6	B SF 2962	1513
Pool	Ork	HY 619	378	pin	context 330, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 1489	1514
Pool	Ork	HY 619	378	pin	context 375, ph 5d	GU-2005-6	B SF 1734	1515
Pool	Ork	HY 619	378	pin	context 348, ph 5d/c	GU-1810, GU-2005-6	B SF 1417	1516
Pool	Ork	HY 619	378	pin	context 270 = top soil	tpq: weighted mean 1	B SF 872	1517
Pool	Ork	HY 619	378	pin	context 2, ph 7	tpq of ph 6bi1 = GU-1808	B SF 1127	1518
Pool	Ork	HY 619	378	pin	0276/0330		B SF 0006	1519
Pool	Ork	HY 619	378	pin	context 270 = top soil		B SF 1655	1520
Pool	Ork	HY 619	378	pin	context 0008, ph 5d		B SF 1211	1521
Pool	Ork	HY 619	378	pin	context 31, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 67	1522
Pool	Ork	HY 619	378	pin	context 464, ph 4a	GU-1806, GU-1810, GU-2005-6	B SF 976	1523
Pool	Ork	HY 619	378	pin	context 341, ph 5d	GU-1997	B SF 2580	1524
Pool	Ork	HY 619	378	pin	context 310, ph 6bi	GU-1806, GU-1810, GU-2005-6	B SF 2031	1525
Pool	Ork	HY 619	378	pin	context 2, ph 7	tpq ph 6a = GU-2003, tag ph 6bi1 = GU-1808	B SF 2006	1526
Pool	Ork	HY 619	378	pin	context 274, ph 5d	tpq ph 6bi1 = GU-1808	B SF 35	1527
Pool	Ork	HY 619	378	pin	context 298, ph 4g	GU-1806, GU-1810, GU-2005-6	B SF 1751	1528
Pool	Ork	HY 619	378	pin	context 57, ph 5d	weighted mean k	B SF 2968	1529
Pool	Ork	HY 619	367	pin		GU-1806, GU-1810, GU-2005-6	B SF 717	1530

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Pool	Ork	HY 619	378	pin	context 341, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 2030	1531
Pool	Ork	HY 619	378	pin	context 386, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 1898	1532
Pool	Ork	HY 619	378	pin	context 437, ph 5c	tpq ph 5b weighted mean 1	B SF 2209	1533
Pool	Ork	HY 619	378	pin	context 95, ph 4g	weighted mean k	B SF 1058	1534
Pool	Ork	HY 619	378	pin	context 38, ph 6b11	GU-1808	B SF 307	1535
Pool	Ork	HY 619	378	pin	context 7, ph 7	tpq ph 7 = GU-1808	B SF 134	1536
Pool	Ork	HY 619	378	pin	context 5, ph 7	tpq ph 6b11 = GU-1808 AD	B SF 38	1537
Pool	Ork	HY 619	378	pin	context 80, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 626	1538
Pool	Ork	HY 619	378	pin	u/s	taq ph 4f = GU-1999	B SF 2357	1539
Pool	Ork	HY 619	378	pin	context 1080, ph 4d/e		B SF 3861	1540
Pool	Ork	HY 619	378	pin	context 276 = top soil		B SF 1381	1541
Pool	Ork	HY 619	378	pin?	context 2, ph 7	tpq ph 6b11 = GU-1808	B SF 53	1542
Pool	Ork	HY 619	378	pin?	context 368, ph 5d/c	tpq ph 5b weighted mean 1	B SF 1520	1543
Pool	Ork	HY 619	378	pin	context 718, ph 4c	tpq ph 4a = GU-1997, taq ph 4f = GU-1999	B SF 3248	1544
Pool	Ork	HY 619	378	pin	context 718, ph 4c	tpq Ph 4a = GU-1997, taq Ph 4f = GU-1999	B SF 3643	1545
Pool	Ork	HY 619	378	pin	context 275, ph 6b1	tpq PH 6A = GU-2003, taq ph 6b11 = GU-1808	B SF 1695	1546
Pool	Ork	HY 619	378	pin	context 25, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 184	1547
Pool	Ork	HY 619	378	pin	context 8, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 75	1548
Pool	Ork	HY 619	378	pin	context 270 = top soil		B SF 1221	1549
Pool	Ork	HY 619	378	pin	context 66, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 449	1550
Pool	Ork	HY 619	378	pin	context 2014, ph 6c	tpq ph 6a = GU-2003, taq ph 6b11 = GU-1808	B SF 4334	1551
Pool	Ork	HY 619	378	pin	context 2052, ph 6c		B SF 4819	1552
Pool	Ork	HY 619	378	pin	context 2001, ph 7		B SF 4244	1553
Pool	Ork	HY 619	378	pin	context 341, ph 6b1		B SF 2029	1554
Pool	Ork	HY 619	378	pin	context 293, ph 6c		B SF 1254	1555
Pool	Ork	HY 619	378	pin	context 309, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 1344	1556
Pool	Ork	HY 619	378	pin	context 276 = top soil		B SF 1356	1557
Pool	Ork	HY 619	378	pin	context 407, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 1967	1558
Pool	Ork	HY 619	378	pin	context 298, ph 4g	weighted mean k	B SF 2388	1559
Pool	Ork	HY 619	378	pin	context 38, ph 6b11	GU-1808	B SF 263	1560
Pool	Ork	HY 619	378	pin	context 49, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 693	1561
Pool	Ork	HY 619	378	pin	context 49, ph 5d		B SF 693	1562
Pool	Ork	HY 619	378	pin	context 80, ph 5d	GU-1806, GU-1810, GU-2005-6	B SF 718	1564
Pool	Ork	HY 619	378	pin	context 270 = topsoil		B SF 1213	1804
Pool	Ork	HY 619	378	pin.	context 481, ph 5C	tpq weighted mean 1	B SF 2429	2002

Fig 27.

Fig 27.

Fig 28.

Fig 28.



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Pool Quoybanks, St Ola	Ork	HY 619	378	pin	context 2014, ph 6C	Fig 28. Cursiter 1887, 343, fig 4	B SF 4483	1807
	Ork	HY		pin	ploughed field, 7w subteranean struct		H B.1914.700	1694
Reay Reay Reay	Caith	NC 96	64	pin	V grave w oval brooches etc	Donations 1927, 109-10 Fig 7. Grieg 1940, 20, fig 5	RMS HR.516	803
	Caith	NC 96	64	pin			RMS HR.816	804
	Caith	NC 96	64	pin			RMS IL.336	1566
Reay	Caith	NC 96	64	pin	male V grave w axe, shield etc	Fanning 1983a no 4 Grieg 1940, 19 Fanning 1983a, no 5	RMS IL.373	1567
Rhudha Chalsteal Riggan of Kami	Inv Ork	HY 591	074	comb comb	Site 2, 1964 ex, on wall of period 3	Buteux forth, cat no 2	RMS L1967.85 K	1117 2077
Riggan of Kami	Ork	HY 591	074	comb	Site 2, 1964 ex, under tumble from E wall	Buteux forth, cat no 3	K	2078
Riggan of Kami	Ork	HY 591	074	pin	Site 2, 1964 ex, below level of midden	Buteux forth, cat no 4	K	2079
Riggan of Kami	Ork	HY 591	074	comb	Site 2, 1964 ex, midden 1 extension	Buteux forth, cat no 46	K	2080
Riggan of Kami	Ork	HY 591	074	pin	Site 2, 1964 ex, below bench in N wall, room 1	Buteux forth, cat no 47	K	2081
Riggan of Kami	Ork	HY 591	074	pin	Site 2, 1964 ex, midden 1, 2nd extension	Buteux forth, cat no 53	K	2082
Riggan of Kami	Ork	HY 591	074	pin	Site 2, 1964 ex, 10' by 10' extension	Buteux forth, cat no 54	K	2083
Riggan of Kami	Ork	HY 591	074	pin	Site 2, 1964 ex, under secondary wall, room 1	Buteux forth, cat no 61	K	2084
Riggan of Kami	Ork	HY 591	074	pin	Site 2, 1964 ex, upper hearth material, room 1	Buteux forth, cat no 63	K	2085
Rosemarkie	Ross	NH 744	594	pin	Caird's Cave, 1912 ex	assoc finds of stone, bone Fig 6. Donations 1931, 412 & ant, no date	RMS HM.237	750
Rosemarkie	Ross	NH 744	594	pin	Caird's Cave, 1912 ex	assoc finds of bone, stone & ant, no date	RMS HM.238	751
Rosemarkie	Ross	NH 744	594	pin	Caird's Cave, 1912 ex	assoc finds of stone, bone Fig 26. Donations 1931, 412 & ant, no date	RMS HM.239	752
Rosemarkie	Ross	NH 744	594	pin	Caird's Cave, 1912 ex	assoc finds of stone, bone & ant, no date	RMS HM.240	753
Rossal	Suth			pin		Fig 12. Laing 1973, fig 5.36	RMS FC.255	904
Rossshire Rudha na Traghad	Ross Inv	NF 8	7	pin pin	reported found in dunes, Beveridge found none	Laing 1973, fig 4.14 Beveridge 1911, 228	RMS FC.238	724 1803
S Fort of Luìng	Argyl	NM 750	107	pin	finds incl nothing intrinsically dateable	Ritchie, J 1971, 110 RCAMS 1975, no 189	RMS HR.486	544
S Fort of Luìng	Argyl	NM 750	107	pin	finds incl nothing intrinsically dateable	Ritchie, J 1971, 110 RCAMS 1975, no 189	RMS HR.487	545
S Uist	Inv	NF 78	29	pin			RMS GS.103	1205
S Uist	Inv	NF 78	29	pin			RMS GS.163	1206
S Uist	Inv	NF 78	29	pin	'a wheelhouse' 'circular structure'	Donations 1860, 122	RMS HD.15	1208

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
S Uist Saevar Howe	Inv	NF 78	29	pin	'Pictish', 78C	Hedges 1983, cat no 1, fig K 1984.323	RMS HD.16	1209
	Ork	HY 246	270	pin		13.1	K 1984.323	189
Saevar Howe	Ork	HY 246	270	pin	GU-1401, Penny of Burgred of Mercia, AD 866-868, reused as pendant = tpq	Hedges 1983, cat no 104, fig 13.104	K 1984.426	190
Saevar Howe	Ork	HY 246	270	pin	GU-1401, penny of Burgred of Mercia, AD 866-868, reused as pendant = tpq	Hedges 1983, cat no 119, fig 13.119	K 1984.441	191
					GU-1401, penny of Burgred of Mercia, AD 866-868, reused as pendant = tpq	Hedges 1983, cat no 77, fig 13.77	K 1984.339	192
Saevar Howe	Ork	HY 246	270	pin	GU-1401 Penny of Burgred of Mercia, AD 866-868, reused as pendant = tpq	Hedges 1983, cat no 78, fig 13.78	K 1984.400	193
Saevar Howe	Ork	HY 246	270	pin	GU-1400	Hedges 1983, cat no 120, fig 13.120	K 1984.442	194
						Hedges 1983, cat no 19, fig 13.19	K 1984.341	195
Saevar Howe	Ork	HY 246	270	pin	GU-1400	Hedges 1983, cat no 18, fig 13.18	K 1984.439	196
Saevar Howe	Ork	HY 246	270	pin	Farrer's excavations	Hedges 1983, cat no 155, fig 12.155	K	197
						Hedges 1983, fig 12	K	198
Saevar Howe	Ork	HY 246	270	pin	GU-1401, penny of Burgred of Mercia, AD 866-868, reused as pendant = tpq	Hedges 1983, cat no 79, fig 13.79	K 1984.401	199
Saevar Howe	Ork	HY 246	270	comb	Farrer's spoil, context 23	Hedges 1983, cat no 116, fig 11.116	K 1984.438	200
						Hedges 1983, cat no 4, fig K 1984.326 11.4	K 1984.326	201
Saevar Howe	Ork	HY 246	270	comb	'Pictish', 78C	Hedges 1983, cat no 3, fig K 1984.325 11.3	K 1984.325	202
Saevar Howe	Ork	HY 246	270	comb	GU-1400	Hedges 1983, cat no 17, fig 11.17	K 1984.339	203
						Hedges 1983, cat no 75, fig 11.75	K 1984.397	204
Saevar Howe	Ork	HY 246	270	comb	Farrer's spoil	Hedges 1983, cat no 109, fig 11.109	K 1984.431	205
						Hedges 1983, cat no 110, fig 11.110	K 1984.432	206
Saevar Howe	Ork	HY 246	270	comb	Farrer's spoil	Hedges 1983, cat no 111	K 1984.433	207
						Hedges 1983, cat no 112, fig 11.112	K 1984.434	208
Saevar Howe	Ork	HY 246	270	comb	Farrer's spoil	Hedges 1983, cat no 113, fig 11.113	K 1984.435	209
Saevar Howe	Ork	HY 246	270	comb	Farrer's spoil	Hedges 1983, cat no 114, fig 11.114	K 1984.436	210



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Saear Howe	Ork	HY 246	270 comb	Farrer's spoil		Hedges 1983, cat no 115, fig 11.115	K 1984.437	211
Saear Howe	Ork	HY 246	270 comb?	Farrer's spoil		Hedges 1983, cat no 117, fig 11.117	K 1984.439	212
Saear Howe	Ork	HY 246	270 comb	Farrer's 1862 excavations		Hedges 1983, cat no 152, fig 12.152	?	213
Saear Howe	Ork	HY 246	270 comb	Farrer's 1862/67 excavations		Hedges 1983, cat no 153, fig 12.153	?	214
Saear Howe	Ork	HY 246	270 pin?				RMS GA.125	1097
Saear Howe	Ork	HY 246	270 comb				RMS GA.121	1098
Saear Howe	Ork	HY 246	270 comb				RMS GA.120	1099
Saear Howe	Ork	HY 246	270 pin	Farrer's 1867 excavations		Hedges 1983, cat no 154, fig 12	RMS GA.127	1100
Saear Howe	Ork	HY 246	270 pin	Farrer's 1862 excavations		Hedges 1983, cat no 155, fig 12	RMS GA.126	1101
Sands of Bracon,Yell Shet	HU 5	9	pin	area of complex of cairns, encl & other remains		Fig 24. RCAHMS 1946 I, no 1726	RMS BN.4	1078
Sands of Bracon,Yell Shet	HU 5	9	pin	area of complex of cairns, encl & other remains		Fig 13. RCAHMS 1946 I, no 1726	RMS BN.3	1079
Sands of Bracon,Yell Shet	HU 5	9	comb	area of complex of cairns, encl & other remains		RCAHMS 1946 I, no 1726	RMS BN.1	1080
Sands of Bracon,Yell Shet	HU 5	9	comb	area of complex of cairns, encl & other remains		RCAHMS 1946 I, no 1726	RMS BN.2	1081
Sands of Rath, Taransay	Inv	NB 02	01 pin?				RMS BN.6	1115
Sandwick	Shet	HU 43	23 pin?				L ARC.65498a	1464
Sandwick	Shet	HU 43	23 pin				L ARC.65497	1466
Sandwick	Shet	HU 43	23 pin				L ARC.6549b	1467
Sandwood Bay	Suth	NC 23	64 pin			Fanning 1983a, no 15	RMS FC.300	726
Scotland?			pin				H B.1914.505	1646
Scotland?			comb				H B.1914.496	1663
Scotland?			comb				H B.1914.495	1677
Scots Craig, Tayport Fife	NO 453	289	pin				RMS FC.299	725
Sheep Hill Fort	Dunb	?	?	SUAL (3). Context epsilon, ph 2			H A.1971.154	1662
Sheep Hill Fort	Dunb	?	?	SHBB (2)		1962	H A.1971.152	1461
Sithean Mor	Inv	NF 75	76 pin	SHBF, context alpha, ph 2		Fig 23.	RMS GT.194	278
Sithean Mor	Inv	NF 75	76 pin				RMS GT.195	279
Sithean Mor	Inv	NF 75	76 pin				RMS GT.192	280
Sithean Mor	Inv	NF 78	76 pin				RMS GT.376	313
Sithean Mor	Inv	NF 78	76 pin				RMS GT.376	1212
Sithean Mor	Inv	NF 75	76 pin?				RMS GT.191	1224
Sithean Mor	Argyl	NR 360	914 pin	sand dune, a little to S of a hearth		Ritchie, J N G 1981, 279-80, fig 7	RMS	1933
Sithean a Phiobaire	Inv	NF 734	214 pin			Lethbridge 1952, fig 5.11	RMS GS.166	1189
Sithean a Phiobaire	Inv	NF 734	214 pin			Lethbridge 1952, fig 5.7	RMS GS.167	1190
Sithean a Phiobaire	Inv	NF 734	214 pin			Lethbridge 1952, fig 5.10	RMS GS.168	1191
Sithean a Phiobaire	Inv	NF 734	214 pin			Lethbridge 1952, fig 5.8	RMS GS.169	1192
Sithean a Phiobaire	Inv	NF 734	214 pin			Lethbridge 1952, 7fig 5.9	RMS GS.170	1193



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NCR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Sithean a Phiobaire	Inv	NF 734	214 pin			Lethbridge 1952, 184, fig 5	RMS GS.171	1194
Sithean a Phiobaire	Inv	NF 734	214 pin			Lethbridge 1952, 188, fig 8	??	1455
Sithean a Phiobaire	Inv	NF 734	214 pin-imp			Beveridge 1911, 120	?	1456
Sithean an Altair, Valley Skaill	Inv	NF 78	76 pin	reported found NE corner largest ch, & to E of hse Site 2, midden 1				1799
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c, latest occupation	Gelling 1984, fig 13.12	K 1982.275	216
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Buteux forth SF 1027	K 1982.277	217
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Gelling 1984, fig 13.2	K 1982.278	218
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Buteux forth SF 1028	K 1982.279	219
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Gelling 1984, fig 13.13	K 1982.280	220
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Buteux forth SF 1032	K 1982.282	221
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Gelling 1984, fig 13.14	K 1982.283	222
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Buteux forth SF 1033	K 1982.2841	223
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Buteux forth, SF 1045	K 1982.284b	224
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Gelling 1984, fig 13.20	K 1982.284c	225
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Buteux forth, SF 1024	K 1982.284d	226
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Gelling 1984, fig 13.21	K 1982.285	227
Skaill	Ork	HY 589	064 pin	site 2, midden 1	prob l1c	Buteux forth, SF 1025	K 1982.286	228
Skaill	Ork	HY 589	064 pin	S of midden 1, but same layer	prob l1c	Gelling 1984, fig 13.22	K 1982.287	229
Skaill	Ork	HY 589	064 pin	site 2, midden 2	c AD 850-1000	Buteux forth, SF 1026	K 1982.289	230
Skaill	Ork	HY 589	064 pin	site 2, midden 2, contemp w house 3	c AD 850-1000	Gelling 1984, fig 13.11	K 1982.290	231
Skaill	Ork	HY 589	064 pin	site 2, wall of house 1	Pictish/?Norse, post mid 8C	Buteux forth, SF 1037	K 1982.291	232
Skaill	Ork	HY 589	064 pin	site 2, structure of house 3, 1 e period 1 or 2	?Pictish/?Norse/ post mid 8C AD - c 850	Gelling 1984, fig 13.7	K 1982.292	233
Skaill	Ork	HY 589	064 pin	site 2, structure of house 3, 1 e period 1 or 2	?Pictish/?Norse, post mid 8C AD - c 850	Buteux forth SF 1030	K 1982.293	234
Skaill	Ork	HY 589	064 pin	site 2, structure of house 3, 1 e period 1 or 2	?Pictish/?Norse, post mid 8C AD - c 850	Gelling 1984, fig 13.1	K 1982.294a	235
Skaill	Ork	HY 589	064 pin	site 2, stone-lined pit, end hse 3	c AD 850-1000	Buteux forth SF 1031		
Skaill	Ork	HY 589	064 pin	site 4, s wall of building, same layer mid 1, site 2	prob late Norse, ie l1c AD	Buteux forth, SF 1038		
Skaill	Ork	HY 589	064 pin	site 4, S wall of building	prob late Norse	Gelling 1984, fig 13.9	K 1982.294b	236
Skaill	Ork	HY 589	064 comb	site 2, prob assoc w house 5	prob l1c AD	Buteux forth, SF 1041	K 1982.169	239

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Skaill	Ork	HY 589	064 comb	site 2, u/s		Buteux forth, SF 506-508	K 1982.270	240
Skaill	Ork	HY 589	064 comb	unprovenanced		Gelling 1984, fig 12.11	K 1982.257	241
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Buteux forth, 7SF 520	K 1982.258	242
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Gelling 1984, fig 12.7	K 1982.259	243
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Buteux forth, SF 1002	K 1982.260	244
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Gelling 1984, fig 12.9	K 1982.261	245
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Buteux forth, SF 1003	K 1982.262	246
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Gelling 1984, fig 12.5	K 1982.263	247
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Buteux forth, SF 1004	K 1982.264	248
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Gelling 1984, fig 12.6	K 1982.265	249
Skaill	Ork	HY 589	064 comb	site 2, midden 1	prob AD 11C	Buteux forth, SF 1005	K 1982.266	250
Skaill	Ork	HY 589	064 comb	site 2, midden 3	Pictish/7Norse, post mid	Gelling 1984, fig 12.10	K 1982.267	251
Skaill	Ork	HY 589	064 comb	site 2, midden 3	8C AD	Buteux forth, SF 1006	K 1982.268	252
Skaill	Ork	HY 589	064 comb	site 2, midden 3	Pictish/7Norse, post mid	Buteux forth, SF 1007	K 1982.271	253
Skaill	Ork	HY 589	064 comb	site 2, midden 3	8C	Buteux forth, SF 1008	K 1982.272	254
Skaill	Ork	HY 589	064 comb	site 2, E wall house 1	Pictish/7Norse, post mid	Gelling 1984, fig 12.2	K 1982.273	255
Skaill	Ork	HY 589	064 comb	site 2, e wall house 1	8C	Buteux forth, SF 1013	K 1982.295	256
Skaill	Ork	HY 589	064 comb	site 2, e wall house 1	8C	Gelling 1984, fig 12.4	K 1982.301	257
Skaill	Ork	HY 589	064 comb	site 2, either hse 1 or 2	7Pictish/7Norse, post mid	Buteux forth, SF 1014	K 1982.274	258
Skaill	Ork	HY 589	064 comb	site 2, either hse 1 or 2	8C-7mid 9C	Gelling 1984, fig 12.8	K 1982.302	259
Skaill	Ork	HY 589	064 comb	site 2, u/s		Buteux forth, SF 1015	K 1982.303	260
Skaill	Ork	HY 589	064 comb	site 2, u/s		Buteux forth	RMS IL.50	1574
Skaill	Ork	HY 589	064 comb	site 2, u/s		Grieg 1940, 129, no 49, fig 59		
Skaill	Ork	HY 23	18 pin	part of large silver hoard c 950 AD		Donations 1938, 131, fig 2	RMS IL.517	1584
Skaill	Ork	HY 23	18 pin	part of great V hoard	c 950 AD			
Skaill	Ork	HY 23	18 comb	site 2, in collapse of outer (lower) E wall		Fanning 1983a, no 53	K 1982.	2049
Skaill	Ork	HY 23	18 comb	site 2, sealed under wall of main longhouse		Buteux forth, SF 900	K 1982.	2050
Skaill	Ork	HY 23	18 comb	site 2, midden 3		Buteux forth, SF 906	K 1982.	2051
Skaill	Ork	HY 23	18 comb	site 2, u/s		Gelling 1984, fig 12.1	K 1982.	2052
Skaill	Ork	HY 23	18 comb	site 2, u/s		Buteux forth, SF 1012	K 1982.	2053
Skaill	Ork	HY 23	18 comb	site 2, u/s		Buteux forth, SF 1019	K 1982.	2054
Skaill	Ork	HY 23	18 comb	site 5		Buteux forth, SF 1012	K 1982.	2055
Skaill	Ork	HY 23	18 comb	site 6		Buteux forth, SF 1021	K 1982.	2056
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 138	K 1982.	2057



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 503	K 1982.	2058
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 504	K 1982.	2059
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 505	K 1982.	2060
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 509	K 1982.	2061
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 521	K 1982.	2062
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 529	K 1982.	2063
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 530	K 1982.	2064
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 519	K 1982.	2065
Skaill	Ork	HY 23	18 comb	unprovenanced		Buteux forth, SF 522	K 1982.	2066
Skaill	Ork	HY 23	18 pin	site 6		Buteux forth, SF 14	K 1982.	2067
Skaill	Ork	HY 23	18 pin	unprovenanced		Buteux forth, SF 541	K 1982.	2068
Skaill	Ork	HY 23	18 pin	site 2, slump of wall	Norse	Buteux forth, SF 915	K 1982.	2069
Skaill	Ork	HY 23	18 pin	corner by S wall of Room 1				
Skaill	Ork	HY 23	18 pin	above shell midden towards Norse				
Skaill	Ork	HY 23	18 pin	NW corner of site 5				
Skaill	Ork	HY 23	18 pin	site 5		Buteux forth, SF 135	K 1982.	2071
Skaill	Ork	HY 23	18 pin	site 6		Buteux forth, SF 15	K 1982.	2072
Skaill	Ork	HY 23	18 pin	site 6		Buteux forth, SF 33	K 1982.	2073
Skaill	Ork	HY 23	18 pin	site 6		Buteux forth, SF 94	K 1982.	2074
Skaill	Ork	HY 23	18 pin	unprovenanced		Buteux forth, SF 514	K 1982.	2075
Skaill	Ork	HY 23	18 pin	unprovenanced		Buteux forth, SF 900	K 1982.	2076
Skaill	Ork	HY 589	064 pin	site 2, under floor of earlier building		Buteux forth, SF 918	RMS K.1982	2101
Skaill	Ork	HY 589	064 pin	site 6, u/s		Buteux forth, SF 42	RMS K.1982	2102
Skaill	Ork	HY 589	064 pin	site 6		Buteux forth, SF 82	RMS K.1982	2103
Skaill	Ork	HY 589	064 pin	site 6, u/s		Buteux forth, SF 83	RMS K.1982	2104
Skaill	Ork	HY 589	064 pin	site 6		Buteux forth, SF 118	RMS K.1982	2105
Skaill	Ork	HY 589	064 pin	site 6		Buteux forth, SF 119	RMS K.1982	2106
Skaill	Ork	HY 589	064 pin	site 6		Buteux forth, SF 3	K	2147
Skaill, Sandwick	Ork	HY 23	18 pin			Fig 13.	H B.1914.701	1695
Skellor, N Uist	Inv	NF 806	756 pin	sand hills		Fig 26. Beveridge 1911, pl	RMS GT.6	403
Skellor, N Uist	Inv	NF 806	756 pin					
Sleat, Sasaig, Skye	Inv	NG 59	00 pin			Simpson & Simpson 1968, pl 2	RMS GS.28	404
Sliganach, Kildonan	Inv						RMS GS.199	1103
St Boniface's	Ork	HY 4877	5274 comb	churchyard		Laing 1973, fig 4.17	K 731	261
St Boniface's	Ork	HY 4877	5274 comb	churchyard		Lamb 1983a, no 18		
St Boniface's	Ork	HY 4877	5274 comb	churchyard		Orkney SMR no 847	K 731	262
St Ford's Links	Fife	NO 46	01 pin	'kitchen midden' eroding from dunes		Lamb 1983a, no 18	K 731	263
St Ford's Links	Fife	NO 46	01 comb	'kitchen midden' eroding from dunes		Orkney SMR no 847	RMS HR.517	644
Stennes	Ork	HY	pin			Munro 1901, 286, fig 2	RMS HR.517	645
						Grieg 1940, 170	RMS FC.193	1069
						Fanning 1983a, no 24		



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Steventon Sands	Aber		pin			Fig 28. Laing 1973, fig 5.24	RMS BMC.295	900
Steventon Sands	Aber		pin				RMS BMC.296	901
Steventon Sands	Aber		pin				RMS BMC.297	902
Strathtay	Perth	NO 00 43	pin	Blackhall House			RMS FC.234	721
Tain	Ross	ND 22 66	pin	kitchen midden	assoc weaving tablet		RMS HR.81/39	805
Talnotrie	Kirk		pin	Norse hoard		Maxwell 1913	RMS	2001
Tents Muir	Fife	NO 4 2	pin			Fig 17. Kilbride-Jones 1980b, fig 59.8	RMS BN.135	903
						Clarke 1971a, 51		
The Duns, Berneray	Inv	NF 91 81	pin			Fig 28. Laing 1973, fig 5.33	RMS FC.232	329
						Donations 1915, 208, fig 1		
The Sands, Colonsay	Argyl	NR 3 9	pin?				RMS BN.7	1116
Tigh Talambhanta	Inv	NF 677 022	pin-imp			Young 1953, pl VIII, fig 7, 61, 62,65,67	RMS GU.70	1441
Tiree	Argyl	NM 0 4	pin				RMS HD.356	1257
Tiree	Argyl		pin				H B.1951.2092	1655
Tiree	Argyl		pin				H B.1951.2092	1656
Tiree	Argyl	NM 0 4	pin			Fig 28.	GAGM '55-96	1756
Tota Dunaig, Vallay	Inv	NF 78 76	pin			Fig 26.	RMS GT.160	296
Tota Dunaig, Vallay	Inv	NF 78 76	pin			Fig 23.	RMS GT.161	297
Tota Dunaig, Vallay	Inv	NF 78 76	pin			Fig 25.	RMS GT.162	298
Traprain Law	Loth	NT 58 74	pin	1922.234 Ha 6		Cree & Curle, A O 1922, fig 12.1	RMS GVB.33	660
Traprain Law	ELoth	NT 58 74	pin	1922.2 5 Ha 6		Cree & Curle, A O 1922, fig 12.2	RMS GVB.34	661
Traprain Law	ELoth	HT 58 74	pin	HA 6.1922.236		Cree & Curle, A O 1922, 211, fig 12.3	RMS GVB.35	662
Traprain Law	ELoth	NT 58 74	pin	1923.230 o? 4		Fig 13. Cree 1923, fig 7, RHS	RMS GVB.36	663
Traprain Law	ELoth	NT 58 74	pin	1923.229 P4			RMS GVB.37	664
Traprain Law	ELoth	NT 58 74	pin	xi.14.42			RMS GVB.38	665
Traprain Law	ELoth	NT 58 74	pin	v.21.328.			RMS GVB.39	666
Traprain Law	ELoth	NT 58 74	pin?				RMS GVB.?	667
Traprain Law	ELoth	NT 58 74	pin	v.21.327			RMS GVB.40	668
Traprain Law	ELoth	NT 58 74	pin	xi.14.43		Burley 1956, cat no 95	RMS GVB.41	669
Traprain Law	ELoth	NT 58 74	pin	1922.103 Hala		Cree & Curle 1922, 215, fig 15	RMS GVM.95	670
Traprain Law	ELoth	NT 58 74	pin	xi1 15.24		Burley 1956, cat no 96		
Traprain Law	ELoth	NT 58 74	pin	level 3F	late 2C	Dunning 1934, fig 7.8	RMS GVM.65	671
Traprain Law	ELoth	NT 58 74	pin	1924.232.S3		Burley 1956, cat no 97	RMS GVM.97	672
Traprain Law	ELoth	NT 58 74	pin	level 2A		Curle & Cree 1916, 102	RMS GVM.98	673
Traprain Law	ELoth	NT 58 74	pin	level 3	early 4C	Burley 1956, cat no 98	RMS GVM.99	674
Traprain Law	ELoth	NT 58 74	pin		late 2C	Burley 1956, cat no 99	RMS GVM.100	675
Traprain Law	ELoth	NT 58 74	pin			Burley 1956, cat no 100	RMS GVM.101	676
Traprain Law	ELoth	NT 58 74	pin	lowest level A	1-2 C AD	Burley 1956, cat no 101	RMS GVM.102	677
						Fig 14. Burley 1956, cat no 102		
						Fowler 1963, fig 2.1		

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Traprain Law	ELOth	NT 58	74	pin	level 3	Fig 14. Burley 1956, cat no 103 Kilbride-Jones 1980a, fig 1.2	RMS GVM.103	678
						Fig 14. Burley 1956, cat no 104 Kilbride-Jones 1980a, fig 1.1		
Traprain Law	ELOth	NT 58	74	pin	level 3	Fig 14. Burley 1956, cat no 105 Kilbride-Jones 1980a, fig 1.3	RMS GVM.105	680
Traprain Law	ELOth	NT 58	74	pin	level 3I	Fig 14. Burley cat no 106 Kilbride-Jones 1980a, fig 1.5	RMS GVM.106	681
Traprain Law	ELOth	NT 58	74	pin	level 3	Fig 14. Burley 1956, cat no 107 Kilbride-Jones 1980a, fig 1.8	RMS GVM.107	682
Traprain Law	ELOth	NT 58	74	pin	level 1	Fig 14. Burley 1956, cat no 108 Fowler 1963, fig 2.2	RMS GVM.108	683
Traprain Law	ELOth	NT 58	74	pin		Fig 14. Burley 1956, cat no 109 Kilbride-Jones 1980a, fig 1.10	RMS GVM.109	816
Traprain Law	ELOth	NT 58	74	pin		Fig 17. Burley 1956, cat no 110 Burley 1956, cat no 111	RMS GVM.110	817
Traprain Law	ELOth	NT 58	74	pin	level 2J	Burley 1956, cat no 112	RMS GVM.111	818
Traprain Law	ELOth	NT 58	74	pin		Burley 1956, cat no 113 Fig 7 & 17. Burley 1956, cat no 114	RMS GVM.112	819
Traprain Law	ELOth	NT 58	74	pin		Fig 17. Burley 1956, cat no 115 Burley 1956, cat no 116	RMS GVM.113	820
Traprain Law	ELOth	NT 58	74	pin		Burley 1956, cat no 117 Fig 18. Burley 1956, cat no 118	RMS GVM.114	821
Traprain Law	ELOth	NT 58	74	pin		Kilbride-Jones 1980a, fig 60.3	RMS GVM.115	822
Traprain Law	ELOth	NT 58	74	pin		Fig 18. Burley 1956, cat no 119 Burley 1956, cat no 120	RMS GVM.116	823
Traprain Law	ELOth	NT 58	74	pin	level 2	Burley 1956, cat no 121 Burley 1956, cat no 122	RMS GVM.117	824
Traprain Law	ELOth	NT 58	74	pin	level 2B	Burley 1956, cat no 123 Burley 1956, cat no 124	RMS GVM.118	825
Traprain Law	ELOth	NT 58	74	pin	level 1B			
Traprain Law	ELOth	NT 58	74	pin	level 2E			
Traprain Law	ELOth	NT 58	74	pin	level 4			



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Traprain Law	Eloth	NT 58	74	pin	level 4	Burley 1956, cat no 125	RMS GVM.125	832
Traprain Law	Eloth	NT 58	74	pin	level 11	does not fit chronological synthesis	RMS GVM.126	833
Traprain Law	Eloth	NT 58	74	pin	level 4	Burley 1956, cat no 127	RMS GVM.127	834
Traprain Law	Eloth	NT 58	74	pin	level 11	does not fit chronological synthesis	RMS GVM.128	835
Traprain Law	Eloth	NT 58	74	pin	level 2J	no 128:Kilbride-Jones 1980a, fig 1.11	RMS GVM.129	836
Traprain Law	Eloth	NT 58	74	pin	level 2J	does not fit chronological synthesis	RMS GVM.130	837
Traprain Law	Eloth	NT 58	74	pin	level 2K	does not fit chronological synthesis	RMS GVM.130a	838
Traprain Law	Eloth	NT 58	74	pin		Burley 1956, cat no 131	RMS GVM.131	839
Traprain Law	Eloth	NT 58	74	pin		Burley 1956, cat no 132	RMS GVM.132	840
Traprain Law	Eloth	NT 58	74	pin		Burley 1956, cat no 133	RMS GVM.133	841
Traprain Law	Eloth	NT 58	74	pin		Burley 1956, cat no 134	RMS GVM.134	842
Traprain Law	Eloth	NT 58	74	pin		Burley 1956, cat no 135	RMS GVM.135	843
Traprain Law	Eloth	NT 58	74	pin		Burley 1956, cat no 136	RMS GVM.136	844
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.202	845
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.202	846
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.203	847
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.284	848
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.285	849
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.286	850
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.292	851
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.294	852
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.295	853
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.296	854
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.502	855
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.536	856
Traprain Law	Eloth	NT 58	74	pin			RMS FR.516	857
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.548	858
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.549	859
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.561	860
Traprain Law	Eloth	NT 58as	745	pin			RMS GVM.553	861
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.555a	862
Traprain Law	Eloth	NT 58	74	pin			RMS GVM.554	863
Traprain Law	Eloth	NT 58	74	pin				
Traprain Law	Eloth	NT 58	74	pin		Fig 18. Kilbride-Jones 1980b, fig 60.2	RMS GVM.552	864
Traprain Law	Eloth	NT 58	74	pin		Fig 26.	RMS v-21-94	865
Traprain Law	Eloth	NT 58	74	pin		Fig 26.	RMS 1940.377	866
Traprain Law	Eloth	NT 58	74	pin		Cruden 1940, 57	?RMS	1999
Udal	Inv	NF 825	783	pin		Close-Brooks 1983, cat no 47, 216, fig 98	RMS GS.22	281
Udal	Inv	NF 825	783	pin		Beveridge 1911, pl	RMS GT.120	282
						Beveridge 1911, pl		
						Donations 1922, 15		



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Udal	Inv	NF 825	783	pin		Fig 25. Beveridge 1911, pl Donations 1922, 15	RMS GT.124	283
Udal	Inv	NF 825	783	pin			RMS GT.748	284
Udal	Inv	NF 825	783	pin			RMS HD.456	285
Udal	Inv	NF 825	783	pin			RMS HD.457	286
Uist	Inv	NF 825	783	comb			RMS HD.455	287
Uist	Inv			pin			RMS GT.952	1110
Uist	Inv			pin			RMS GT.953	1111
Uist	Inv			pin			RMS GT.949	1218
Uist	Inv			pin			RMS GT.950	1219
Urquhart	Nairn	NJ 28	63	pin		Donations 1901, fig 3	RMS FC.136	905
Vallaquie, N Uist	Argyl	NF 862	753	pin		M Harman in The Hebridean Naturalist	Inv 982.42	1599
Vallay	Inv	NF 78	76	pin?			RMS GT.400	312
Vallay	Inv	NF 78	76	comb			RMS GT.368	1203
Vallay	Inv	NF 78	76	pin			RMS GT.159	1204
Vallay, N Uist	Inv	NF 78	76	pin		Fig 23.	RMS GT.79	288
Vallay, N Uist	Inv	NF 78	76	pin		Fig 23.	RMS GT.80	289
Vallay, N Uist	Inv	NF 78	76	pin		Fig 23.	RMS GT.81	290
Vallay, N Uist	Inv	NF 78	76	pin		Fig 12.	RMS GT.82	291
Vallay, N Uist	Inv	NF 78	76	pin			RMS GT.83	292
Vallay, N Uist	Inv	NF 78	76	pin		Fig 26	RMS GT.103	293
Vallay, N Uist	Inv	NF 78	76	pin		Fig 26.	RMS GT.104	294
Vallay, N Uist	Inv	NF 78	76	pin			RMS GT.224	299
Vallay, N Uist	Inv	NF 78	76	pin			RMS GT.227	301
Vallay, N Uist	Inv	NF 78	76	pin			RMS GT.228	302
Vallay, N Uist	Inv	NF 78	76	pin			RMS GT.229	303
Vallay, N Uist	Inv	NF 78	76	pin			RMS GT.92	318
Vallay, N Uist	Inv	NF 78	76	pin		Beveridge 1911, 4th pl following 230		
W Isles	Inv	NF 78	76	pin		Fanning 1983a, no 11	RMS GT.92	319
W Isles	Inv			pin		Fig 15. Beveridge 1911	RMS GT.963	405
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1		
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.964	406
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.965	407
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.966	408
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.967	409
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.968	410
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.969	411
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1		
W Isles	Inv			pin		Fanning 1983a, no 59		
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.970	412
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1	RMS GT.971	413
W Isles	Inv			pin		Close-Brooks & Maxwell 1974, fig 1		
W Isles	Inv			pin		Fanning 1983a, no 30		

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 2	RMS GT.972	414
W Isles	Inv		pin			Fanning 1983a, no 37 Close-Brooks & Maxwell 1974, fig 2	RMS GT.973	415
W Isles	Inv		pin			Fanning 1983a, no 44 Close-Brooks & Maxwell 1974, fig 2	RMS GT.974	416
W Isles	Inv		pin			Fanning 1983a, no 60 Close-Brooks & Maxwell 1974, fig 2	RMS GT.975	417
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 2	RMS GT.978	418
W Isles	Inv		pin			Fanning 1983a, no 38 Close-Brooks & Maxwell 1974, fig 2	RMS GT.979	419
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 2	RMS GT.980	420
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 2	RMS GT.981	421
W Isles	Inv		pin			Fig 13. Close-Brooks & Maxwell 1974, fig 1	RMS GT.988 RMS GT.976	422 423
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 2	RMS GT.977	424
W Isles	Inv		pin			Fanning 1983a, no 61 Close-Brooks & Maxwell 1974, fig 2	RMS GT.1200	425
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1201	426
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1202	427
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1164	428
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1165	429
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1171	430
W Isles	Inv		pin			Close-Brooks & Maxwell 1976, fig 3	RMS GT.1172	431
W Isles	Inv		comb			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1020	432
W Isles	Inv		comb				RMS GT.1021	433
W Isles	Inv		comb				RMS GT.1022	434
W Isles	Inv		comb				RMS GT.1023	435
W Isles	Inv		comb				RMS GT.1024	436
W Isles	Inv		comb				RMS GT.1025	437
W Isles	Inv		comb				RMS GT.1026	438
W Isles	Inv		comb				RMS GT.1027	439
W Isles	Inv		comb				RMS GT.1028	440
W Isles	Inv		comb				RMS GT.1029	441

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
W Isles	Inv		comb				RMS GT.1030	442
W Isles	Inv		comb				RMS GT.1031	443
W Isles	Inv		comb				RMS GT.1032	444
W Isles	Inv		comb				RMS GT.1033	445
W Isles	Inv		comb				RMS GT.1033	446
W Isles	Inv		comb				RMS GT.1035	447
W Isles	Inv		comb				RMS GT.1036	448
W Isles	Inv		comb				RMS GT.1037	449
W Isles	Inv		comb				RMS GT.1038	450
W Isles	Inv		comb				RMS GT.1039	451
W Isles	Inv		comb				RMS GT.1040	452
W Isles	Inv		comb				RMS GT.1041	453
W Isles	Inv		comb				RMS GT.1042	454
W Isles	Inv		comb				RMS GT.1034	455
W Isles	Inv		comb				RMS GT.1034	456
W Isles	Inv		comb				RMS GT.1034	457
W Isles	Inv		comb				RMS GT.1034	458
W Isles	Inv		comb				RMS GT.1034	459
W Isles	Inv		comb				RMS GT.1034	460
W Isles	Inv		comb				RMS GT.1034	461
W Isles	Inv		comb				RMS GT.1034	462
W Isles	Inv		comb				RMS GT.1019	463
W Isles	Inv		pin				RMS GT.1163	464
W Isles	Inv		pin			Close-Brook & Maxwell 1974, fig 3	RMS GT.1164	465
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1165	466
W Isles	Inv		pin				RMS GT.1166	467
W Isles	Inv		pin				RMS GT.1167a	468
W Isles	Inv		pin				RMS GT.1167b	469
W Isles	Inv		pin				RMS GT.1186	470
W Isles	Inv		pin				RMS GT.1169	471
W Isles	Inv		pin				RMS GT.1170	472
W Isles	Inv		pin			Fig 13. Close-Brooks & Maxwell 1974, fig 3	RMS GT.171	473
W Isles	Inv		pin			Close-Brooks & Maxwell 1974, fig 3	RMS GT.1172	474
W Isles	Inv		pin				RMS GT.1173	475
W Isles	Inv		pin				RMS GT.1174	476
W Isles	Inv		pin				RMS GT.1175	477
W Isles	Inv		pin				RMS GT.1176	478
W Isles	Inv		pin			Fig 13.	RMS GT.1177	479
W Isles	Inv		pin				RMS GT.1180	480
W Isles	Inv		pin			Fig 25.	RMS GT.1181	481
W Isles	Inv		pin				RMS GT.1178	482
W Isles	Inv		pin				RMS GT.1182	483
W Isles	Inv		pin				RMS GT.1183	484
W Isles	Inv		pin			Fig 12.	RMS GT.1184	485
W Isles	Inv		pin				RMS GT.1185	486
W Isles	Inv		pin				RMS GT.1186	487



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
W Isles	Inv		pin				RMS HT.1187	488
W Isles	Inv		pin		Fig 24.		RMS GT.1188	489
W Isles	Inv		pin				RMS GT.1189	490
W Isles	Inv		pin		Fig 24.		RMS GT.1190	491
W Isles	Inv		pin				RMS GT.1179	492
W Isles	Inv		pin				RMS GT.1191	493
W Isles	Inv		pin				RMS GT.1192	494
W Isles	Inv		pin		Fig 24.		RMS GT.1193	495
W Isles	Inv		pin				RMS GT.1194	496
W Isles	Inv		pin				RMS GT.1195	497
W Isles	Inv		pin				RMS GT.1196	498
W Isles	Inv		pin				RMS GT.1197	499
W Isles	Inv		pin				RMS GT.1198	500
W Isles	Inv		pin				RMS GT.1199	501
W Isles	Inv		pin				RMS GT.1200	502
W Isles	Inv		pin		Close-Brooks & Maxwell 1974, fig 3		RMS GT.1202	503
W Isles	Inv		pin		Close-Brooks & Maxwell 1974, fig 3		RMS GT.1203	504
W Isles	Inv		pin				RMS GT.1204	505
W Isles	Inv		pin				RMS GT.1205	506
W Isles	Inv		pin				RMS GT.1206	507
W Isles	Inv		pin				RMS GT.1207a	508
W Isles	Inv		pin				RMS GT.1207b	509
W Isles	Inv		pin				RMS GT.1208	510
W Isles	Inv		pin?				RMS GT.1209	511
W Isles	Inv		pin				RMS GT.1210	512
W Isles	Inv		pin				RMS GT.1211	513
W Isles	Inv		pin				RMS GT.1212	514
W Isles	Inv		pin				RMS GT.1213	515
W Isles	Inv		pin				RMS GT.1214	516
W Isles	Inv		pin				RMS GT.1215	517
W Isles	Inv		pin				RMS GT.1215	518
W Isles	Inv		pin				RMS GT.1216	519
W Isles	Inv		pin				RMS GT.1217	520
W Isles	Inv		pin				RMS GT.1218	521
W Isles	Inv		pin				RMS GT.1219	522
W Isles	Inv		pin				RMS GT.1220	523
W Isles	Inv		pin				RMS GT.1221	524
W Isles	Inv		pin				RMS GT.1222	525
W Isles	Inv		pin				RMS GT.1223	526
W Isles	Inv		pin				RMS GT.1224	527
W Isles	Inv		pin				RMS GT.1225	528
W Isles	Inv		pin				RMS GT.1226	529
W Isles	Inv		pin?				RMS GT.1227	530
W Isles	Inv		pin				RMS GT.1228	531
W Isles	Inv		pin?				RMS GT.1229	532
W Isles	Inv		pin				RMS GT.1230	533
W Isles	Inv		pin				RMS GT.1231	534

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SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
W Isles	Inv		pin				RMS GT.1232	535
W Isles	Inv		pin				RMS GT.1233	536
W Isles	Inv		pin				RMS GT.1235	537
W Isles	Inv		pin				RMS GT.1234	538
W Isles	Inv		pin				RMS GT.1237	539
W Isles	Inv		pin				RMS GT.1236	540
W Isles	Inv		pin				RMS HR.1037	541
W Isles	Inv		pin				RMS HR.1308	542
W Isles	Inv		pin				RMS HR.1309	543
W Isles	Inv		pin	Ersk Bev Coll		no 3	RMS GNB.86	1242
W Isles	Inv		pin	Ersk Bev Coll		Beveridge & Callander 1931, fig 19.9	RMS GNA.75	1244
W Isles	Inv		pin			Fig 28.	GAGM '46-66/1	1757
W Isles	Inv		pin			Fig 28.	GAGM '28-71	1759
W Isles	Inv		pin			Fig 25.	GAGM '28-71	1760
W Isles	Inv		pin			Fig 24.	GAGM '28-71	1761
W Isles	Inv		pin			Fig 28.	GAGM '28-71	1762
W Isles	Inv		pin			Fig 13.	GAGM '28-71	1764
W Isles	Inv		pin				GAGM '28-71	1765
W Isles	Inv		pin			Fig 28.	GAGM '28-71	1767
W Isles	Inv		pin			Fig 28.	GAGM '28-71	1768
W Isles	Inv		pin			Fig 13.	GAGM '28-71	1769
W Isles	Inv		pin				GAGM '28-71	1770
W Isles	Inv		pin				GAGM '28-71	1771
W Isles	Inv		pin				GAGM '28-71	1772
W Isles	Inv		pin				GAGM '28-71	1773
W of Scot	Inv		pin				GAGM '28-71	1766
Wester Broch	Caith	ND 308	440 pin?		finds incl 1-handled combs, painted pebbles	Fanning 1983a, no 40 Anderson, J 1901, 121	RMS GA.619	596
Wester Broch	Caith	ND 308	440 pin?	broch	combs, painted pebbles	Donations 1909, 13-4	RMS GA.623	597
Wester Broch	Caith	ND 308	440 pin	broch	finds incl 1-handled combs & painted pebbles	Anderson, J 1901, 121 Donations 1909, 13-4	RMS GA.624	598
Wester Broch	Caith	ND 308	440 pin?	broch	finds incl 1-handled combs & painted pebbles	Anderson, J 1901, 121 Donations 1909, 13-4	RMS GA.625	599
Wester Broch	Caith	ND 308	440 pin	broch	finds incl 1-handled combs & painted pebbles	Anderson, J 1901, 121 Donations 1909, 13-4	RMS GA.620	601
Wester Broch	Caith	ND 308	440 pin	broch	finds incl 1-handled combs & painted pebbles	Anderson, J 1901, 121 Donations 1909, 13-4	RMS GA.621	602
Westray	Ork	HY 4	4 comb				H B.1914.845/1	1697
Westray	Ork	HY 4	4 comb				H B.1914.845/3	1698
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/956/1	1934
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/2886	1935
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/885/1	1936
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/43/1	1937
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/2172	1938
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/2505	1939
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/3657	1940
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/3463	1941
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/3277	1942

APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/2446	1943
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/4084	1944
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/3552	1945
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/3335	1946
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/4361	1947
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/3212/1	1948
Whithorn	Gall	NX 44	40 pin		?11-12C		+87/3117	1949
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/1676/1	1950
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/1021/1	1951
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/1022/1	1952
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/1020/1	1953
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/366/1	1954
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/509/11	1955
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/640/11	1956
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/881/1	1957
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/715/1	1958
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/508/1	1959
Whithorn	Gall	NX 44	40 pin		?11-12C		+86/415/1	1960
a Cheardach Mhor	Inv	NF 75	40 pin?	ph I wheelhouse		Young & Richardson 1960, fig 7.1	RMS GSA.253	345
a Cheardach Mhor	Inv	NF 75	40 pin	ph I wheelhouse		Young & Richardson 1960, fig 7.2	RMS GSA.254	346
a Cheardach Mhor	Inv	NF 75	40 pin	ph I wheelhouse		Young & Richardson 1960, fig 7.3	RMS GSA.255	347
a Cheardach Mhor	Inv	NF 75	40 pin	ph I wheelhouse		Young & Richardson 1960, fig 13.24	RMS GSA.256	348
a Cheardach Mhor	Inv	NF 75	40 pin	ph I wheelhouse		Fig 24.		
a Cheardach Mhor	Inv	NF 75	40 pin	ph I wheelhouse		Young & Richardson 1960, fig 7.5		
a Cheardach Mhor	Inv	NF 75	40 pin	ph I wheelhouse		Young & Richardson 1960, fig 13.24	RMS GSA.294	349
a Cheardach Mhor	Inv	NF 75	40 pin	ph I wheelhouse			RMS GSA.290	350
a Cheardach Mhor	Inv	NF 75	40 pin?	ph I wheelhouse			RMS GSA.257	351
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 7.5	RMS GSA.297	352
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 13.24	RMS GSA.298	353
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 30.26	RMS GSA.300	354
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 13.27	RMS GSA.301	355
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 13.28	RMS GSA.302	356
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 13.29	RMS GSA.303	357
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 13.30	RMS GSA.304	358
a Cheardach Mhor	Inv	NF 75	40 pin	ph III		Young & Richardson 1960, fig 13.31		
a Cheardach Mhor	Inv	NF 75	40 pin?				RMS GSA.319	359
a Cheardach Mhor	Inv	NF 75	40 pin?				RMS GSA.320	360
a Cheardach Mhor	Inv	NF 75	40 pin				RMS GSA.321	361
a Cheardach Mhor	Inv	NF 75	40 pin?				RMS GSA.322	362
a Cheardach Mhor	Inv	NF 75	40 pin				RMS GSA.323	363
a Cheardach Mhor	Inv	NF 75	40 pin				RMS GSA.324	364



APPENDIX III: CONCORDANCE OF APPENDIX II BY SITE

SITE	COUNTY	NGR	OBJECT	CONTEXT	EVIDENCE FOR DATING	REFERENCES	MUSEUM CAT NO	NO
a Cheardach Mhor	Inv	NF 75	40	pin	ph V, w pot embedded in black organic layer	Young & Richardson 1960, fig 15.51	RMS GSA.332	365
a Cheardach Mhor	Inv	NF 75	40	comb			RMS GSA.334	366
a Cheardach Mhor	Inv	NF 75	40	pin	ph IV, stained sandy floor related to T wall	Fig 15. Young 1958, 92-4, pl 15a Young & Richardson 1960, fig 15.48	RMS GSA.292	367
a Cheardach Mhor	Inv	NF 75	40	pin			RMS GSA.350	368
a Cheardach Mhor	Inv	NF 75	40	pin	ph I wheelhouse	Young & Richardson 1960, 144, fig 5.17 Young and Richardson 1960, 7RMS fig 7.11	RMS GSA.341	369
a Cheardach Mhor	Inv	NF 75	40	pin			RMS GSA.340	370
a Cheardach Mhor	Inv	NF 756	412	pin-imp			RMS	1454
a Cheardach Mhor	Inv	NF 75	40	pin	sandpit	Fig 27. Fig 25. Fig 27.		2005
nr Sumburgh	Shet	HU 43	23	pin			L ARC.65871	1465
unknown				pin			GAGM '55-96	1774
unknown				pin			GAGM '55-96	1776
unprov				pin			Inv 975.12L	1592
unprov				pin			Inv 975.10L	1594
unprov				pin			Inv 975.8L	1595
unprov				pin			Inv 982.187	1596
unprov				pin			Inv 875/11c	1597
unprov				pin			Inv 975/17L	1598







# APPENDIX IV: SUMMARY OF MIA AND LIA SETTLEMENT IN THE ATLANTIC PROVINCE

The following tables summarise by region the evidence for MIA and LIA settlement in the Atlantic Province. First the non-broch settlement for each area is summarised. Subsequently the evidence for the form and use of broch sites: the presence or absence of Roman, MIA/LIA I and distinctively LIA II finds; subsequent use as a LIA or Norse cemetery; evidence for external defences, passageways encircling the brochs and outbuildings; and evidence for the LIA I/LIA II ritual use of a site, either by the presence of symbol stones/sculpted stones or ecclesiastical reuse.

I am very grateful to E MacKie for allowing me free access to his extensive collection of data on broch sites.

## a Evidence for non-broch, pre-Norse activity in Orkney

A preceding \* indicates that the site has been visited in the course of this research project.

### KEY:

- x evidence for 1-5
- ? possible evidence for 1-5
- evidence for 1-5 not recognised
- 1 LIA I activity
- 2 LIA II activity
- 3 Christian/ecclesiastical presence
- 4 sculpted stone
- 5 burial

RCAHMS = RCAHMS 1946 II

SMR = Sites and Monuments Record for Orkney

SITE	NGR	1	2	3	4	5	SMR	RCAHMS	OTHER REFERENCES
*Pool	HY 619 378	x	x	-	x	-	290	2	
Skaill, Sandwick	HY 23 18	-	x	?	-	-	-	-	
Benni Cuml	HY 671 217	?	-	-	-	-	162	968	
	HY 518 189	?	-	-	-	-	1098	-	
Finyarhoose Brae	HY 761 540	?	?	-	-	-	220	206	
Beafield	HY 686 405	?	?	-	-	-	329	-	
Monkhouses	HY 674 163	?	?	-	-	-	931	1001	
	HY 676 159	?	?	-	-	-	935	1001	
	HY 671 169	?	?	-	-	-	959	-	
	HY 532 091	?	?	-	-	-	7	635	
Linga Holm	HY 616 271	?	?	-	-	-	968	-	



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Park Holm	HY 312 269	? ? - - -	1575	28	
*Stromness	HY 761 513	? ? - - -	216	-	
How	HY 660 392	? ? - - -	103	158	
*Stenabreck	HY 77 52	? ? - - -	-	-	Fig 41j
*Knowe of Nesthouse	HY 279 256	? ? - - -	1677	26	Fig 41b
Kirk of Howe	HY 493 530	? ? ? - -	812	530	
*Howmae	HY 758 522	? - - - -	218	195	Figs 57, 66f
*Saevar Howe	HY 246 270	? x x - x	1663	40	
*Brough of Birsay	HY 239 285	- x x x ?	-	1	Fig 40
Buckquoy	HY 248 282	- x - - x	1669	25	Figs 41c, 42i, o
*Skaili, Deerness	HY 589 064	- x x - -	-	-	
Brett Ness	HY 397 332	- ? - ? -	468	-	
Red Craig	HY 28 24	- x - - -	-	-	Fig 41k
Galilee	HY 75 45	- ? - - -	296	-	
St Peter's	ND 470 908	- - x x -	1816	810; 842	
Queenafjold	HY 372 264	- - - x -	1192	-	
Greens	HY 541 031	- - - x -	18	651	
Ness	HY 544 093	- - - x x	1102	-	
*Westness	HY 37 29	- - - - x	1543	-	

b Evidence for activity on brochs in Orkney

KEY:

- x evidence for 1-9
  - ? possible evidence for 1-9
  - evidence for 1-9 not recognised
  - \* passageway does not completely encircle broch
  - 9 outerwall as opposed to substantial earthworks
  - # radiating outbuildings
  - Δ symbol stone/sculpted stone
  - 1 Roman artefacts
  - 2 MIA/LIA I artefacts
  - 3 LIA II artefacts
  - 4 miscellaneous non-Norse burials
  - 5 Norse burials
  - 6 external defences
  - 7 passageway encircling broch
  - 8 pre-Norse outbuildings
  - 9 ecclesiastical use of site
- RCAHMS = RCAHMS 1946 II  
 SMR = Sites and Monuments Record for Orkney

SITE	NGR	1	2	3	4	5	6	7	8	9	SMR	RCAHMS	OTHER REFERENCES
Burrian 2	HY 296 183	-	x	-	-	-	x	x	?	-	1600	14	Fig 44B
Netlater	HY 323 174	-	x	-	?	?	x	x	?	-	1638	13	Fig 44C
*Broch of Ayre	HY 470 013	-	-	?	?	?	-	x	?	-	87	360	Figs 44A, 41g, n
*Lamaness	HY 613 379	-	-	x	-	x	-	?	?	x	-	180	
Deerness	HY 58 06	-	-	x	-	-	-	?	?	-	-	629	
*Broch of Borwick	HY 223 167	x	-	?	-	-	x	x	?	-	1237	679	Figs 42b, 450
*Broch of Burrian	HY 763 514	-	x	x	-	-	x	x	x	x	217	201	Figs 46C, 42r
Burray East	ND 490 988	x	x	x	-	-	x	-	?	-	-	862	Fig 46B
Howe	HY 275 109	x	x	x	-	?	x	x	?	-	1495	921	Figs 41i, 48
Lingrow	HY 435 088	x	x	-	-	-	?	x	?	-	1534	406	Figs 48-49

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*Midhowe	HY 372 306	x - x - - x x # -	631	553	Fig 48
*Gurness	HY 381 268	x x x - x x x # Δ	1183	263	Figs 42a, c-e, j, 48, 66d
Burgar	HY 352 277	- - x - x - - -	639	261	Fig 44J
*Colli Ness	HY 685 421	- - x x - x - - ?	109	458	
*Peterkirk 1, Sanday	HY 713 436	- - ? ? - - - x	276	460	
Castle Bloody	HY 251 129	- - - x - - - ?	-	941	
Green Hill 2	HY 250 028	- - - x - - - ?	105	379	
*St Boniface's	HY 48 52	- - - x - - - x	847	520	
Vinquin	HY 326 283	- - - ? - x - ? -	641	266	
*Breckness	HY 224 092	- - - ? ? x - - -	1459	920	
Inghowe	HY 391 127	- - - ? ? - x - -	575	322	
Burrian 5	HY 289 154	- - - ? ? - ? - -	1278	680	
*Oxtro	HY 254 268	x - - x ? - - - Δ	1675	11	Fig 44G
Stackrue	HY 270 152	- - - ? ? x - x -	1270	677	
*St Tredwell's	HY 496 509	- - - ? ? x - x x	850	523	Fig 45A
*Ness of Ork	HY 536 223	- - - ? ? - - ? -	1087	777	
*Hillock/Finstown	HY 361 141	- - - ? ? - - ? -	492	323	
Stromness/Warebeth	HY 237 082	- - - ? ? - - ? x	1461	940	
Taft	HY 283 222	x - - ? ? - - - -	1714	15	
St Mary's Kirk	HY 399 187	- - - ? ? - - - ?	667	300	
Knoll of Skulzie	HY 445 492	- - - ? ? - - - -		1072	
Green Hill of Quoyness	HY 250 028	- - - ? ? - - - -	105	379	
Knowe of Swandro	HY 375 297	- - - ? ? - - - -		579	
*Burroughston	HY 540 210	- - - - - x x x -	1123	778	Figs 46A, 66c
Howe of Langskaill	HY 508 059	- - - - - x x - -	2	627	
Burrian 3	HY 323 193	- - - - - x - x -	1633	12	
Ness of Boray	HY 443 211	- - - - - x - x -	1758	313	
*K. of Queen o' Howe	HY 425 494	- - - - - x - x -	690	1043	
The Skeo	ND 285 879	- - - - - x - x -	1933	1009	
Kirk of Cletton	HY 301 156	- - - - - x - ? ?	1615	23	
Hill of Hesti Geo	ND 338 890	- - - - - x - ? -	1944	1008	
Scarrataing	HY 276 176	- - - - - x - ? -	1297	681	
*Knowe of Hunclett	HY 414 272	- - - - - x - ? -	516	555	
Tingwall	HY 401 229	- - - - - x - ? -	711	268	
*Backaskaill	HY 642 392	- - - - - x - ? -	100	159	Fig 45C
Taft o' Faraclett	HY 449 330	- - - - - ? - x -	611	554	
*Berstane	HY 475 100	- - - - - ? - x -	1545	405	
*Howie of the Manse	HY 514 090	- - - - - ? - ? -	3	626	
Lamb Head	HY 690 214	- - - - - ? - ? -	419	947	Fig 44E
*Knowe of Burristae	HY 432 429	- - - - - ? - ? -	718	1034	
*Quoyboring	HY 58 04	- - - - - ? - ? -	1177	-	
Hillock of Baywest	HY 616 242	- - - - - ? - ? -	133	949	
*Dingieshowe	HY 400 274	- - - - - ? - ? -	1	625	
Green Hill 1	HY 632 301	- - - - - ? - ? -	156	948	
Knowe of Burrian	HY 308 168	- - - - - x - - Δ	1603	21	
Redland	HY 378 171	- - - - - ? - - Δ	576	346	
Knowe of Dishero	HY 426 199	- - - - - x - - -	1774	265	
Weems Castle	ND 433 888	- - - - - x - - -	1836	816	Fig 45B
*Howe of Hoxa	ND 425 940	- - - - - ? - - -	1791	815	Fig 44F
Knowe of Burrian	HY 400 274	- - - - - ? - - -	514	551	
*Castle of Bothican	HY 493 497	- - - - - - x ? -	853	522	Fig 44D
Bu of Cairston 1	HY 27 09	- - - - - - x - -	-	-	
Cairn o' Flaws	ND 457 854	- - - - - - x - -	708	857	
*Steiro	HY 501 163	- - - - - - x - -	1077	779	
*Verron	HY 318 300	- - - - - - x - -	-	260	
Chapel Knowe	HY 388 155	- - - - - - ? Δ	574	321	
Cummi Howe	HY 282 103	- - - - - - ? -	1359	872	

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*Eve's Howe	HY 549 061	-	-	-	-	-	-	-	?	-	1167	624	
*Howe Hill	HY 511 159	-	-	-	-	-	-	-	?	-	1070	780	
Hall of Rendall	HY 425 209	-	-	-	-	-	-	-	?	-	1766	270	
Hodgalee	HY 464 447	-	-	-	-	-	-	-	?	-	-	1035	
Knowe of Stenso	HY 363 267	-	-	-	-	-	-	-	?	-	1186	262	
Loch of Clunly	HY 252 165	-	-	-	-	-	-	-	?	-	1262	678	
*North Howe	HY 370 307	-	-	-	-	-	-	-	?	-	523	557	
Riggan of Kami	HY 591 074	-	-	-	-	-	-	-	?	-	1150	628	
Viera Lodge	HY 391 280	-	-	-	-	-	-	-	?	-	458	556	
Wasso	HY 712 380	-	-	-	-	-	-	-	?	-	150	438	Fig 44I
Green Hill of Scarton	ND 337 900	-	-	-	-	-	-	-	?	-	1956	1018	
South Howe	HY 372 303	-	-	-	-	-	-	-	?	-	475	552	
Overbrough/Harray	HY 313 179	-	-	-	-	-	-	-	-	x	1636	139	
Peterkirk 2, Stronsay	HY 650 287	-	-	-	-	-	-	-	-	x	128	960; 974	
Peterkirk 3, Evie	HY 337 287	-	-	-	-	-	-	-	-	x	650	257	
Peterkirk 4, Vestray	HY 499 400	-	-	-	-	-	-	-	-	x	724	1031	
Loch of Wasdale	HY 343 147	-	-	-	-	-	-	-	-	?	579	350	
Burray West	ND 485 987	-	-	-	-	-	-	-	-	-	1779	861	Fig 44H
Newark	HY 716 425	-	-	-	-	-	-	-	-	-	348	439	
Green Hill 3	ND 314 909	-	-	-	-	-	-	-	-	-	1952	1007	
How Farm	HY 660 392	-	-	-	-	-	-	-	-	-	103	158	
Howan Brough	HY 318 191	-	-	-	-	-	-	-	-	-	1632	20	
Hunda Island	ND 433 962	-	-	-	-	-	-	-	-	-	-	863	
The Cairns	HY 291 099	-	-	-	-	-	-	-	-	-	-	1892	
Wass Wick	HY 412 219	-	-	-	-	-	-	-	-	-	1764	269	
Bu of Cairston 2	HY 27 09	-	-	-	-	-	-	-	-	-	-	-	
Croos of Nebister	HY 631 370	-	-	-	-	-	-	-	-	-	98	160	
Buryan	HY 772 434	-	-	-	-	-	-	-	-	-	279	437	
Marygarth House	HY 653 411	-	-	-	-	-	-	-	-	-	328	-	
Houll	HY 693 399	-	-	-	-	-	-	-	-	-	344	475	
Knowe of Verron	HY 230 197	-	-	-	-	-	-	-	-	-	1256	682	
Hillock of Breakna	HY 353 050	-	-	-	-	-	-	-	-	-	1437	486	
Knowe of Redland	HY 265 138	-	-	-	-	-	-	-	-	-	1488	939, 943	
Warbuster	HY 436 093	-	-	-	-	-	-	-	-	-	1533	430	
Knowe of Gullow	HY 306 162	-	-	-	-	-	-	-	-	-	1602	22	
Knowe of Skogar	HY 263 234	-	-	-	-	-	-	-	-	-	1730	16	
Ness of Woodwick	HY 400 248	-	-	-	-	-	-	-	-	-	1763	264	
Brough of Braebister	HY 213 052	-	-	-	-	-	-	-	-	-	1912	380	
Little Howe	ND 424 940	-	-	-	-	-	-	-	-	-	1792	818	
Helliar Holm	HY 485 158	-	-	-	-	-	-	-	-	-	1107	806	
Hunton	HY 653 275	-	-	-	-	-	-	-	-	-	122	980	
Campston	HY 528 041	-	-	-	-	-	-	-	-	-	16	648	
	ND 442 833	-	-	-	-	-	-	-	-	-	1871	851	
	HY 31 17	-	-	-	-	-	-	-	-	-	1649	138	
	HY 665 454	-	-	-	-	-	-	-	-	-	142	182	
	HY 308 200	-	-	-	-	-	-	-	-	-	1594	19	
	HY 274 202	-	-	-	-	-	-	-	-	-	1218		

c Summary of non-broch, pre-Norse activity in Caithness

Key as for a  
RCAHMS = RCAHMS 1911a



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SITE	NGR	1	2	3	4	5	RCAHMS	OTHER REFERENCES
St Peter's, Thurso	ND 116 686	-	-	?	-	-	418	
St Peter's, Olgrimbeg Burn	ND 111 536	-	-	?	-	-	154	
St Maddan's, Freswick	ND 37 67	-	-	?	-	-	xxvi	
St Drostan's, Brabster	ND 2 6	-	-	?	-	-	57	
St Drostan's, Canisbay	ND 34 72	-	-	?	-	-	23	
St Trostan's, Vestfield	ND 06 64	-	-	?	-	-	159, 175	
St Trothan's, Orlig	ND 18 67	-	-	?	-	-	317	
St Ciaran's, Halkirk		-	-	?	-	-	176	
St Cuthbert's, Hauster	ND 32 50	-	-	?	-	-	593	
St Ninian's, Head of Wick	ND 383 508	-	-	?	-	-	xxvi	
St Outhac's, Kirk of Moss	ND 29 56	-	-	?	-	-	592	
St Fergus, Kirk of Wick	ND 365 51	-	-	?	-	-	493	
St Tear's, Shorelands	ND 36 56	-	-	?	-	-	595	
Lybster	ND 24 36	-	-	-	x	-	297	
Birkle Hills	ND 339 584	-	-	-	x	-	577	
Sandside	NC 952 651	-	-	-	x	-	406-7	
Latheron	ND 198 331	-	-	-	x	-	299	Stevenson 1959, 40
Ulbster	ND 125 687	-	-	-	x	-	444	
Reay	NC 96 64	-	-	-	x	-	340	
Links of Keiss	ND 348 549	-	-	-	x	-	587	
Watenan	ND 311 407	-	-	-	x	x	538	Gourlay 1984
Ackergill	ND 348 549	-	-	-	x	x	-	Close-Brooks 1984, 7

d Evidence for activity on brochs in Caithness

A preceding \* indicates that the relevant site was visited in the course of this research project. About 37% of the broch sites in Caithness were visited, but these include the best preserved and those with excavated outbuildings and evidence for LIA activity.

Key as for b

RCAHMS = RCAHMS 1911a

SITE	NGR	1	2	3	4	5	6	7	8	9	RCAHMS	OTHER REFERENCES
Bovermadden	ND 254 635	-	x	-	-	-	-	-	-	-	22	
*Everley	ND 370 683	x	x	-	-	-	-	-	?	-	36	Batey 1984, CAN 057
*Ness	ND 381 667	-	x	-	-	-	x	-	x	-	33	Figs 41e, 62A Batey 1984, CAN 074
Freswick Sands	ND 376 676	-	?	x	-	-	-	-	x	-	3	Fig 58F; Batey 1984, CAN 060
Kilmster	ND 323 566	-	x	x	?	?	x	x	x	-	507	Fig 59B
Crosskirk	ND 025 701	x	x	?	x	?	x	?	x	xΔ	347	Figs 59C, 60a Mercer 1981, MON 327
*Elsay	ND 387 520	-	-	x	-	-	x	-	?	-	521	Fig 61C; Batey 1984, WIC 152
*Hillhead	ND 376 514	-	-	x	-	-	-	?	x	-	520	Fig 61A; Batey 1984, WIC 161
Wester	ND 338 583	-	-	?	?	?	g	-	x	?Δ	513	Fig 59A; Batey 1984, WIC 120
*Keiss West	ND 349 615	x	-	-	-	-	x	?	x	?	517	Fig 62D; Batey 1984, WIC 108
*Nybster	ND 370 631	x	-	-	-	-	x	-	x	-	518	Figs 42k, n, p-q, 61B, 66g Batey 1984, WIC 091
*Keiss South	ND 354 612	x	-	-	?	?	x	-	x	-	515	Fig 62C; Batey 1984, WIC 103
Green Tullochs	ND 013 696	-	-	-	?	?	x	x	-	-	348	Fig 58D; Mercer 1981, MON 326

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*Yarrows	ND 308 440	-	-	-	?	?	x	-	x	-	509	Figs 42g-h, 60b, 62E Mercer 1985, WAR 13
Burgh Ruadh	ND 116 285	-	-	-	?	?	x	-	?	-	207	
Murkle	ND 162 688	-	-	-	?	?	?	-	?	-	319	Fig 63B; Mercer 1981, MON 516
*Achavar	ND 262 370	-	-	-	?	?	-	-	?	-	199	
Achvarasdal Lodge	NC 983 647	-	-	-	?	?	-	-	x	-	353	Mercer 1985, FOR 12
*Burn of Latheron Wheel	ND 187 326	-	-	-	?	?	-	-	-	-	212	Batey 1984, LAT 261
Dale 2	ND 130 523	-	-	-	?	?	-	-	-	-		
*Old Stirkoke	ND 328 493	-	-	-	?	?	-	-	-	-	499	
Halcro	ND 239 612	-	-	-	?	?	-	-	-	-	1	
Achies 2	ND 140 551	-	-	-	?	?	-	-	-	-		
Hoy	ND 142 606	-	-	-	?	?	-	-	-	-	435	
Thrumster	ND 332 451	-	-	-	?	?	-	-	-	-	7502	
Hill of Works	ND 290 626	-	-	-	?	?	x	x	?	-	3	Fig 61E
Achingale	ND 230 566	-	-	-	?	?	-	-	-	-	473	
Ousedale Burn	ND 071 188	-	-	-	?	?	-	-	x	-	204	Batey 1984, LAT 313
Brounabon	ND 323 435	-	-	-	?	?	-	-	-	?	511	Fig 64C; Mercer 1985, WAR 230
*Dunbeath	ND 155 304	-	-	-	x	-	-	-	?	-	215	
*Latheron Wheel	ND 176 325	-	-	-	x	-	x	-	-	-	211	Batey 1984, LAT 261
Kettleburn	ND 349 519	-	-	-	-	x	?	?	x	-	588	Fig 61F
Castlehill	ND 193 687	-	-	-	-	x	-	-	-	-	320	Mercer 1981, MON 530
*Scottag	ND 257 570	-	-	-	-	?	-	-	-	-	470	
*Housel Cairn	ND 119 596	-	-	-	-	?	-	-	-	-	115	
*Skirza Head	ND 394 685	-	-	-	-	-	x	?	x	-	35	Batey 1984, CAN 050
*Westerdale 1	ND 133 510	-	-	-	-	-	x	?	x	-	105	
Acharole 1	ND 228 517	-	-	-	-	-	?	?	-	-	466	Fig 58B
Appnag Tulloch	ND 212 359	-	-	-	-	-	x	-	x	-	218	Batey 1984, LAT 239
Thing's Va	ND 081 682	-	-	-	-	-	x	-	x	-	432	Fig 58A; Mercer 1981, MON 461
*Norwall	ND 327 545	-	-	-	-	-	x	-	x	-	508	Fig 62B
*Watenan North	ND 318 415	-	-	-	-	-	x	-	x	-	524	Fig 63E; Mercer 1985, WAR 184
Ballachly	ND 192 442	-	-	-	-	-	x	-	x	-	192	
Rhemullen	ND 153 310	-	-	-	-	-	x	-	x	-	84	Batey 1984, DUN 018
*Bruan 1	ND 310 395	-	-	-	-	-	x	-	x	-	193	Fig 63F; Batey 1984, LAT 218
*Tiantulloch	ND 152 352	-	-	-	-	-	x	-	x	-	196	
Toftgun	ND 280 424	-	-	-	-	-	x	-	x	-	525	
*Upper Borgue	ND 124 271	-	-	-	-	-	x	-	x	-	206	Fig 59D
Tulloch Bad a'Choilich	ND 101 240	-	-	-	-	-	x	-	x	-	202	
Tulloch of Lybster	ND 027 695	-	-	-	-	-	x	-	x	-	346	Mercer 1981, MON 337
*Loch Watenan	ND 317 412	-	-	-	-	-	x	-	x	-	526	Fig 58E; Mercer 1985, WAR 177
*Minera	ND 156 346	-	-	-	-	-	x	-	x	-	197	
Ballantrath	ND 144 307	-	-	-	-	-	x	-	?	-	213	
Berriedale 1	ND 103 249	-	-	-	-	-	x	-	?	-	203	
Cairn of Humster	ND 353 485	-	-	-	-	-	x	-	?	-	506	
Camster 1	ND 252 452	-	-	-	-	-	x	-	?	-	189	
Camster 2	ND 256 456	-	-	-	-	-	x	-	?	-	522	
Golsary	ND 206 375	-	-	-	-	-	x	-	?	-	220	
Ha' of Duran	ND 195 636	-	-	-	-	-	x	-	?	-	436	
*Smerral 2	ND 177 340	-	-	-	-	-	x	-	?	-	210	
*Tulloch Turnal	ND 090 229	-	-	-	-	-	x	-	?	-	200	
Warehouse	ND 303 413	-	-	-	-	-	x	-	?	-	190	Fig 63A; Mercer 1985, WAR 76
*Achnagoul	ND 163 323	-	-	-	-	-	x	-	?	-		
Achbuiligan Tulloch	NC 989 657	-	-	-	-	-	x	-	?	-	350	Fig 64A; Mercer 1985, FOR 14
*Smerral 1	ND 178 338	-	-	-	-	-	?	-	x	-	209	
Achow	ND 230 362	-	-	-	-	-	?	-	?	-	208	
*Achnorn	ND 136 305	-	-	-	-	-	x	-	-	-	214	Fig 61E
Camster 3	ND 209 610	-	-	-	-	-	x	-	-	-	18	
Cnoc Donn	ND 140 533	-	-	-	-	-	x	-	-	-	103	
Greysteil Castle	ND 180 417	-	-	-	-	-	x	-	-	-	222	

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Knockglass 1	ND 055 636	- - - - - x - - -	117	Mercer 1985, FOR 235
Knock Urry	NC 984 663	- - - - - x - - -	349	
*Knockinnon	ND 176 311	- - - - - x - - -	216	
*Mybster	ND 162 528	- - - - - x - - -	96	
Old Hall of Dunn 1	ND 204 561	- - - - - x - - -	461	
Scarfsferry	ND 256 742	- - - - - x - - -	62	Batey 1984, DUN 021
Scrabster 2	ND 087 697	- - - - - x - - -	429	Fig 64E; Mercer 1981, FOR 449
Tullach Mor 1	ND 149 494	- - - - - x - - -	108	
Tulloch of Stemster	ND 040 654	- - - - - x - - -	344	Mercer 1985, FOR 179
*Watten	ND 241 540	- - - - - x - - -	468	
*Westerdale 2	ND 130 519	- - - - - x - - -	221	
Tulloch of Achavarn	ND 085 596	- - - - - - x - -	112	
Coghill	ND 267 571	- - - - - - ? - -	469	Fig 58C
*Keiss North	ND 354 612	- - - - - - - x -	516	Figs 61D, 66h Batey 1984, WIC 099
*Upper Latheron	ND 182 317	- - - - - - - x -	217	
*Usshily Tulloch	ND 208 355	- - - - - - - x -	221	
Auchunabust	NC 994 646	- - - - - - - ? -	351	Mercer 1985, FOR 24
Berriedale 2	ND 115 233	- - - - - - - ? -	205	
Borrowston	ND 329 436	- - - - - - - ? -	510	Fig 64B; Mercer 1985, WAR 232
Roster	ND 266 399	- - - - - - - ? -	191	
*Ballentink 1	ND 150 313	- - - - - - - ? -	261	
Wester Watten	ND 229 550	- - - - - - - ? -	464	
*Thrumster Little	ND 338 456	- - - - - - - - -		
Tulach Gorm	ND 042 571	- - - - - - - - -	389	Fig 63C; Mercer 1985, FOR 333
Tota an Dranndain	ND 037 579	- - - - - - - - -	391	Fig 63D; Mercer 1985, FOR 312
*Lybster	ND 253 360	- - - - - - - - -		
Achkeepster	ND 167 517	- - - - - - - - -		
*Acharole 2	ND 231 524	- - - - - - - - -		
*Hempriggs	ND 351 471	- - - - - - - - -	504	Batey 1984, WIC 183
Tullach Mor 2	ND 146 498	- - - - - - - - -		
Tannach	ND 330 474	- - - - - - - - -	500	
Gansclet	ND 336 444	- - - - - - - - -	501	Batey 1984, WIC 192
Brimside Tulloch	ND 050 670	- - - - - - - - -	434	Mercer 1985, FOR 173
Occumster	ND 269 356	- - - - - - - - -	198	Batey 1984, LAT 232
	ND 377 701	- - - - - - - - -		Fig 64D; Batey 1984, CAN 044a
	ND 222 696	- - - - - - - - -	66	Mercer 1981, MON 552
	ND 208 674	- - - - - - - - -	318	Mercer 1981, MON 547
	ND 221 704	- - - - - - - - -		Mercer 1981, MON 657
	ND 324 415	- - - - - - - - -	523	Mercer 1985, WAR 194
	ND 049 635	- - - - - - - - -	171	Mercer 1985, FOR 171
	NC 898 640	- - - - - - - - -		Mercer 1980, BIG 27
	ND 280 424	- - - - - - - - -		Mercer 1980, TOF 2

e Evidence for non-broch, pre-Norse activity in activity in Shetland

Key as for a  
RCAHMS = RCAHMS 1946 III

SITE	NGR	1	2	3	4	5	RCAHMS
Hillswick	HU 282 770	? ?	- -	- -			1388
Sands of Bracon, Yell	HU 53 05	- x	- -	- -			1726
Sandwick	HP 62 02	- x	- -	x			1581



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f Evidence for activity on brochs in Shetland (Refer also to Fojut 1985, 81-84)

Key as for b

RCAHMS = RCAHMS 1946 III

SITE	NGR	1	2	3	4	5	6	7	8	9	RCAHMS	OTHER REFERENCES
Clickhimin	HU 464 409	x	x	x	-	-	x	-	x	-	1246	Fig 67
Jarlshof	HU 399 096	-	x	x	-	-	x	-	x	-	1149	Fig 68
Aith	HU 515 435	-	-	-	-	-	x	-	?	-	1106	
Belmont	HP 558 006	-	-	-	-	-	x	-	?	-	-	
Burraland	HU 448 232	-	-	-	-	-	x	-	?	-	1143	
Burra Ness	HU 557 958	-	-	-	-	-	x	-	?	-	1716	
Cullingsburgh	HU 521 424	-	-	-	-	-	x	-	?	-	-	
Culswick	HU 253 448	-	-	-	-	-	x	-	?	-	1397	
Dalsetter	HU 408 157	-	-	-	-	-	x	-	?	-	1146	
Eastshore	HU 403 113	-	-	-	-	-	x	-	?	-	1148	
Fugla Ness	HU 438 778	-	-	-	-	-	x	-	?	-	1115	
Greenbank	HP 539 051	-	-	-	-	-	x	-	?	-	1715	
Holm of Copister	HU 472 780	-	-	-	-	-	x	-	?	-	1720	
Levenwick	HU 416 198	-	-	-	-	-	x	-	?	-	1144	
Loch of Houlland	HU 213 793	-	-	-	-	-	x	-	?	-	1352	
Mousa	HU 457 237	-	-	-	-	-	x	-	?	-	1206	
Snabrough	HP 568 028	-	-	-	-	-	x	-	?	-	1546	
Watsness	HU 175 507	-	-	-	-	-	x	-	?	-	1609	
West Sandwick	HU 440 888	-	-	-	-	-	x	-	?	-	1722	
Burravoe	HU 518 793	-	-	-	-	-	x	-	-	x	1745	
Housabister	HU 487 578	-	-	-	-	-	x	-	-	x	1282	
Aithsetter	HU 447 304	-	-	-	-	-	x	-	-	-	1141	
Brough Holm	HU 566 059	-	-	-	-	-	x	-	-	-	1548	
Burgar Stack	HP 611 143	-	-	-	-	-	x	-	-	-	1544	
Burland	HU 447 361	-	-	-	-	-	x	-	-	-	1247	
Burraland	HU 223 497	-	-	-	-	-	x	-	-	-	1607	
Head of Brough	HU 446 860	-	-	-	-	-	x	-	-	-	1721	
Houbie	HU 620 904	-	-	-	-	-	x	-	-	-	1212	
Noss Sound	HU 528 410	-	-	-	-	-	x	-	-	-	1085	
Sae Breck	HU 210 781	-	-	-	-	-	x	-	-	-	1361	
Stoura	HU 208 152	-	-	-	-	-	x	-	-	-	1674	
Tumlin	HU 345 539	-	-	-	-	-	x	-	-	-	-	
Underhoull	HP 574 045	-	-	-	-	-	x	-	-	-	1547	
Wadbister	HU 447 504	-	-	-	-	-	x	-	-	-	1499	
Brough Lodge	HU 581 927	-	-	-	-	-	x	-	-	-	1238	
Brough	HU 519 412	-	-	-	-	-	x	-	-	-	1107	
Burrian	HU 477 545	-	-	-	-	-	x	-	-	-	1308	
Hannavoe	HU 240 807	-	-	-	-	-	x	-	-	-	1343	
Symbister	HU 539 627	-	-	-	-	-	x	-	-	-	1342	
Gossabrough	HU 534 834	-	-	-	?	-	-	-	?	-	1718	
Clevigarth	HU 407 130	-	-	-	-	-	-	-	?	-	1147	
Feal	HU 629 901	-	-	-	-	-	-	-	?	-	1211	
Southvoe	HU 401 148	-	-	-	-	-	-	-	?	-	1142	
Bousta	HU 223 574	-	-	-	-	-	-	-	?	-	1610	
Clumlie	HU 404 181	-	-	-	?	-	-	-	-	-	1145	
Balta	HP 660 090	-	-	-	-	-	-	-	-	-	1596	
Brough	HU 379 350	-	-	-	-	-	-	-	-	-	-	
Burgan	HU 344 775	-	-	-	-	-	-	-	-	-	-	

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Burravoe	HU 358 671	-	-	-	-	-	-	-	-	-	-
East Burrafirth	HU 358 579	-	-	-	-	-	-	-	-	-	1395
Footabrough	HU 200 495	-	-	-	-	-	-	-	-	-	1608
Hawks Ness	HU 461 489	-	-	-	-	-	-	-	-	-	1500
Huxter	HU 173 570	-	-	-	-	-	-	-	-	-	1605
Lunabister	HU 378 164	-	-	-	-	-	-	-	-	-	1152
Noonsbrough	HU 294 576	-	-	-	-	-	-	-	-	-	1394
Virkie	HU 390 107	-	-	-	-	-	-	-	-	-	-
West Burrafirth	HU 257 573	-	-	-	-	-	-	-	-	-	1393
West Houlland	HU 275 503	-	-	-	-	-	-	-	-	-	1398
Windhouse	HU 488 922	-	-	-	-	-	-	-	-	-	1723
Infield	HU 454 748	-	-	-	-	-	-	-	-	-	1116
Loch of Burriland	HU 344 750	-	-	-	-	-	-	-	-	-	1387
Musselbrough	HP 589 009	-	-	-	-	-	-	-	-	-	1582
Barra Holm	HU 386 458	-	-	-	-	-	-	-	-	-	1529
Buriland	HU 390 370	-	-	-	-	-	-	-	-	-	1535
Burwick	HU 390 406	-	-	-	-	-	-	-	-	-	1528
Gord	HU 438 295	-	-	-	-	-	-	-	-	-	1150
Heglibister	HU 387 498	-	-	-	-	-	-	-	-	-	1501
Holm of Benston	HU 463 537	-	-	-	-	-	-	-	-	-	1283
Islesburgh	HU 338 692	-	-	-	-	-	-	-	-	-	1354
Loch of Brow	HU 383 157	-	-	-	-	-	-	-	-	-	1153
Loch of Kettlester	HU 511 806	-	-	-	-	-	-	-	-	-	1719
Mail	HU 433 278	-	-	-	-	-	-	-	-	-	1187
Scousburgh	HU 377 178	-	-	-	-	-	-	-	-	-	1190
Skelberry	HU 393 166	-	-	-	-	-	-	-	-	-	1151
Vidlin	HU 479 665	-	-	-	-	-	-	-	-	-	1306
Clodie Knowe	HU 441 293	-	-	-	-	-	-	-	-	-	1750

g Evidence for activity on brochs in Sutherland

Key as for b

RCAHMS = RCAHMS 1911b

SITE	NGR	1	2	3	4	5	6	7	8	9	RCAHMS	OTHER REFERENCES
*Carn Liath	NC 870 014	x	-	-	x	-	x	-	†	-	270	Fig 69a
*Kintradwell	NC 929 081	-	-	-	x	-	-	-	x	?Δ	467	Fig 69b
*Carrol	NC 846 065	-	-	-	x	-	x	-	x	-	27	
Backies	NC 835 026	-	-	-	-	-	x	-	!	-	272	
Clachtoll	NC 037 278	-	-	-	-	-	x	-	!	-	7	
Achcoillenaborgie	NC 714 594	-	-	-	-	-	x	-	!	-	183	
Allt an Duin I	NC 724 575	-	-	-	-	-	x	-	!	-	182	
Carn Bran	NC 942 122	-	-	-	-	-	x	-	!	-	468	
*Skelbo Wood	NC 783 933	-	-	-	-	-	x	-	!	-	106	
Skail	NC 720 473	-	-	-	-	-	x	-	-	-	-	
HAL 39	NC 891 575	-	-	-	-	-	x	-	-	-	-	Mercer 1980
Castle Cole	NC 795 134	-	-	-	-	-	x	-	-	-	25	
Castle Spynie	NH 541 420	-	-	-	-	-	x	-	-	-	-	
Dun Creagh	NC 605 356-	-	-	-	-	x	-	-	-	-	175	
Scotsburn House I	NH 715 762	-	-	-	-	-	x	-	-	-	-	
Armadale Burn	NC 799 627	-	-	-	-	-	x	-	-	-	190	
Coill Ach a'Chuil	NC 659 382	-	-	-	-	-	x	-	-	-	176	
Dunrobin Wood	NC 841 018	-	-	-	-	-	x	-	-	-	271	
Eldrable	NC 983 182	-	-	-	-	-	x	-	-	-	309	

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Killin	NC 867 076	-	-	-	-	-	x	-	-	-	26	
Kilphedir	NC 994 189	-	-	-	-	-	x	-	-	-	307	
Dun na Maigh	NC 552 530	-	-	-	-	-	x	-	-	-	527	
Suisgill	NC 888 253	-	-	-	-	-	x	-	-	-	308	
Dun Viden	NC 727 519	-	-	-	-	-	x	-	-	-	181	
Achaneas 2	NC 469 027	-	-	-	-	-	x	-	-	-	51	
Allt an Duin 2	NC 810 261	-	-	-	-	-	x	-	-	-	313	
Alt a'Choir Mhoir	NC 922 189	-	-	-	-	-	x	-	-	-	312	
Borgie Bridge	NC 670 587	-	-	-	-	-	x	-	-	-	185	
Dalchork	NC 573 112	-	-	-	-	-	x	-	-	-	394	Mercer 1980
Dun Chealmy	NC 720 514	-	-	-	-	-	x	-	-	-	179	
East Kinnauld 2	NC 745 014	-	-	-	-	-	x	-	-	-	479	
Kilbrare	NC 823 099	-	-	-	-	-	x	-	-	-	24	
Dalchork	NC 573 112	-	-	-	-	-	x	-	-	-		
Achaneas 1	NC 470 025	-	-	-	-	-	?	-	-	-	50	
Dun Carnachaidh	NC 721 527	-	-	-	-	-	?	-	-	-	180	
Kylesku	NC 217 341	-	-	-	-	-	?	-	-	-	168	
The Borg	NC 899 509	-	-	-	-	-	-	-	?	-	186	Mercer 1980
Duchary	ND 85 05	-	-	-	-	-	-	-	?	-	28	
Dun Alascaig	NH 657 868	-	-	-	-	-	-	-	-	-	-	
*Dunbeath	ND 155 304	-	-	-	-	-	-	-	-	-	215	
Dun Phail	ND 015 139	-	-	-	-	-	-	-	-	-	387	
Feranach	NC 844 273	-	-	-	-	-	-	-	-	-	314	
Grum More	NC 611 370	-	-	-	-	-	-	-	-	-	174	
Sallachadh	NC 549 092	-	-	-	-	-	-	-	-	-	392	
DAL 256	NC 591 104	-	-	-	-	-	-	-	-	-	-	Mercer 1980
LED 15	NC 246 134	-	-	-	-	-	-	-	-	-	-	Mercer 1980
HAL 1	NC 894 523	-	-	-	-	-	-	-	-	-	-	Mercer 1980
HAL 2	NC 892 533	-	-	-	-	-	-	-	-	-	-	Mercer 1980
7	NC 697 610	-	-	-	-	-	-	-	-	-	184	Mercer 1981

#### h Evidence for LIA non-broch activity in Sutherland

KEY:

1 = presence of LIA I pin/comb(s)

2 = presence of LIA II pin/comb(s)

3 = evidence for LIA activity on basis of pottery (after Lane 1983)

RCAHMS = RCAHMS 1911b

SITE	NGR	1	2	3	RCAHMS
Goslpie	NH 824 998	-	x	-	-

#### 1 Evidence for LIA non-broch/-wheelhouse/-dun activity in the Western Isles

Key as for h

RCAHMS = RCAHMS 1928

SITE	NGR	1	2	3	RCAHMS	OTHER REFERENCES
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- Appendix IV -

Udal (US)	NF 825 783	- x x	273	Fig 41a
Boreray	NG 1 9	x ? -	-	
Vallaquie	NF 864 754	x - x	274	
Berneray	NF 909 830	x - -	-	
Pabbay	NF 7 2	? ? -	-	
Sleat, Sasaig	NG 59 00	? - -	-	
Geirisclett	NF 767 753	- x -	278	
Bealach Ban	NF 78 76	- x -	-	
Bernera Sands	NG 1 9	- x -	-	
Galson	NB 437 594	- x -	20	
Kildonan	NF 726 286	- x -	-	
Rudha Chaisteal		- x -	-	
Sithean Mor	NF 87 76	- x -	337	
Borvemore	NG 1 9	- ? -	-	
Howmore	NF 75 36	- ? -	367	
Knap		- ? -	-	
Old Cattlefold	NF 77 76	- ? -	-	
Skellor	NF 806 756	- ? -	-	
Sloc Sabhail	NF 8 7	- ? -	-	
South Vist	NF 7 3	- ? -	-	
Tota Dunaig	NF 772 760	- ? -	-	
Dun Toloman	NF 820 749	- - x	294	
Gress Lodge	NB 493 418	- - x	58	
Northton	NF 987 902	- - x	-	
Unival	NF 800 668	- - x	228	
Tungadale			497	

j Evidence for activity on broch, dun and enclosure sites in the Western Isles

KEY:

- 1 = presence of Roman artefacts
  - 2 = presence of LIA I pin/comb(s)
  - 3 = presence of LIA II pin/comb(s)
  - 4 = evidence for LIA activity on basis of pottery (after Lane 1983) and other artefacts
  - 5 = structural evidence for prolonged use of site
- RCAHMS = RCAHMS 1928

SITE	NGR	1	2	3	4	5	RCAHMS	OTHER REFERENCES
Dun Ardtreck	NG 335 358	x	x	-	-	-	484	
Dun Fiadhairt	NG 233 504	x	-	-	-	-	508	
Dun Beag	NG 340 386	-	x	-	-	?	479	
Dun Cuier	NF 664 034	-	-	x	x	x	441	Fig 70a
Eilean Olabhat	NF 750 753	-	-	x	-	x	180	
Loch na Berie	NB 103 352	-	-	x	-	x	69	
Dun Carloway	NB 190 412	-	-	-	-	x	68	
Dun Bharabhat	NB 099 353	-	?	-	-	-	72	

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k Evidence for LIA Activity on Wheelhouse Sites in the Western Isles

Key as for j  
RCAHMS = RCAHMS 1928

SITE	NGR	1	2	3	4	5	RCAHMS	OTHER REFERENCES
Bac Mhic Connain	NF 708 762	x	x	x	x	x	271	
Garry Iodrach	NF 772 742	x	x	x	?	x	-	
Garry Iodrach	NF 772 743	-	x	x	x	-	-	
Foshigarry	NF 742 763	-	x	x	?	?	xlii	
Dun Cnoc a Comhdhalach	NF 770 741	-	x	?	?	?	269	
Sithean a Phiobaire	NF 734 214	-	?	?	-	-	-	
Bruthach na Tigh	NF 734 207	-	?	-	-	-	-	
a Cheardach Mhor	NF 75 40	-	-	x	x	x	-	Fig 70b
Bruthach a Sithean	NF 733 738	-	-	x	x	-	-	
Clettraval	NF 749 713	-	-	-	x	?	178	
Eilean Maleit	NF 772 742	-	-	-	?	?	270	
Machair Leathann	NF 80 75	-	-	?	-	?	272	
Dun Scurrival	NF 695 081	-	-	?	-	-	449	

1 Evidence for LIA activity on non-broch/-dun/-fort/-crannog sites in the West Coast and Inner Isles <sup>Coast</sup> ^

KEY:

- 1 = presence of LIA I pin/comb(s)
- 2 = presence of LIA II pin/comb(s)
- 3 = evidence for LIA activity on basis of pottery (after Lane 1983)
- 4 = other evidence for LIA activity

SITE	NGR	1	2	3	4	RCAHMS	OTHER REFERENCES
Ardnave	NR 288 745	x	-	-	-	1984, no 242	
Arnabost	NM 209 600	-	?	-	-	1980, no 231	
Bruach an Druimein	NR 820 972	-	-	-	x	1988, no 350	
Clachan	NR 79 58	-	-	-	x	1988, 35	
Crinan	NR 79 93	-	-	-	x	1988, 35	
Machrins, Colonsay	NR 357 933	-	-	-	x	1984, no 300	Fig 41f
Kerrera	NM 857 298	-	x	-	-	1975, 22	
Coll	NM 1 5	-	x	-	-	-	
Foill, Coll	NM 1 5	?	x	-	-	-	
Acurrach	NN 112 204	-	x	-	-	-	

m Evidence for Possible LIA Activity on Broch Sites in the West Coast and Inner Isles

Key as for j

- Appendix IV -

SITE	NGR	1	2	3	4	5	RCAHMS
Dun Mor Vul	NM 042 493	x	?	-	-	?	1980, no 167

n Evidence for activity LIA activity on dun, fort and crannog sites in the West Coast and Inner Isles

Key as for j

SITE	NGR	1	2	3	4	5	RCAHMS
Dunadd	NR 837 935	x	-	x	x	x	1988, no 248
Dunollie	NM 852 314	-	-	x	x	x	1975, no 286
Loch Glashan	NR 916 925	-	-	-	x	x	1988, no 354
Dùn Beg Vul	NM 046 492	-	?	-	-	-	1980, no 196
Dùn an Fheurain	NM 824 266	x	x	x	-	-	1975, no 164
Kildonan Bay	NR 780 277	x	-	-	x	x	1971, no 220
Dun Ardifuar I	NR 789 969	x	-	-	x	-	1988, no 270
Dùn Fhinn	NR 657 306	x	-	-	x	-	1971, no 203
Dun Lagaidh	NH 142 913	-	x	-	-	-	-
Kildalloig	NR 745 190	-	-	-	x	x	1971, no 219
Dun Chonallaich	NM 854 036	-	-	-	x	-	1988, no 250
Eilean Righ I	NM 803 021	-	-	-	x	-	1988, no 320
Ugadale	NR 785 285	-	-	-	x	-	1971, no 238
Eilean Righ	NM 803 021	-	-	-	?	-	1988, no 320
Dùnan nan Nighean	NR 415 976	-	-	-	-	x	1984, no 203
Ibrig	NM 025 444	-	-	-	-	?	1980, no 210
Balloch	NR 677 176	-	-	-	-	?	1971, no 158



## APPENDIX V: DETAILS OF SPATIAL ANALYSES FOR INDIVIDUAL SITES



## APPENDIX V: DETAILS OF SPATIAL ANALYSES FOR INDIVIDUAL SITES

This appendix describes in detail the use of space and routes of access which are found in each of the buildings/settlement complexes illustrated in figs 76-77 (chapter 10). Here site plans are superimposed with unjustified access maps and the routes of access are illustrated, where applicable, with photographs. Any lettering used refers to the excavators' original plans.

### EARLY IRON AGE

BU (fig 75): refer to §10.2.3.

### MIDDLE IRON AGE

GURNESS (fig 76, 78; figs 81-92): Spaces are generally distinguished by the presence of a threshold stone (with or without pivot stones), a low kerb, or entrance via a doorway with jambs into an enclosed space. Exceptions are described.

The Outworks and Outbuildings: As seen today, the site is approached from a flat open area adjacent to the coast. The arms of the inner rampart curve out from the entrance and give the effect of a forecourt (fig 82), drawing the eye in towards the line of the broch tower. Entrance is through the inner ramparts and over the inner ditch, by means of the guardhouse. Access is not immediately through the middle and outer ditches and middle rampart (which do not totally encircle the site), but actors would have been aware of their presence, especially if they had walked around the enclosed area. The fact that these outworks are joined to E and W does not detract from their independent existence. Inclusion of ramparts in this and subsequent analysis is an archaeological appropriation of the technique in order to indicate the presence of these (almost) circuitous boundaries.

The gateway straddles a causeway between the two terminals of the inner ('Great') ditch. There is a possible internal chamber to the left. The gatehouse was built after outbuildings 6 and 7, to which it abuts, and originally the doorways were 2m rather than 1m

wide (Hedges 1987 II, 37). From the gatehouse a passage 1.7-2m wide leads directly to the entrance of the broch tower, where the passage widens around the exterior guard chambers to create a different sense of space (fig 83). Access is gained from the initial section of passage to outbuildings 6,7 and 8, and from this slight forecourt to outbuildings 5 and 9 and to the broch itself. To either side of the broch entrance the passage bifurcates to give access to outbuildings 1-4 and 10-14 (figs 84-85).

To the N the outbuildings have suffered serious disturbance and many of the extant features are not contemporary with the MIA. As a result there are problems in defining the MIA spaces in this area, especially in outbuildings 10-12 and 14. Hedges divides the outstructures into buildings on the basis of load-bearing walls, which on the evidence of hearths and internal divisions contain more than one dwelling or apartment (for example fig 86). It would be superfluous to describe each room by feature. This has already been done by Hedges for buildings 1-6, and the other buildings can be easily interpreted on the basis of their plans (Hedges 1987 II, 39-41, fig 2.10). Each building is divided into one or more areas with a hearth, usually a sub-circular area defined by orthostats and/or a low kerb. Stone-lined tanks are often associated with the hearths (for example fig 87). The areas with hearths were usually entered by means of a passageway, and may have involved crossing over several thresholds. Sometimes the passages circulate around this area. From these passages and/or areas with hearths, access could be gained to a series of features, such as cupboards, earth-closets and chambers which were defined with an entrance. There are problems deciding what constitutes a chamber rather than a cupboard. The chambers were probably box-beds (neuks), with lengths commonly falling in the 1.7-2.1m range, their widths 1.2-1.5m wide. Some of them were paved, and the roofs also survive on some. Cupboards are also distinguished by an entrance, but do not seem to have had threshold stones, and their floor area is much smaller. There are a large number of indeterminate compartments and bins off the bay area. In general it can be assumed that the internal fittings in the outbuildings were on a similar scale to those in the broch, but that those in the broch have been better preserved by the broch superstructure. There is no evidence for any of the outbuildings ever having had an upper storey (Hedges 1987 II,



41).

A few aspects of the individual outbuildings are worth highlighting:

1. Building 4: a double entrance from the passage gives a separate threshold to each of the units within the one set of load bearing walls (Hedges 1987 II, pl 2.35). Presumably there was originally an interior wall dividing these two entrances and their respective passages, otherwise it is difficult to understand why two entrances were needed to a single interior lobby.
2. Buildings 5 and 6 are interconnected through their shared load-bearing wall, which is unusual, as each building is usually discrete.
3. A large part of building 14 is a blank area. This is very curious, but possibly the area was too narrow for incorporation in a building, internal features did not survive, or they were missed by the excavators.

The Broch: The broch is entered from the 'forecourt' at the end of the main access passage, between a couple of low apartments external to the broch tower entrance, and which have been built up against it (fig 88). These effectively extend the entrance of the broch passage by some 2.5m and add an extra doorway 4.5m from the original one. Each of the compartments is accessible from the passage. From here access is gained to the original broch door via a tunnel-like entrance. This door opened inwards and could be secured with a bar. Immediately behind this the passage widens and access can be gained to the two tall guard cells. From these access can be made to the basal and a superimposed mural gallery. It is probable that the lower gallery never extended all the way around (Hedges 1987 II, 19). Entry into the upper intramural gallery must have been difficult, and as seen now it does not connect with any other features at this level. It is blocked to the S by the chamber at the foot of the stairs (which may be secondary), and if it continued in the opposite direction presumably connected with the present aumbry.

As seen today, the interior is not all of one period (*ibid*, 28-35). The staircase just inside the entrance (fig 88) is very late. There are problems over the exact arrangement of the interior because it was only perfunctorily planned before being dug through in search of earlier levels, but Hedges (*ibid*, 28) suggests three main

alternatives, of which the third is favoured:

1. a triangular lobby giving directly into the southern compartment with access to a north-western apartment.
2. a triangular lobby leading to a tiny square access zone from which a southern and north-western apartment could be entered.
3. a triangular lobby leading into a rectangular access zone from which a southern apartment, and northwestern apartment and rectangular northern division could be entered.

Thus, even without the intrusive staircase one was forced to turn right through a doorway, the sill of which can still be seen, into a triangular lobby. The conjectured central access zone, like a short corridor, was entered from the lobby and gave access to the three areas outlined above. Presumably the southern and northern compartments were separated, but a wall was not recorded. To the E and W access was gained from the access zone to compartments.

The northern rectangular division leads into a chamber against the broch wall. Immediately adjacent to this was the northwestern compartment which had a central hearth area with two compartments leading off it. Entrance to the southern compartment is presumed to have been directly over the entrance to the well (*ibid*, 29), and led into a large area with central hearth and a series of surviving chambers against the broch wall to E and W (fig 89-91). Similar chambers probably also existed to the S, underneath the doorway at the 1.8m level (*ibid*, pl 2.26). There was no permanent stairs by which to reach this doorway, or the conjectural gallery to which it gave access (*ibid*, fig 2.8). Access was presumably by means of a ladder.

First and second floor levels (fig 92): Hedges conjectures a floor around much of the circumference of the broch interior at the height of 1.8m (*ibid* 32-34, fig 2.8). Obviously there were structures, if not floors, at a higher level, as stairs in the northwestern compartment lead up to this level. To what they lead is unknown, but presumably structures related to the height of the scarcement. Access from these stairs led to a small area of floor at 1.8m. Walling suggests that it was not possible to gain access from this area to the rest of the first floor gallery. To the SW intramural steps led down from unknown structures at scarcement level to a landing at the 1.8m level. From here access can be gained to a (?secondary) chamber or



onto the gallery conjectured to be at the 1.8m level and to extend three quarters of the way around the interior. Access to this probable gallery via a ladder is a possibility from virtually anywhere on the ground floor.

HOWE (fig 77; fig 93): Spatial analysis is based on the site in its earliest phase 7 stage, when the nucleated settlement was first laid out. There was little significant change in the plan of the site over the MIA, except that the outworks ceases to be maintained; the broch interior loses its domestic function but retains the same internal divisions; and the outbuildings potentially become less ordered, especially to the W.

Access analysis is based entirely on published descriptions and plans, personal communications with B Smith and by analogy with the Gurness and Midhowe standing structures. Howe was destroyed several years before this research was begun. The principles applied are as described for Gurness, and it is not therefore necessary to go through every step of the structure. However, a couple of points should be singled out:

1. I assume that a ladder would have allowed access between the broch ground floor interior and its upper stairs and cell
2. an earth-house could be entered from the broch interior

LINGRO (fig 77; fig 94): Spaces are distinguished on the same basis as at Gurness, but the problems of definition are particularly acute as only a site plan and the occasional sketch of the excavations survives. Not all the buildings need be contemporary, although with the obvious exceptions of G and H (fig 49) they may be (§8.2.10). Access analysis is attempted, but it must be emphasised that a large part of it, is of necessity, arbitrary.

The outbuildings: It is assumed that there may have been outworks surrounding the site. Buildings G and H are ignored. Otherwise analysis is fairly straightforward, on the basis of the plan (most ambiguities arise in room/complex F).

The broch: the broch is entered through an extended passage with two sets of guard cells on each side. Little is recorded of the exact



form which the interior took (an illustration in Petrie MS f, ORD/182/12, probably of F, does little to clarify the picture). In plan there are suggestions of two, if not three main areas with a central break in the line of orthostats for access. The western example had a tank, and in its northern corner a triangular compartment (cf Gurness). In the southernmost corner of this court another triangular feature is indicated. Conventions in the manuscripts may suggest it was a paved area, but nothing else is divulged. An orthostatic wall divides the W from the E half of the court, and orthostatic projections from this suggests at least one cupboard (Petrie MS f, ORD/182/7). To the N are a couple of short projections from the wall, possibly indicating the former presence of compartments, and a length of walling creates a small chamber (but looks later). Nothing is known of any upper levels.

The resultant access map is thus not so deep as those at Howe, Gurness and Midhowe because of the poor quality of the data applying to the interior.

MIDHOWE: (fig 77; figs 95-106). Spaces are distinguished on the same basis as at Gurness, but problems of definition are much more acute because of both the degree of modern-day manicuring of the site and the original quality of the excavators' recording.

The Outworks and Outbuildings (fig 95): The settlement is approached from the landward side, the broch being on a thin spit of land between two substantial geos. The land between the geos is bridged by a series of outworks, most notably a large rampart (fig 96). A hollow way leads between the walling which marks an entrance through the outer rampart (Hedges 1987 III, 114) and a causeway over the ditch. None of the outworks completely encircle the site, but in combination with natural features complete a circuit. The outer rampart is widest at the point of entry through it (fig 97), an entrance which has been narrowed by later walling. This entrance had at least one doorway. Upon starting to walk through the ramparts (and sensing their presence) the narrow entrance widens into a subrectangular space, to the left hand side of which is a series of short steps. These led up onto the ramparts, and probably over the entrance (thus forming the blockhouse suggested by Lamb 1980a, 90). On the far side of this

chamber there is a narrowing and a set of bar-holes. Consequently the passage (J) widens into a long straight way (fig 98). To the left are a series of entrances to different areas, in the first two cases down the edge of a virtually vertical break in slope. The nature of the lower buildings in this area, and their date, is problematic. Shortly the entrance passage meets the S side of the broch where there is a choice of direction around the broch. Proceeding directly west one eventually reaches the broch entrance. Nothing is known of any contemporary structures which might have been encountered.

Standing immediately in front of the broch entrance there is the choice of entering the broch or veering left into the passage which encircles it (fig 99), and from which access is gained into a series of radial outbuildings (see for example various prospects of building H, figs 100-101). Little is known of the original divisions within these structures, although some of the extant orthostatic chambers may belong to this rather than later phases. Thus the little which survives of these buildings can only be very approximately divided into its constituent spaces. Building H is particularly large, and it is particularly difficult to imagine how it was roofed in the absence of known internal supports. To the E of the broch it is difficult to relate two spaces interconnected by steps to the overall scheme.

The Broch (ground floor level): The broch is entered through an impressive, long entrance (fig 102), and over a series of threshold stones. The guard cells flanking the doorway do not apply to this period, and the original entrance is no longer apparent because the pivot stone had been covered by later paving. Immediately inside is a vestibule, in part created by orthostats which extend the length of the entrance. From this vestibule there is the choice of entrance into northern compartment D, or southern compartment C (fig 103). Each compartment takes up exactly half of the interior, and is divided from the other by a line of orthostats up to 8 feet (c2.4m) high (fig 103-104). Further orthostats divided the interior into a series of chambers, compartments and cupboards (for example fig 105). The interior has been interpreted as in fig 106, but several points are worth highlighting:

1. in compartment C the monumental chamber ('alcove') to the S has a narrow gap permitting entrance to it from the adjacent chamber

2. in compartment D the arrangement is most unusual, as the central area is raised whilst the outer perimeter is lower. In effect this creates a corridor around the main domestic focus directly to the stairs in the western corner.

(First and Second Floor Levels): From the northernmost part of compartment D access can be gained via a small raised doorway to both the lower intramural gallery (mainly blocked now) and an intermediate level gallery. From the stairs in the W end of this compartment, which it is assumed once reached the ground as at Gurness, access can now be gained to an intramural cell which blocks off further entrance to the upper gallery.

As at Gurness a gallery has been postulated to have run around a sector of the southern compartment, and it must have been reached by a ladder from the ground floor if it is contemporary with the upper intramural cell. The evidence for this gallery (at about the 1.8-2m level) consists of the rooves to the chambers adjacent to the 'alcove' (fig 104-105), and the roof supports for the westernmost chamber adjacent to the dividing wall. From this gallery one could gain access to the intermediate intramural gallery, including a cell to the E, although the passage was partly blocked/collapsed. The intramural stairs led up to an unknown structure. It is not known how access might have been gained to the scarcement level cells above the main doorway and guard chambers.

#### LATE IRON AGE

BUCKQUOY (fig 77; fig 107): The very earliest structural evidence is the partial remains of a house similar to the 'Shamrock' at Gurness (see below). It has rectilinear cells opening off a central chamber with a hearth (house 6). In phase Ib a smaller house (5) of similar form was constructed, with three rectilinear cells opening off an area with central hearth. On the fourth side was the entrance. Paving led from the house for a distance of 1.3m beyond. This structure is very small, and it must have been associated with a larger, but discrete domestic focus.

In phase II the site was levelled and house 4 constructed. It consists of four aligned and interconnecting rooms, the whole complex



being entered by the small vestibule to the SE or via a paved pathway into the SW side of the largest and main chamber which had the hearth. Entrance to the SE was over a sill, and then there was probably a doorway into the second room (if a whalebone socket had functioned as a part of the door furniture). In the main living room the remains of low stone kerbing on either side of the hearth suggest that there may have originally been wooden or stone platforms lining the wall, or alternatively as minor sub-divisions of the internal area. These have been treated as separate spaces. At the NW end of the building, leading from the main room, was a circular chamber. Two incomplete structures can be associated with this house, one of which was a paved area enclosed by fencing.

GURNESS (fig 78; fig 108): This description follows closely that of Hedges (1987 II, 65-67) and describes the only late building complex at Gurness to which access analysis may be applied. To the S of the broch where outbuildings 2 and 3 had formerly stood, a polyventral structure (the 'Shamrock') and associated 'Annexe' were constructed. The Shamrock was entered from the W through an extended entrance with flanking orthostats. This gave access to a central area with hearths, surrounding which were four compartments, each with thresholds, and each covering an area of about 3m<sup>2</sup>. Further to the E, from an additional compartment/passageway there was access over a threshold to an earlier broch period apartment. From the passageway access could be gained to the Annexe, which is multiphase and not fully understood. Basically it consisted of three compartments aligned N-S, with two chambers leading off the southernmost one. The original floor was not paved.

Elements of similar structures were found in the immediate vicinity of the Shamrock and Annexe, giving the impression of more widespread, although not necessarily contemporary activity (*ibid*, fig 2.11).

HOWE (fig 78; fig 109): Access analysis is only possible for the structures of phase 8 stage 6 (Carter et al 1984, fig 5), and even then the doorways are very informal. It is not even clear where the main entrance was; I take it to be the entrance to the W connecting with the pathway to the broch. From here one enters into the main

room with a long hearth. At the end of this room was a sub-circular chamber, and to the N a smaller one set into the wall which might have functioned as a sleeping compartment. To the SW is a lintelled entrance leading into a semi-enclosed and paved area, but the exact nature of this enclosure, possibly a yard or open vestibule cannot be seen because of plough damage. There seem to be two exits to the N into a sub-circular compartment whence access is gained to another area with a hearth and compartments off it. To the E, via two thresholds, is a long passage which leads to a paved area, divided into two by a series of orthostats. From the larger of these chambers access is gained to an earth-house built into the rubble of the collapsed broch.

POOL: The data from this site is not as yet available for analysis.

HOWMAE (fig 78; fig 110): It is not possible to establish which, if any, was ever the main entrance to this settlement complex. An entrance from the S into area O (probably a courtyard) seems most likely. As this site is unphased the salient features are therefore discussed in much the same order as they were excavated (J Traill 1890; W Traill 1885). Access to buildings A and B is from the south, each having a separate entrance. They are not interconnected. B was possibly originally divided into two by a partition wall. From the SE access can be gained into a large courtyard (O) from where access can be gained to a number of buildings and one cupboard-like cell to the E. C is divided by orthostats (2-3 feet high) into several divisions. L is entered by crossing over two thresholds, that is there seems to be a small vestibule in front of it. To the east access is gained to room E, and from here to the south to room D, north to an irregular-shaped wheelhouse (F) divided by numerous partitions (2-4 feet high at the time of excavation) into different compartments. To the W of F access is gained to a sub-rectangular compartment (J), divided into four areas by low kerbs, and a raised platform in the E corner. Originally there was probably access from here to passage Q. Alternatively one left from room F into a large irregular compartment (G). In its original form this room contained at least two orthostats of eight feet or over, which gives some indication of how the roof of such a building might have been supported. From the extant plans and



sections it is not totally clear how the interior of this building was divided. To the W was a recess set slightly lower than the rest of the floor. This substantial compartment contained a cist and other internal divisions may have acted both as cupboards and roof supports. Whilst there is no mention of a hearth in any of these rooms it is obvious that this of all chambers must have contained one. To the E of this room access was gained to a long rectangular room with internal recesses and aumbries; in its original form this room was not partitioned. To the W of the main complex area K, N and M were all paved, and access between K and M is suggested at the E end of the S wall. To the E of the complex a small cell (P) originally had an entrance on its northern side, but at the time of excavation this was blocked up, and it is not at all clear how access was gained to this area.

STENABRECK (fig 78: fig 110): Excavations took place at Stenabreck in 1883 (Traill W 1885) when the outline of its walls were traced. The finds suggest a prehistoric horizon, IA at the earliest, and the form of the structure is also compatible with an IA date. Nothing is known of the phasing of the site, but the whole structure may have been semi-subterranean or had a turf/soil outer cladding.

The main entrance to the settlement was by a doorway with threshold and pivot stone to the N of the complex. Near to this the key for a tumblelock was found, suggesting that this was a wooden door which could be secured. There was a second means of access by a rectangular vestibule to the immediate S of the main entrance. Several of the rooms contained intramural presses. One, in compartment B (Traill 1885, fig 1) had a low stone, about a foot high in front of it, but none the less its dimensions suggest it was probably a storage area rather than living area. One small chamber to the E (H on Traill's plan) showed no obvious means of entrance.

UDAL (fig 78): Only schematic access maps can be created for the LIA structures at the Udal because they have not been fully published. The following is therefore based on information derived from interim report and lectures given by the excavator (for example Crawford 1986). The spaces are assigned as for Buckquoy. The main distinction is that the sites here are all initially entered through an encircling



- Appendix V -

enclosure. The resultant yards contain two buildings, the four posters, and the main houses.

## APPENDIX VI: METALWORK FROM WAREBETH CEMETERY



APPENDIX VI: METALWORK FROM WAREBETH CEMETERY

Bronze and gold mount with celtic pattern from Monker Green (fig 111a)

In about 1889 a cast bronze mounting with a celtic pattern, covered with gold on the upper surface, was discovered at Monker Green, Stromness (RMS acc no FA.44; Donations 1892; Grieg 1940, 200, fig 95). The fragment has been crudely truncated on three sides, although one edge has a clean cut, achieved by several blows from a sharp implement. The design consists of two major elements: a raised, decorated border (9 mm wide) which decreases in depth towards the centre of the plaque where it steps down diagonally to a thinner area of inhabited continuous vine scroll.

The edge is outlined on each of its long sides by plain borders, inbetween which runs an egg-and-dart derived motif (Wamers 1987, 97). The lower field contains the vestiges of three elements of a single inhabited continuous vine scroll, each similar, but differing in minor detail. A contorted forward-facing bird-like animal inhabits each scroll, craning its long neck forward to bite one of its outstretched hind-limbs, which both embrace the plant scroll and finally entwine around themselves and terminate in a small lobe. The beast has a long hooked, hatched beak, a beady circular eye and pouched cheeks. Only three limbs are indicated, each extending from an elaborate triskele-form hip at the base of the slender neck. One triskele is simple, its three swirling lines emanating from a central point. The other is more elaborate, evolving from a central circle, further enhanced by three small oblique nicks. The single jointed foreleg extends backwards as if to support the weight of the animal. It has a longitudinal linear division, and terminates in long claws. A long thin spur emanates from the back of the heel and curls around the spear-shaped leaf at the end of each scroll. Where each scroll bifurcates there are two parallel V-shaped lines.

This object has been discussed by Bakka (1963, 60-61, fig 63) and Bruce-Mitford (1960, 254, fig 64). Both authorities agree it was manufactured by an eighth-century Northumbrian craftsman, Bruce-Mitford preferring the second half of or late eighth century on the



basis of analogies with the Croft-Ormside-Kells group. The Stromness example, and bronze-bound pails from Birka and Hopperstad (Bakka 1963, fig 23-27) which bear bird-inhabited vine scrolls, may be derived from the Mediterranean art group independently of the birds and bird-friezes of the Lindisfarne manuscript group because of their associated vines (*ibid*, 60; *contra* Bruce-Mitford 1960, 254). The vine-scroll was a popular Pictish motif, a celticised version of the Northumbrian vine-scroll, undoubtedly spread through the influence of the Roman church in Scotland (Henderson 1983). There is however no reason to attribute this object to the Picts.

The egg-and-dart derived motif may be related to the 'crescent and almond-shaped prominences' on two bronze mountings from Crieff where each section of shaped border is filled by a single egg and two darts (Allen and Anderson 1903).

An Insular object such as this may originally have been a part of a highly ornate book mount or box, and the top edge has the remains of two, possibly three shallow, impressed indentations by which it would have been attached with clasps, c 14 mm apart.

The exact context of this and the following mount are unknown, but Bakka (1963, 61) makes the interesting suggestion that they might have come from Norse graves in view of the suprisingly large number of contemporary late Saxon and Insular/Northumbrian objects which have been found in Norwegian graves. But a mount such as this could have come from any Christian Insular context, probably, but not exclusively, ecclesiastical.

Dimensions (in mm): length 46; width 28; maximum depth of border 6; depth of main plate 2.

#### Circular decorated bronze and gold mount from Stromness (fig 111b)

In 1887 a decorated mount was reported as having been found some time ago at Stromness (Cursiter 1887, 346). The original is now in the Hunterian Museum, Glasgow (acc no B.1914.863), but there is a facsimile in the Royal Museum of Scotland, Edinburgh (acc no FC.160). It consists of a cast circular bronze plate with a thin raised vertical edge (height 5mm), the upper surface of which has been covered with gold. A fine cable runs around the upper edge, although the edges of the mount are somewhat corroded. From a central

setting, which has lost its boss, swing three arms of an ornate triskele, the two wide arms of which are filled with fine linear decoration. They possibly terminate in devolved bird heads with lentoid eyes. The third arm tapers smoothly to a constant width and then swings around to encircle the edge of the disc. Its final part is destroyed, but appears to taper to a point once its circuit is complete. A similar triskele can be seen on a panel at the top of the foot of the Ardagh chalice (Rynne 1987, pl I.B) which dates to c 700 AD (Wilson 1984, 120), or the contemporary Lindisfarne Gospels (f 139r: Bruce-Mitford 1960, fig 46). Both these works are representative of Insular art of this period (Bruce-Mitford even sees the Ardagh chalice as possibly Northumbrian: *ibid*, 251). The three intermediate fields are decorated with various forms of fine chip-carved interlace in a moderate relief. In technique this piece is very similar to a brooch from Harray (Cursiter 1887, 344, fig 5; Hunterian museum acc no B.1914.864; Grieg 1940, 200, fig 96).

This Insular mount, probably contemporary with the other mount from Monker Green, has variously been described as the circular terminal portion of a penannular brooch (Cursiter 1887, 346) and the remains of the central portion of the same (Grieg 1940, 200). The edges are very corroded and it is difficult to see whether it has either been cut from a brooch or cast individually. If the latter is the case, its form as an individual mount for a penannular brooch is most unusual; finer panels of filigree etc, or glass/amber insets are more typical. Note for example the blue glass and other coloured glass used in circular settings on certain of the penannular brooches in the St Ninian's hoard (Wilson 1973, 98). On the reverse are two small protruberances which may have to do with attachment. Alternatively it could possibly have been incorporated in an object such as a book cover, chalice, paten or reliquary. The Monymusk reliquary (J Anderson 1881, frontispiece) incorporates similar circular mounts.

Dimensions (in mm): maximum diameter 29mm; maximum depth 5mm.



## FIGURES



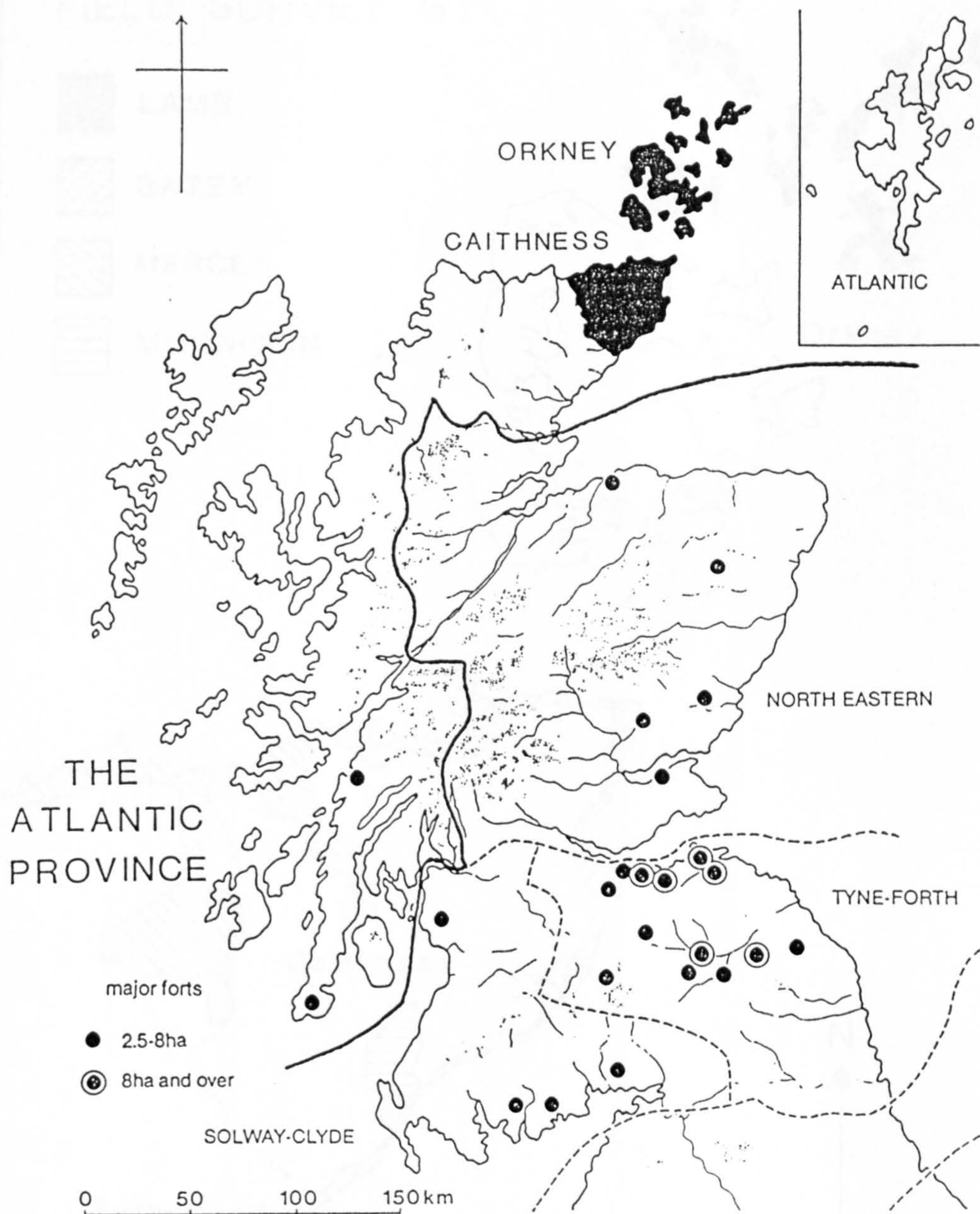


Figure 1. The boundaries of north Britain in the Iron Age (modified after Piggott 1966; Ralston 1979) with the study area in black.



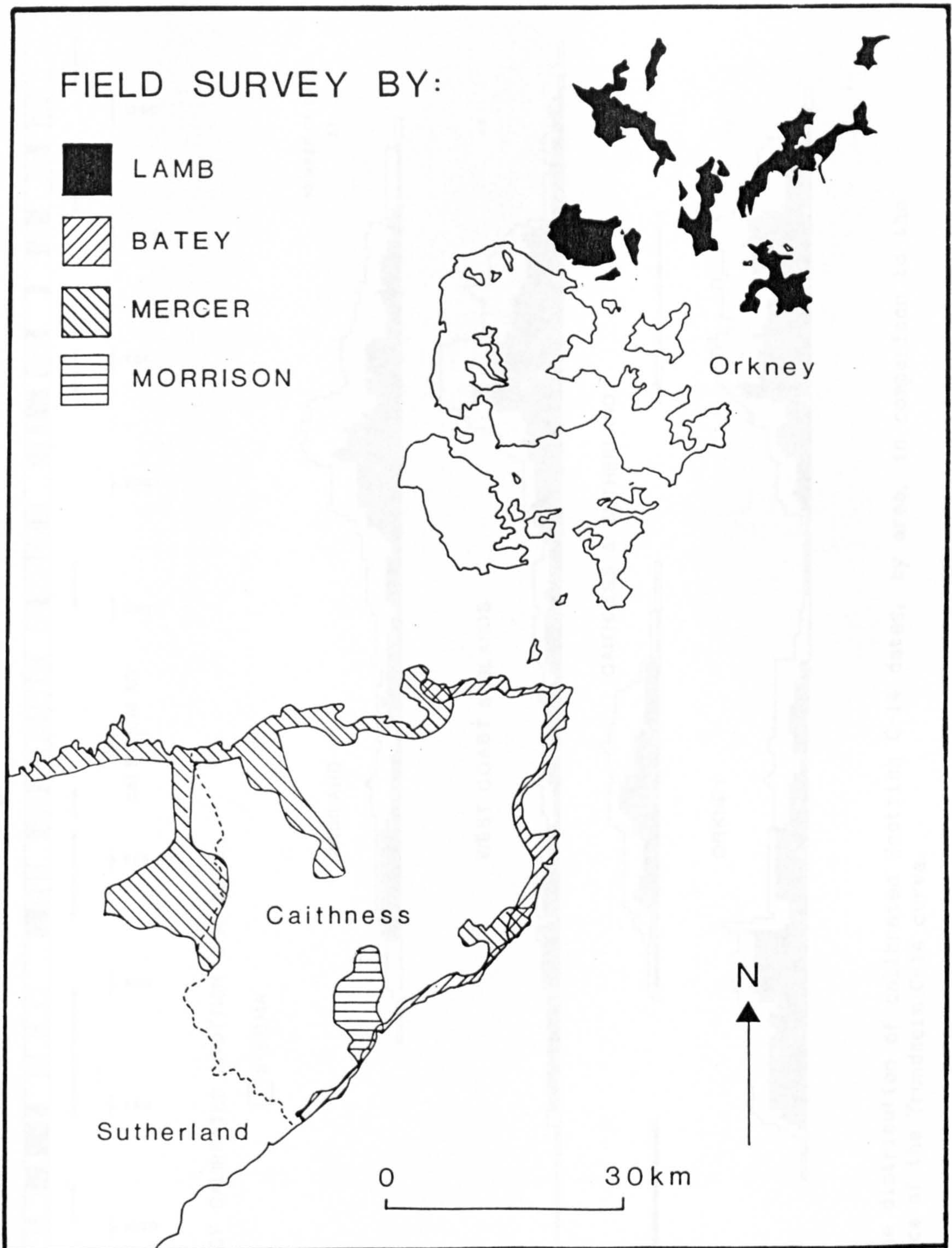


Figure 2. The distribution of field work by Lamb, Batey, Mercer and Morrison in northeast Scotland.



Figure 1 is a stratigraphic column diagram showing the relationship between slope angle, lithology, and time. The column is divided into sections based on slope angle:  $\geq 65^\circ$  SLOPE (dark grey), 46-64° SLOPE (stippled), and  $\leq 45^\circ$  SLOPE (white). The column is also divided into sections based on lithology: INVERSION (indicated by double-headed arrows) and non-inversion (indicated by single-headed arrows). The time scale is in cal BC and cal AD, with markers at 1250, 1000, 750, 500, 250, and 0 (cal BC | cal AD).

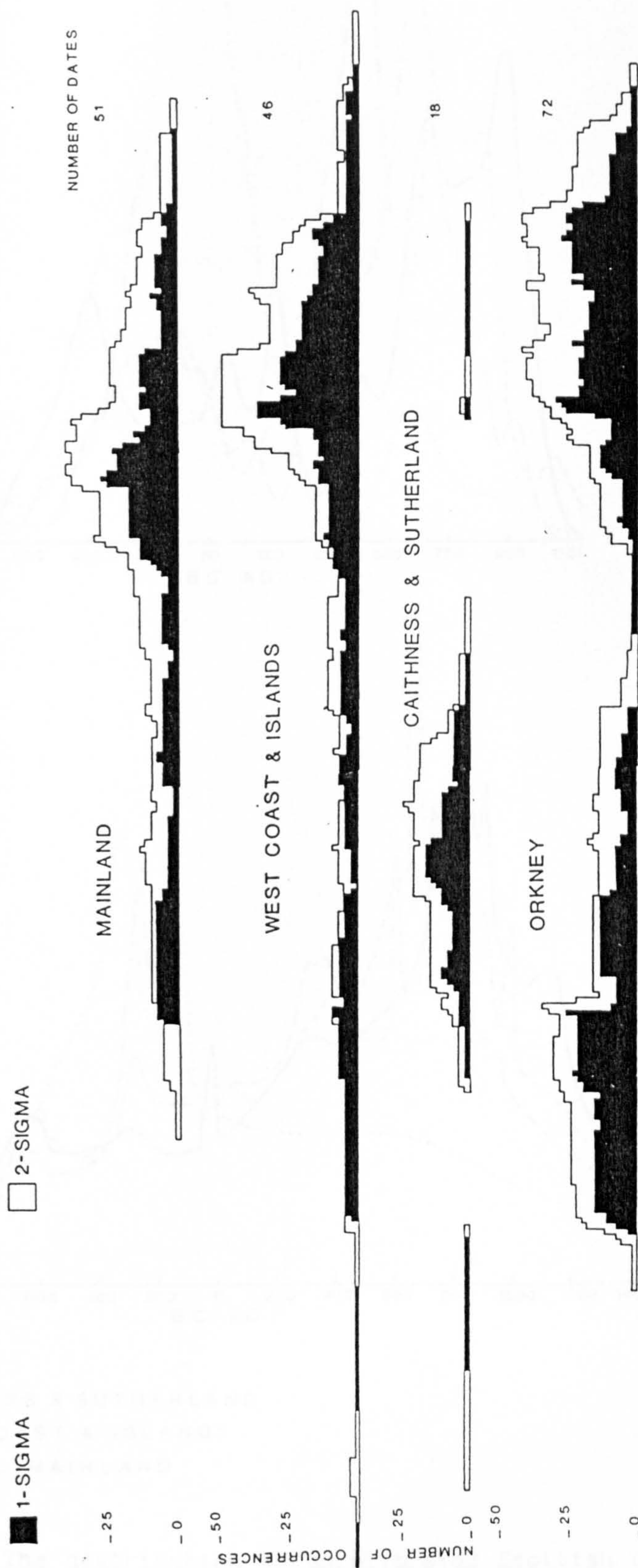
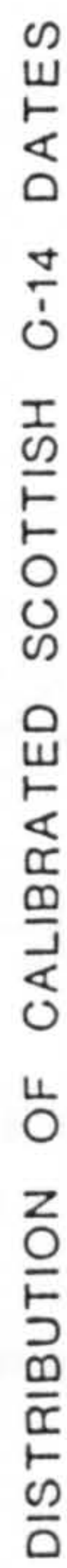


Figure 3. The distribution of calibrated Scottish C-14 dates, by area, in comparison to the characteristics of the Trondheim C-14 curve.



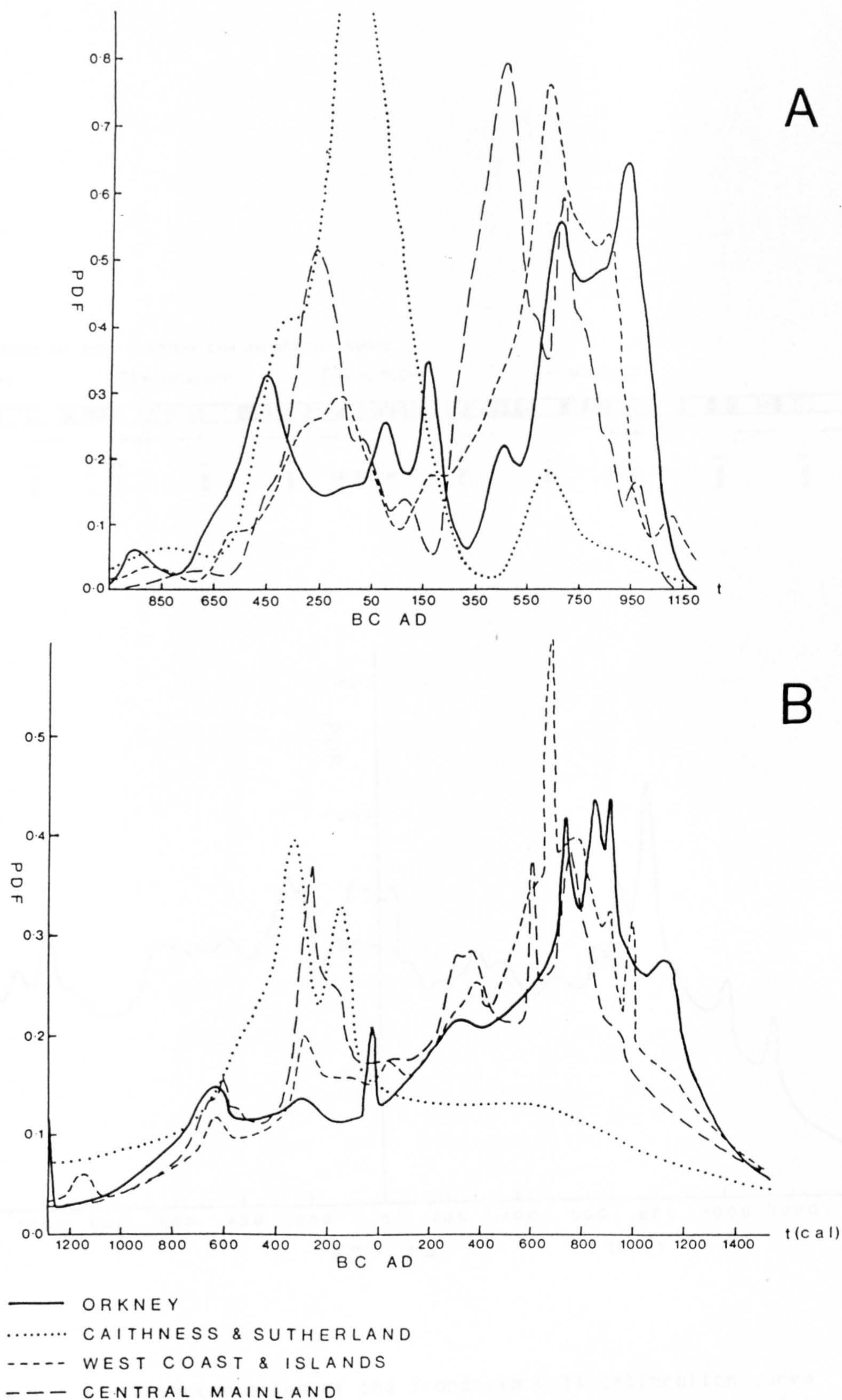
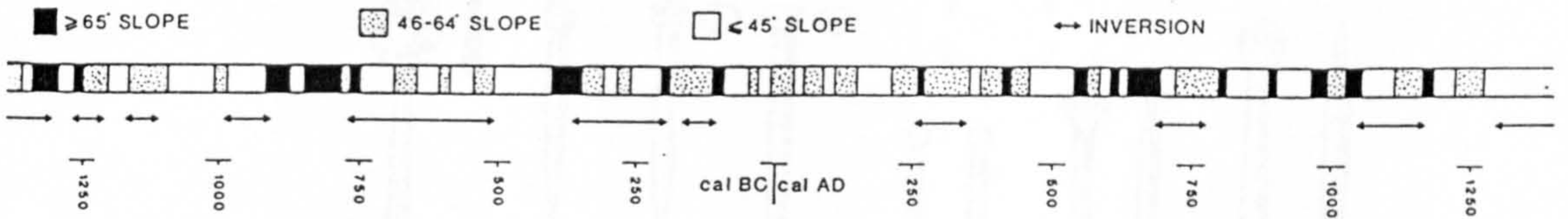


Figure 4. A The distribution of uncalibrated Scottish C-14 dates, by area, at the 1- $\sigma$  level; B The distribution of calibrated Scottish C-14 dates, by area, at the 1- $\sigma$  level.  $t$  = time, PDF = probability density function. The diagram has been produced by cumulatively summing boxes representing the date span; the height of each box being adjusted to ensure that the area remains constant.



# A

## CHARACTERISTICS OF THE TRONDHEIM C-14 CALIBRATION CURVE



# B

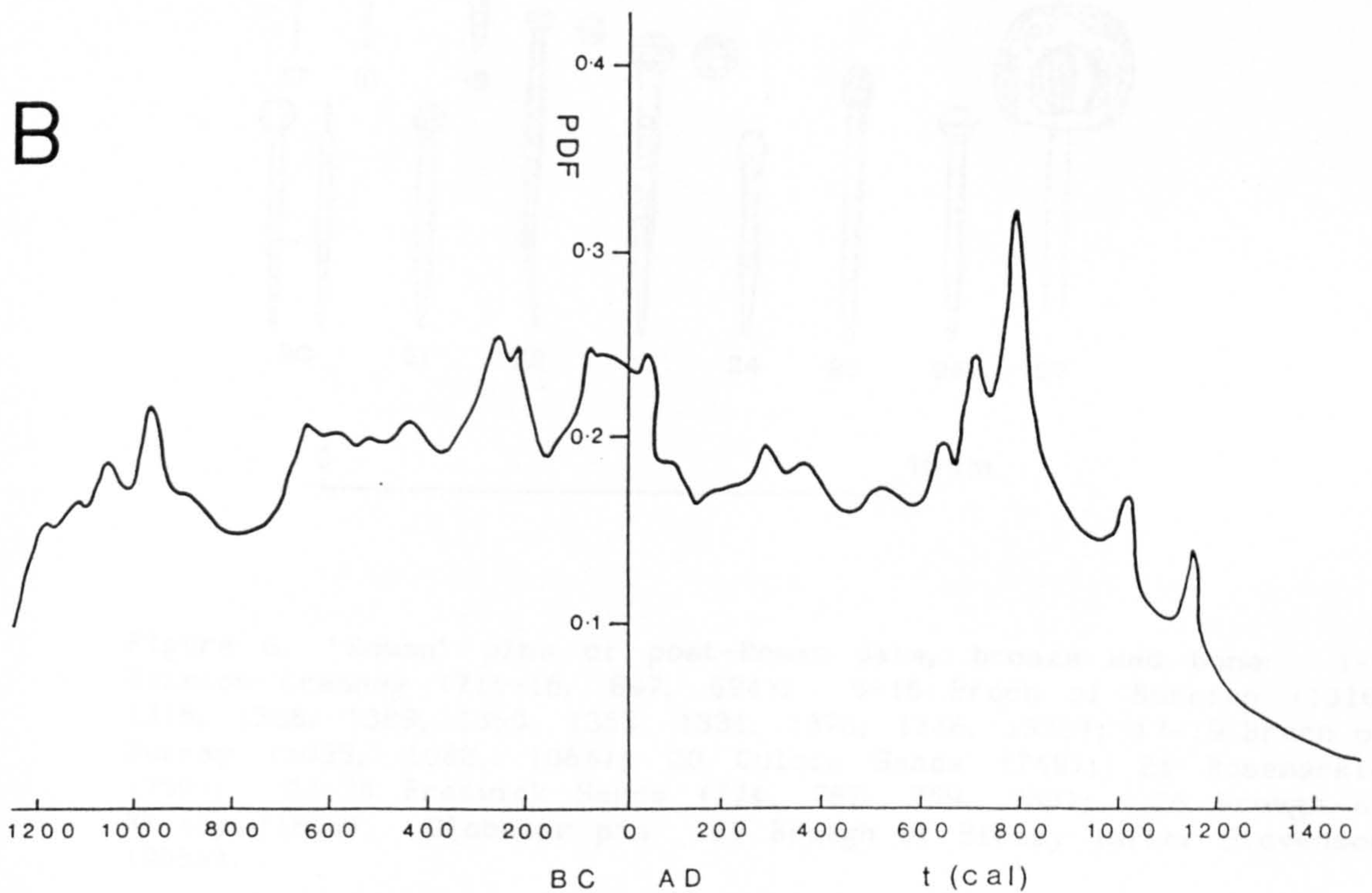


Figure 5. A Characteristics of the Trondheim C-14 calibration curve in comparison with B the distribution of C-14 calibrations ( $1-\sigma$ ) for each decade between 3000-950 bp, with a constant standard deviation of 50 years. B has been compiled in the same manner as the graphs in fig 4.



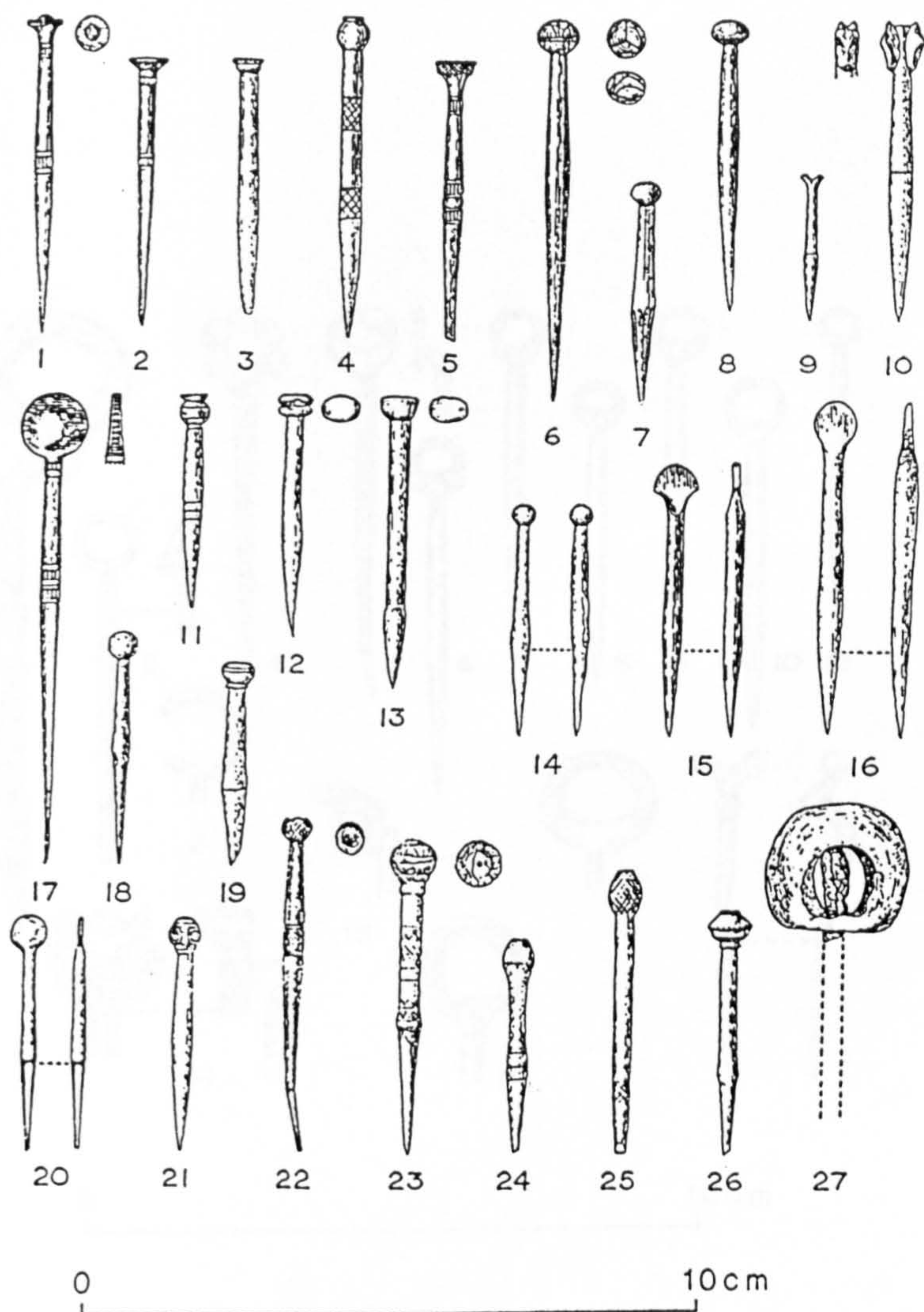


Figure 6. 'Roman' pins of post-Roman date, bronze and bone: 1-4 Buiston Crannog (715-16, 697, 694); 5-16 Broch of Burrian (1316, 1315, 1396, 1389, 1350, 1353, 1331, 1376, 1346, 1339); 17-19 Broch of Burray (1095, 1082, 1084); 20 Culbin Sands (749); 21 Rosemarkie (750); 22-25 Freswick Sands (774, 787, 759, 758); 26 Brough of Birsay (1833). Globular pin: 27 Brough of Birsay (after Stevenson 1955a).



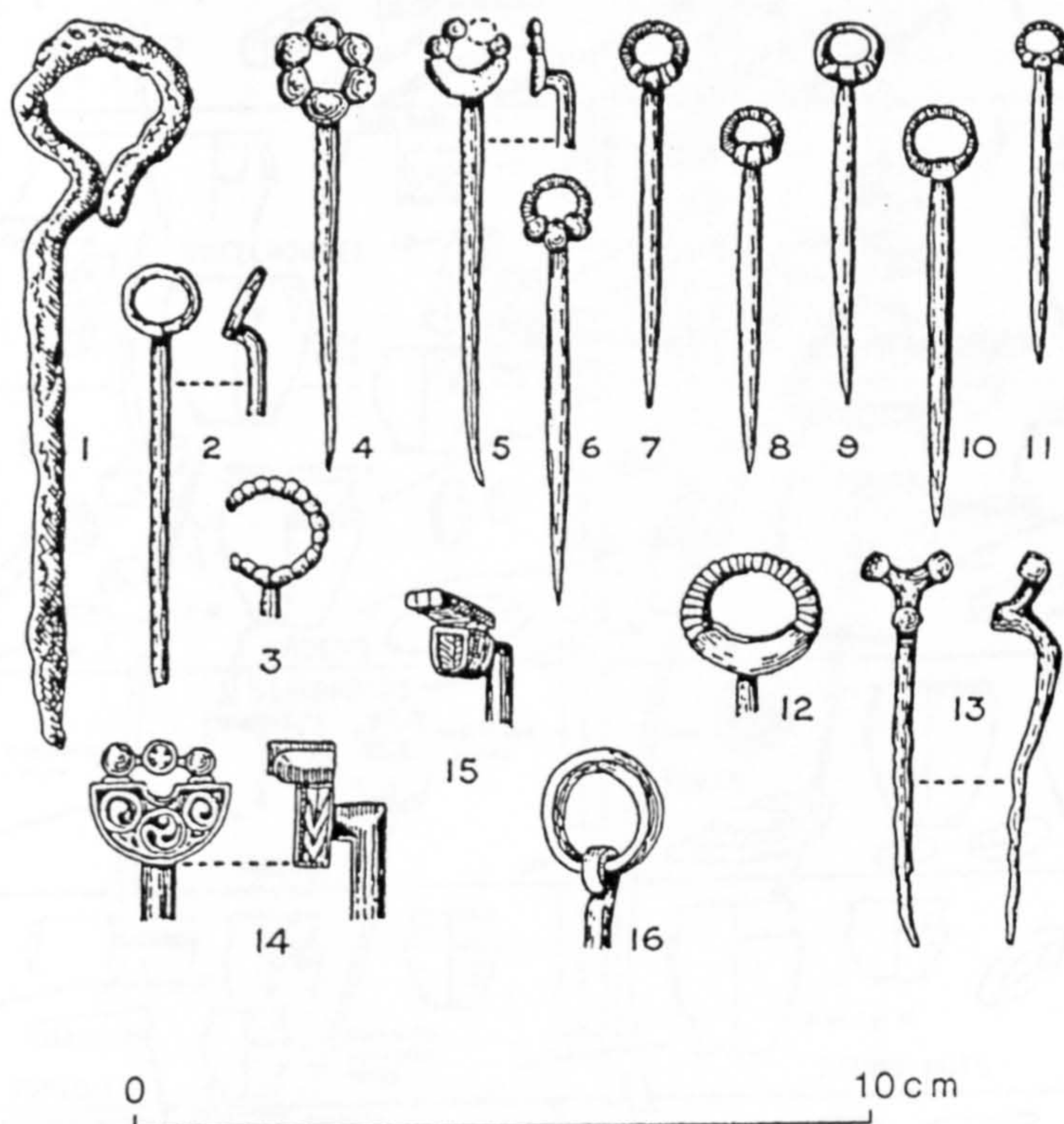


Figure 7. **Ring-headed pins.** Crook: 1 Abernethy Fort (iron). Projecting-head: 2-3 Traprain Law (-, 821); 4-11 Covesea (10 silver, 11 'ibex') (646-47, 649-50, 653, 651, 648, 652); 12 Bowermadden Broch (620); 13 Bruathach a Tuath (372). Hand-pins: 14 Norrie's Law (silver); 15 Dunadd (1264). Loose-ring: 16 Reay (1566) (after Stevenson 1955a).



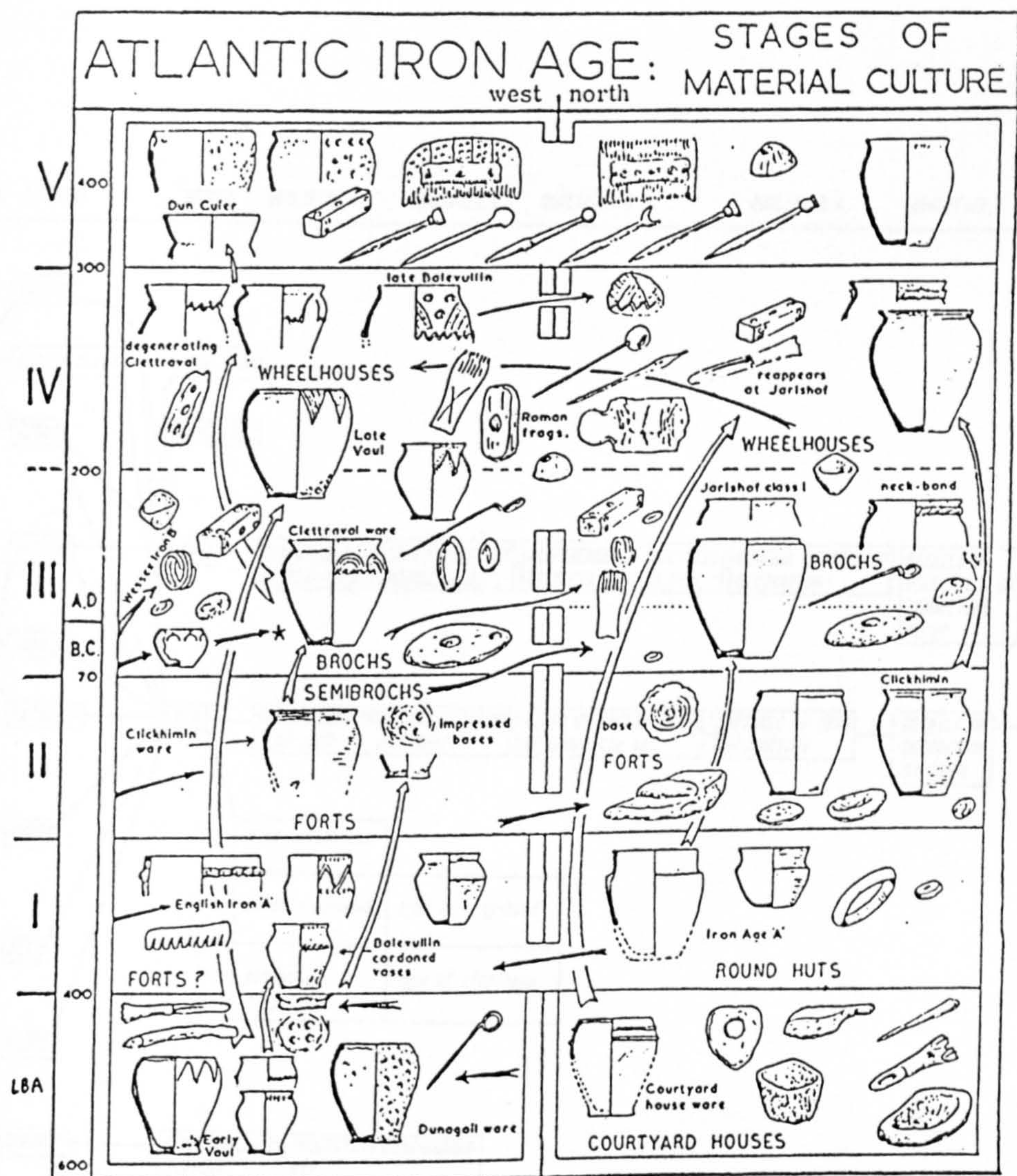


Figure 8. MacKie's suggested stages in the development of Atlantic Iron Age material culture (after MacKie 1973), where the black arrows represent the possible transfer of cultural traits from one region to another, the white arrows the apparent continuity of traits in one area.



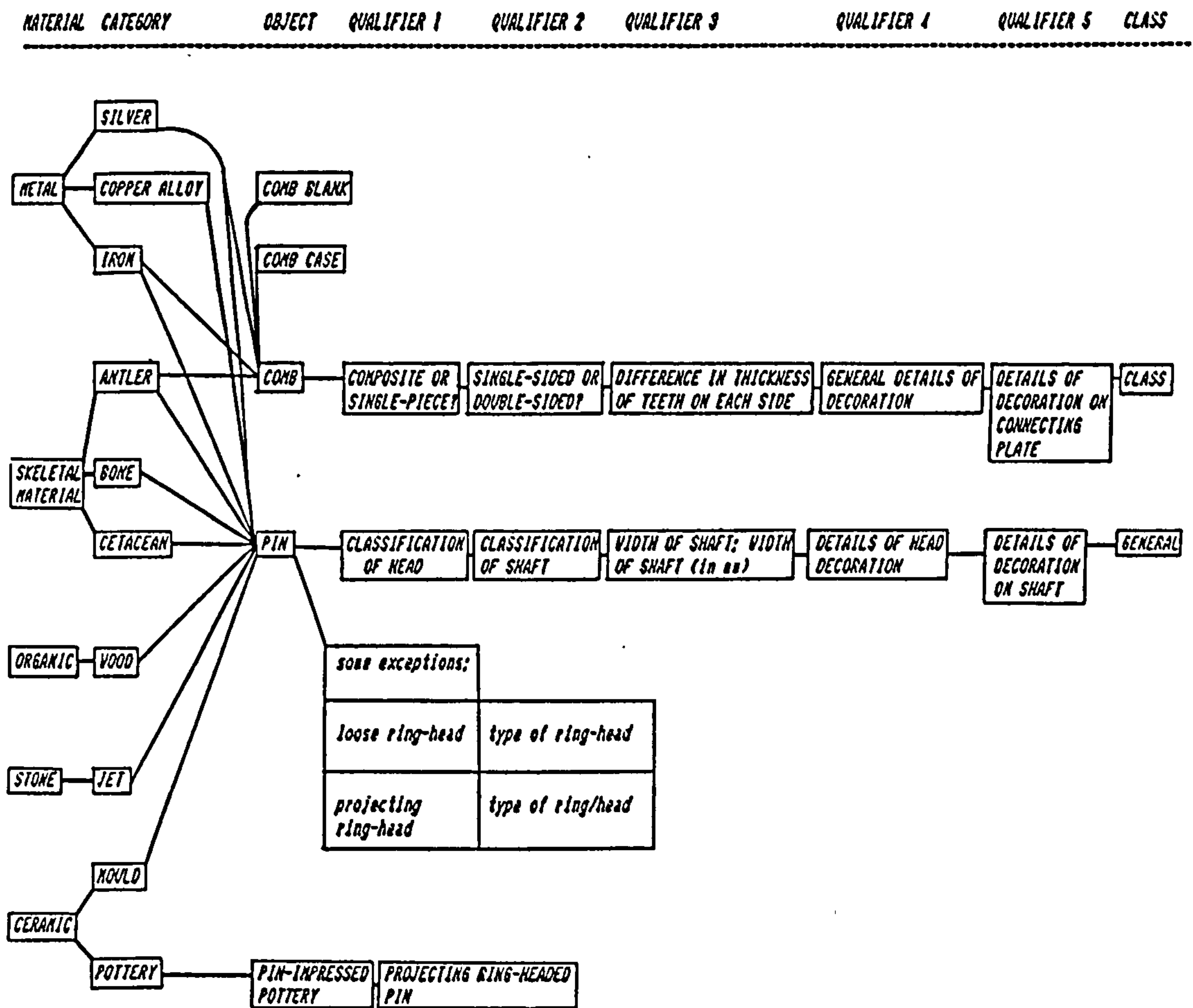


Figure 9. Summary of nature of entries of data fields in appendix II, for which entry varies according to the prior combination of material, category and object.





Figure 10. The distribution of Iron Age bone, antler and metal artefacts from Orkney and NE Caithness in comparison to land capability, soil acidity and topography.



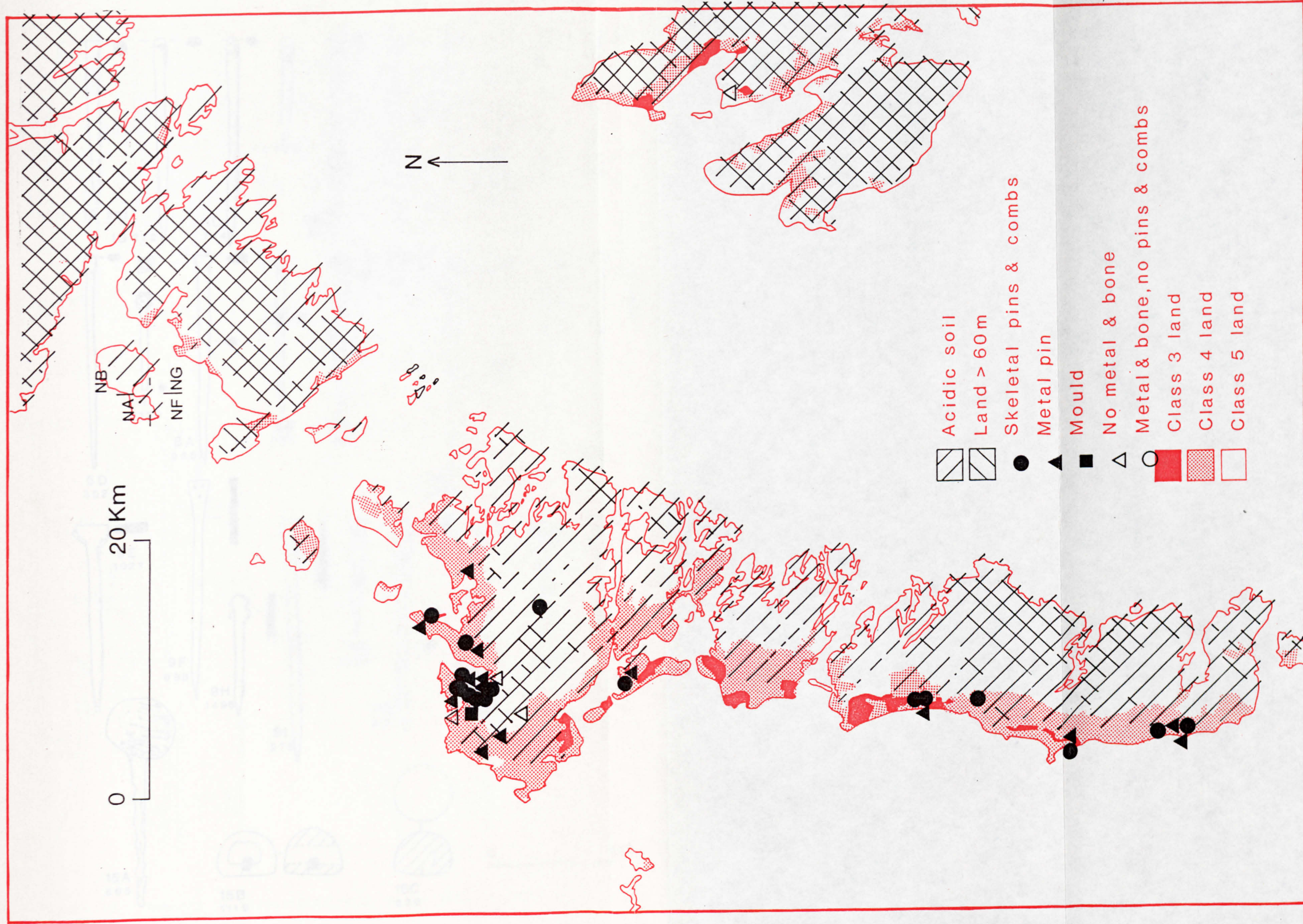


Figure 11. The distribution of Iron Age bone, antler and metal artefacts from a part of the Western Isles in comparison to land capability, soil acidity and topography.



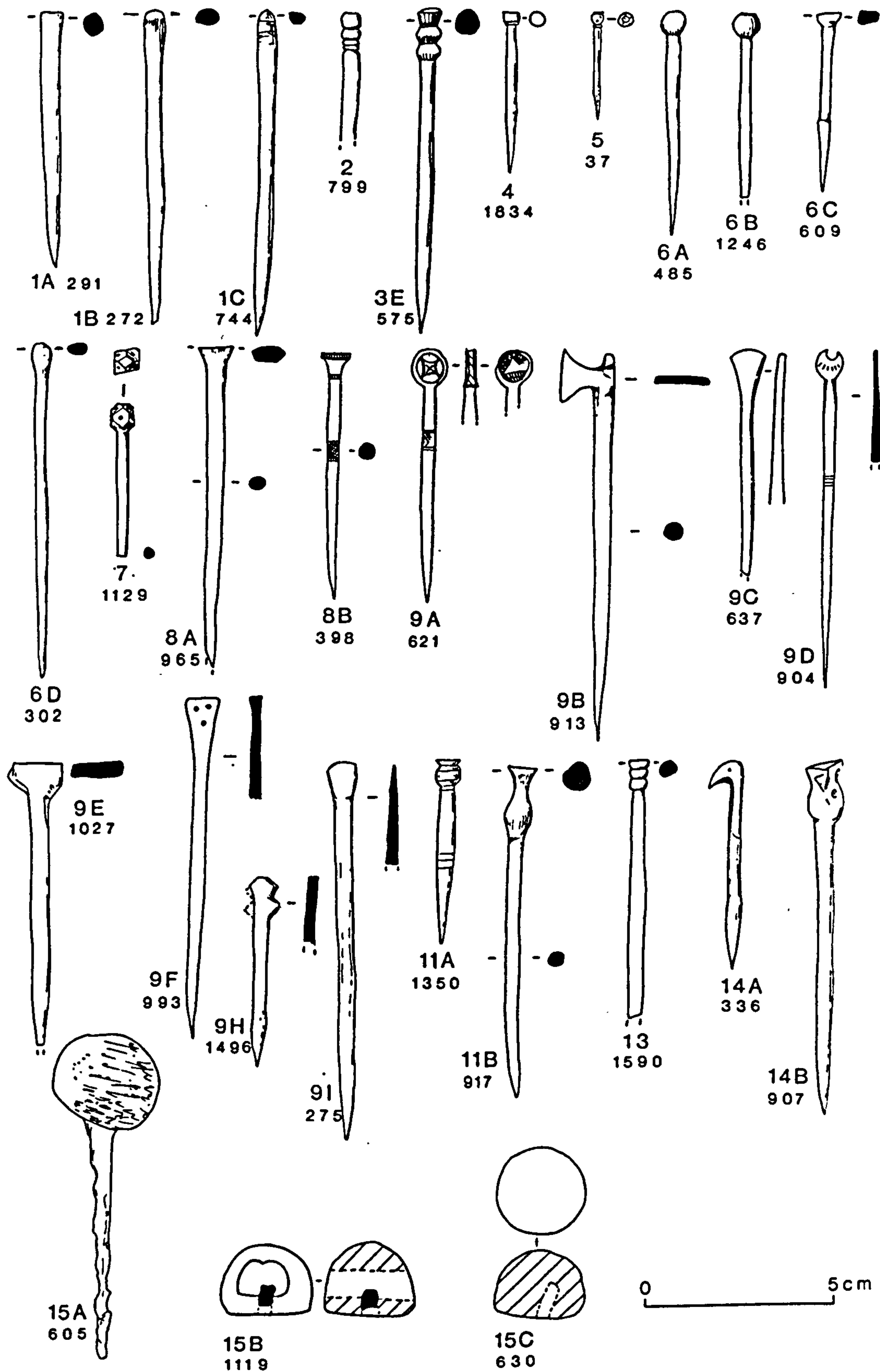


Figure 12. Summary of classification of bone and antler stick pins.

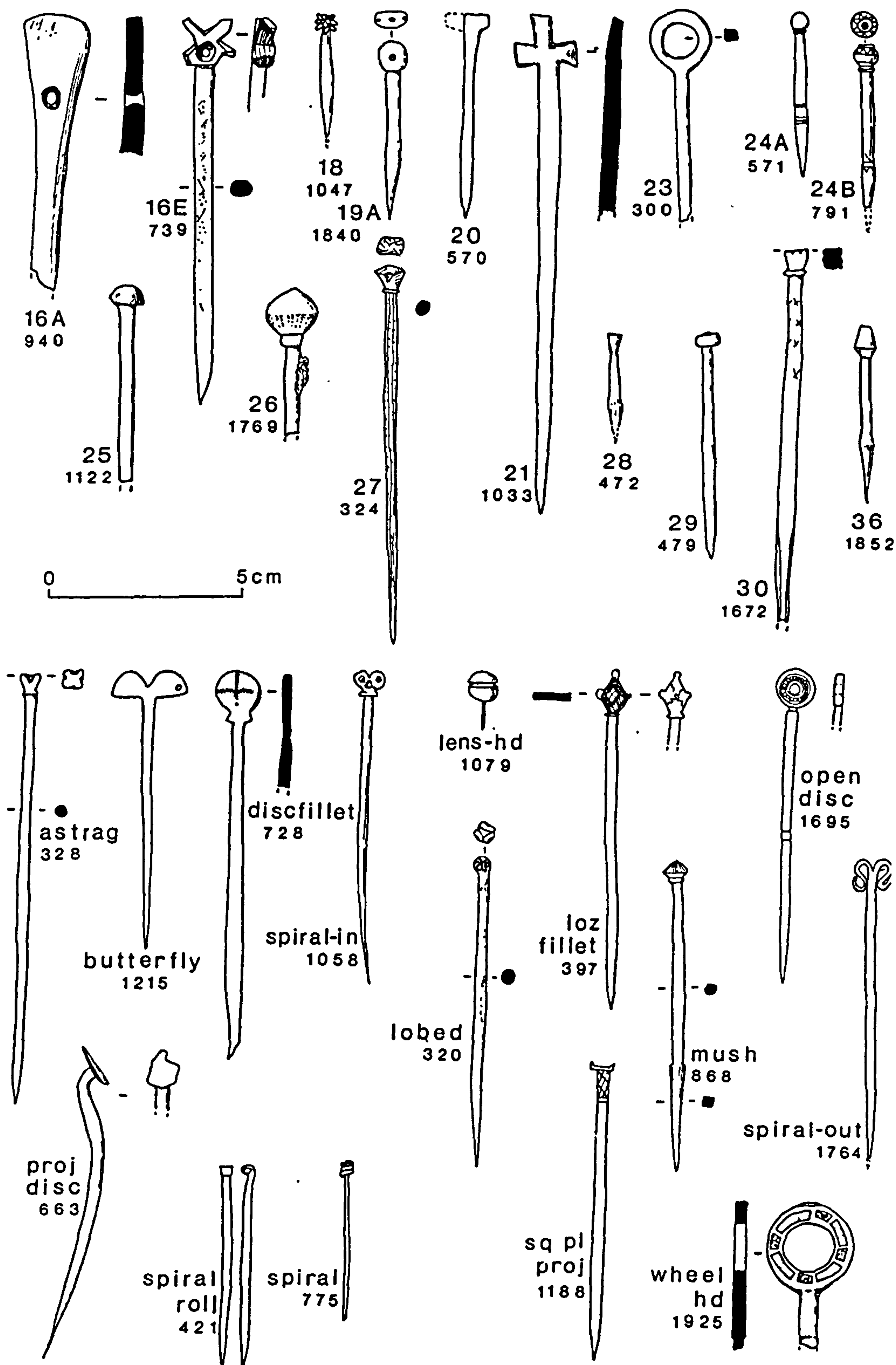


Figure 13. Summary of classification of stick pins and metal-only pin forms.



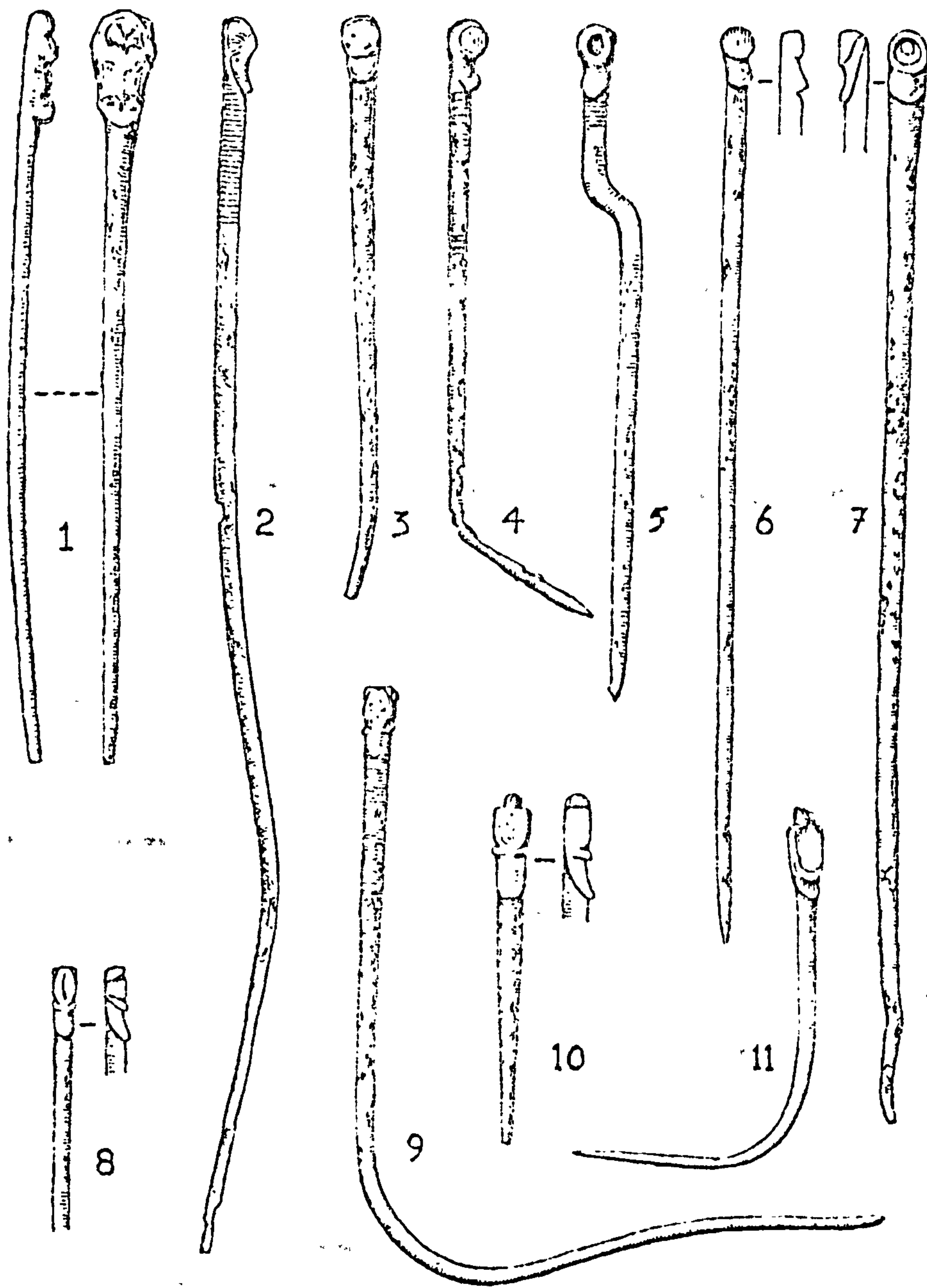
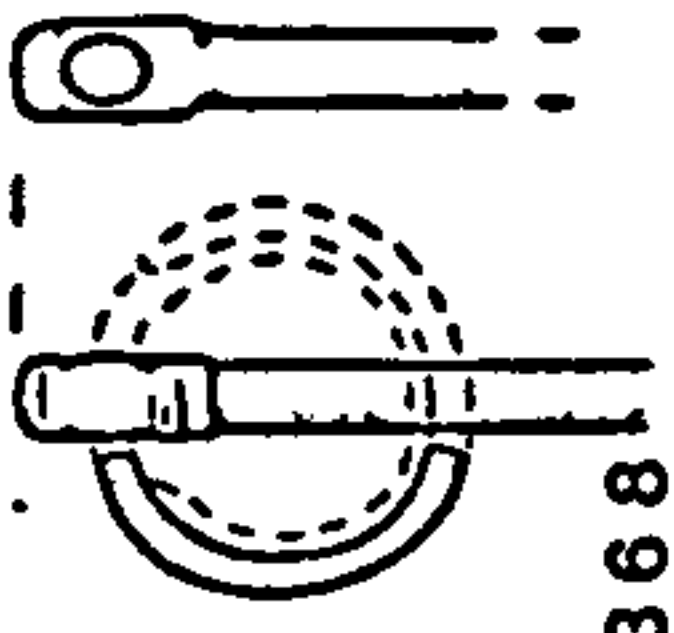
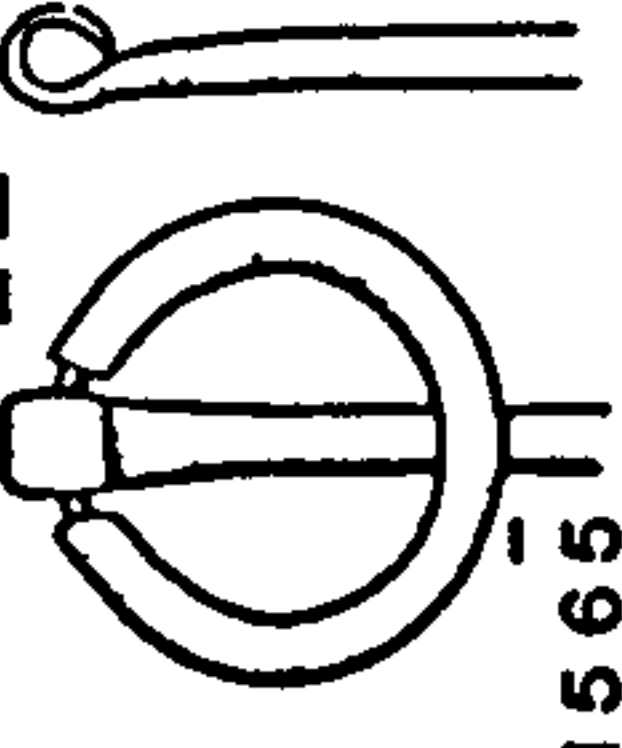
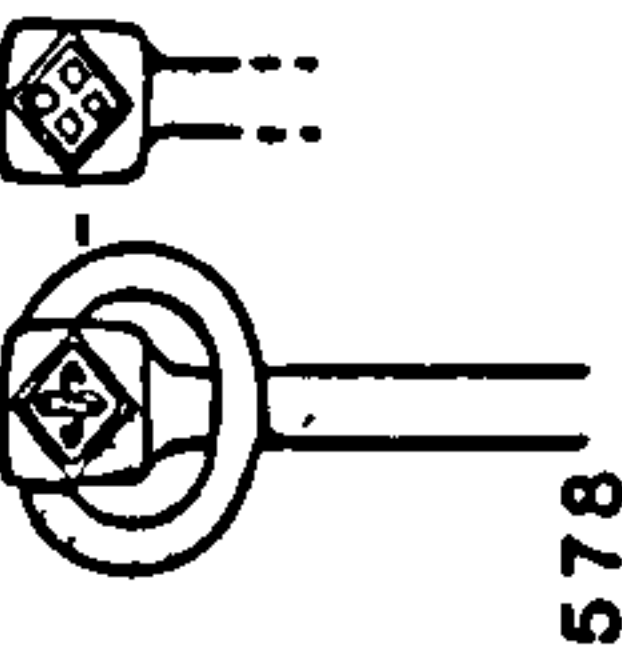
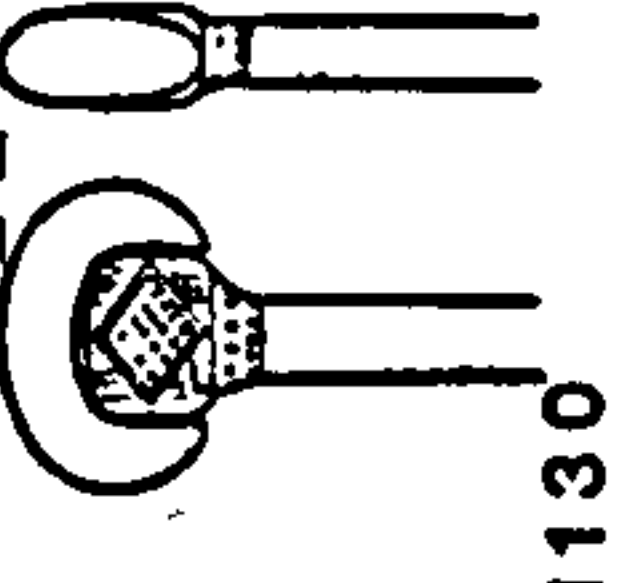
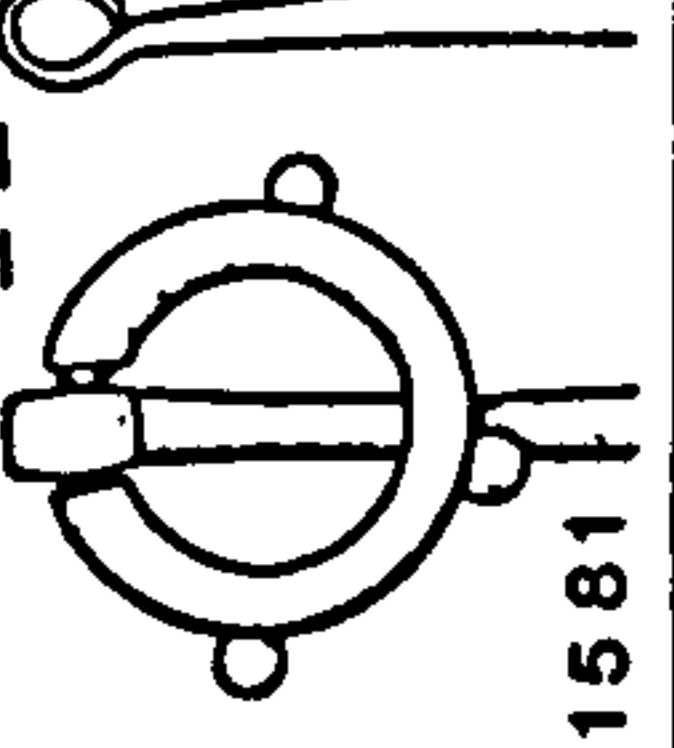
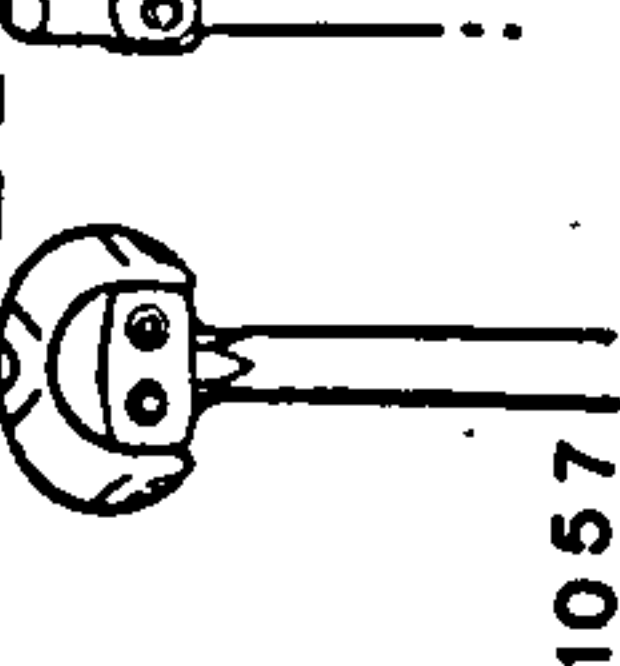


Figure 14. Fowler E pins from Traprain Law: 1-7 proto-zoomorphic (679, 678, 680, 677, 681, -, -); 8-11 zoomorphic (682-83, 816, 835) (after Kilbride-Jones 1980a).

PIN RING	LOOP	POLYHEDRAL	GRUTCH	NEEDLE	BALUSTER
SPIRAL					 368
PLAIN	 1565	 1578			
KIDNEY		 1130			
RIB					
KNOB	 1581				
STIRRUP					 1057

0 5 cm

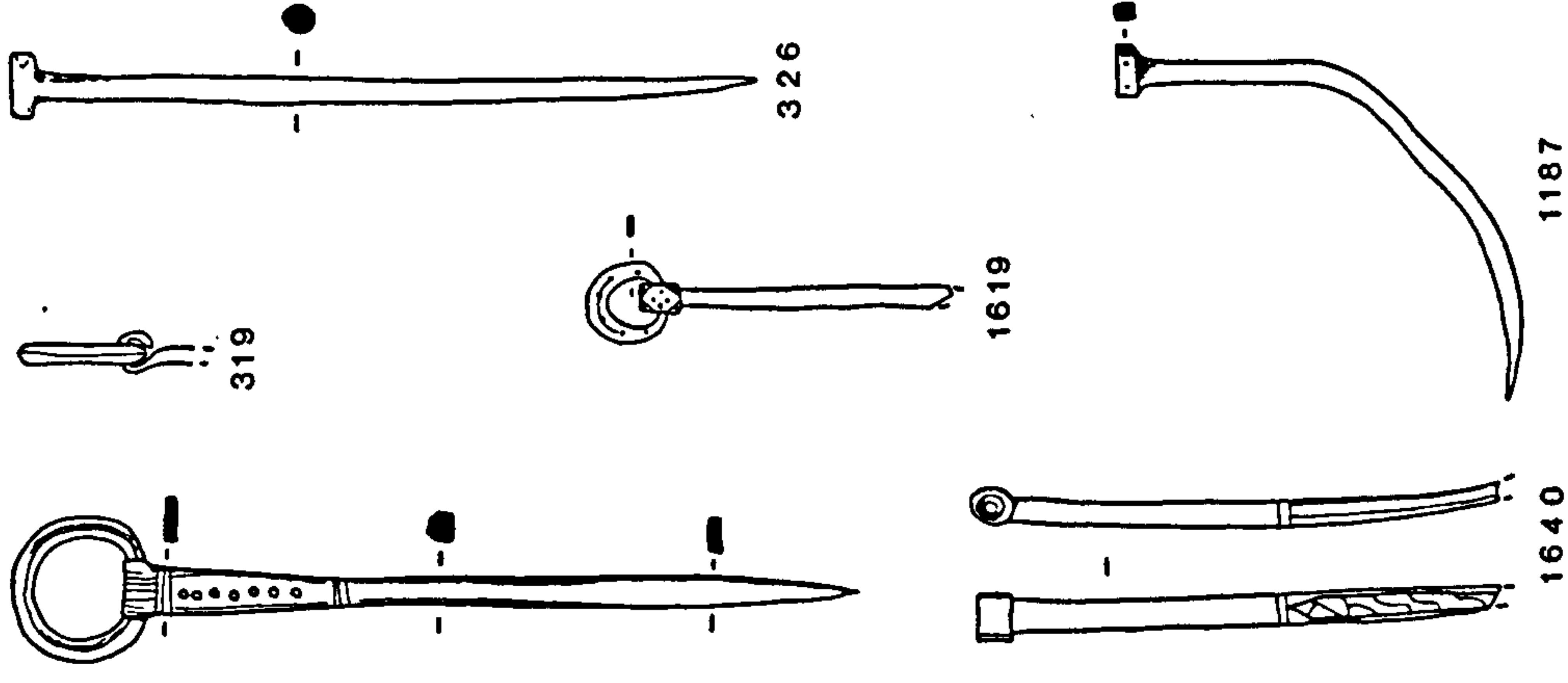


Figure 15. Summary of classification of loose-ring heads (based upon Fanning 1983a) and illustrations of further examples.



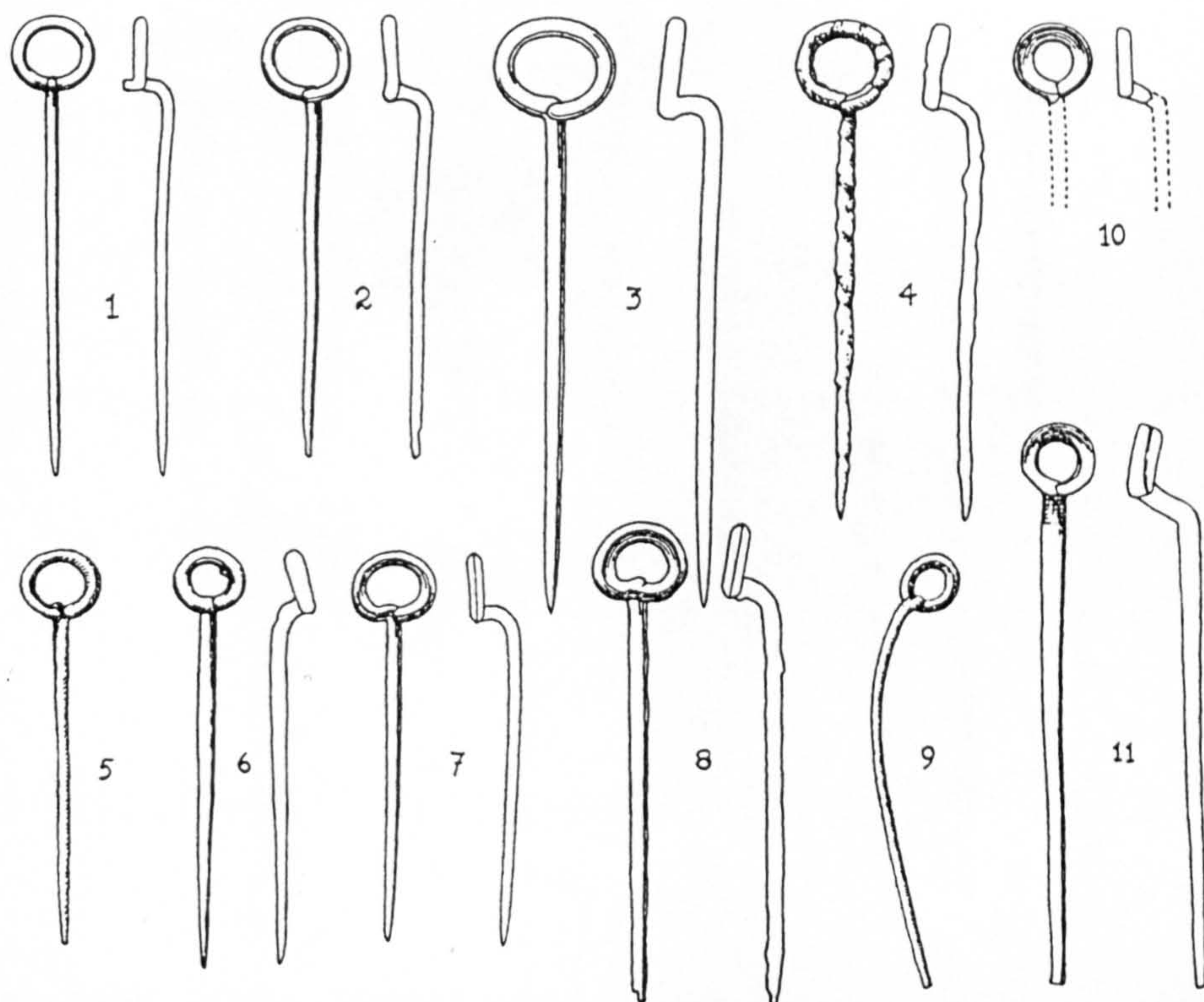


Figure 16. Projecting ring-headed pins 1 Dùn an Fheurain (1294); 2, 10 Culbin Sands; 3 Angelsey; 4 Laws of Monifieth (555); 5, 7 Midhowe (185-86); 6, 9 Traprain Law; 8 Ness (801); 11 Dunadd (1265) (after Kilbride-Jones 1980b).

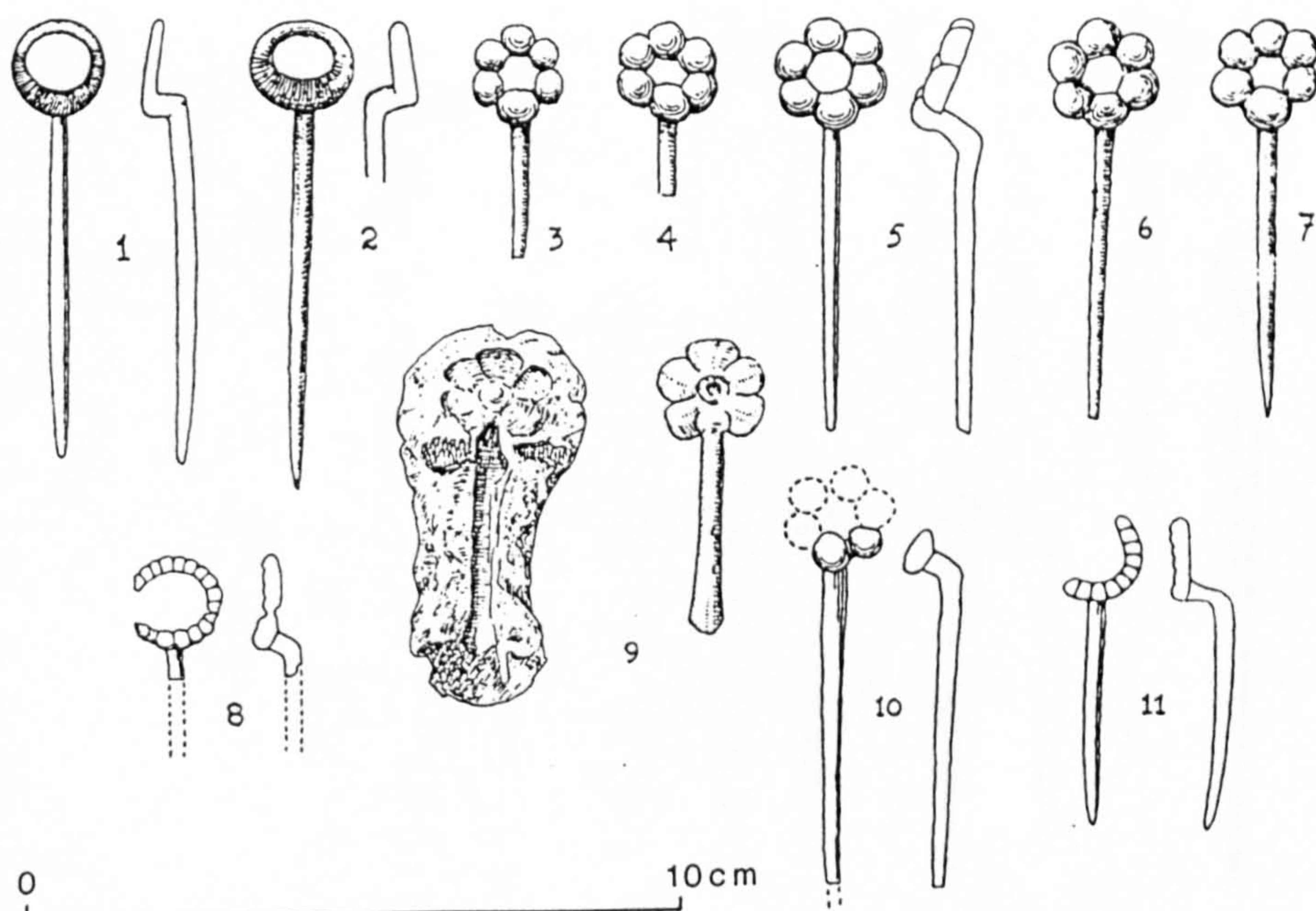


Figure 17. Semi-corrugated pins 1 Gurness (154); Keady, Co Armagh; Rosette type pins 3-6 Traprain Law (817, 822, -, -); 7 Covesea (646); 9 Traprain Law (861); 10 Aesica, Northumberland; Beaded type pins 8 Traprain Law (821); 11 Tentsmuir (903) (after Kilbride-Jones 1980b).



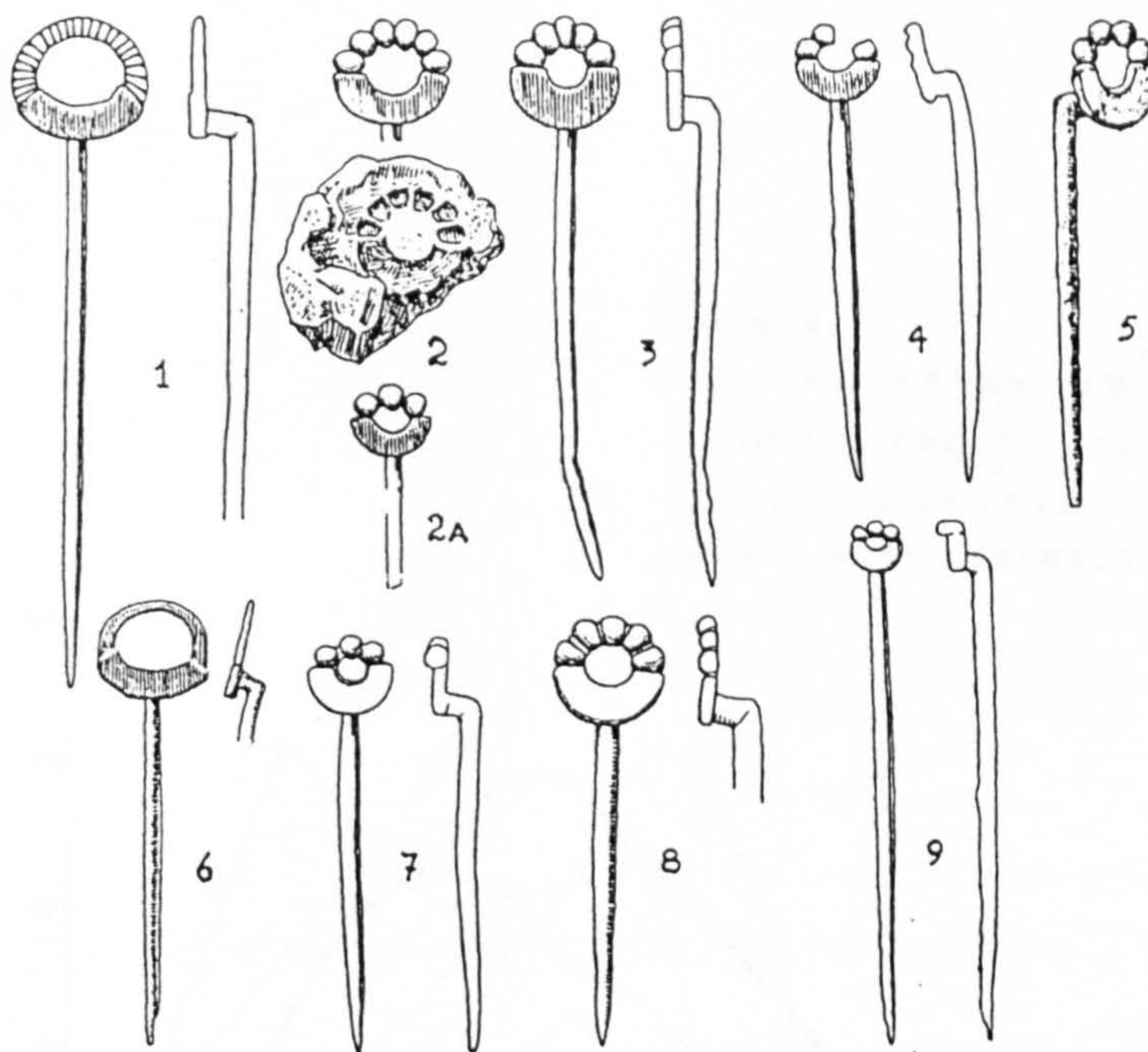


Figure 18. **Semi-beaded pins** 1 Bowermadden (620); 6 similar but plain, Lydney, Glos; **Proto hand-pin** 2-3 Traprain Law (864, 825); 4 Covesea (647); 5 Corbridge, Northumberland; 7 no locality; 8 silver, Ireland; 9 **Handpin** Traprain Law (826) (after Kilbride-Jones 1980b).

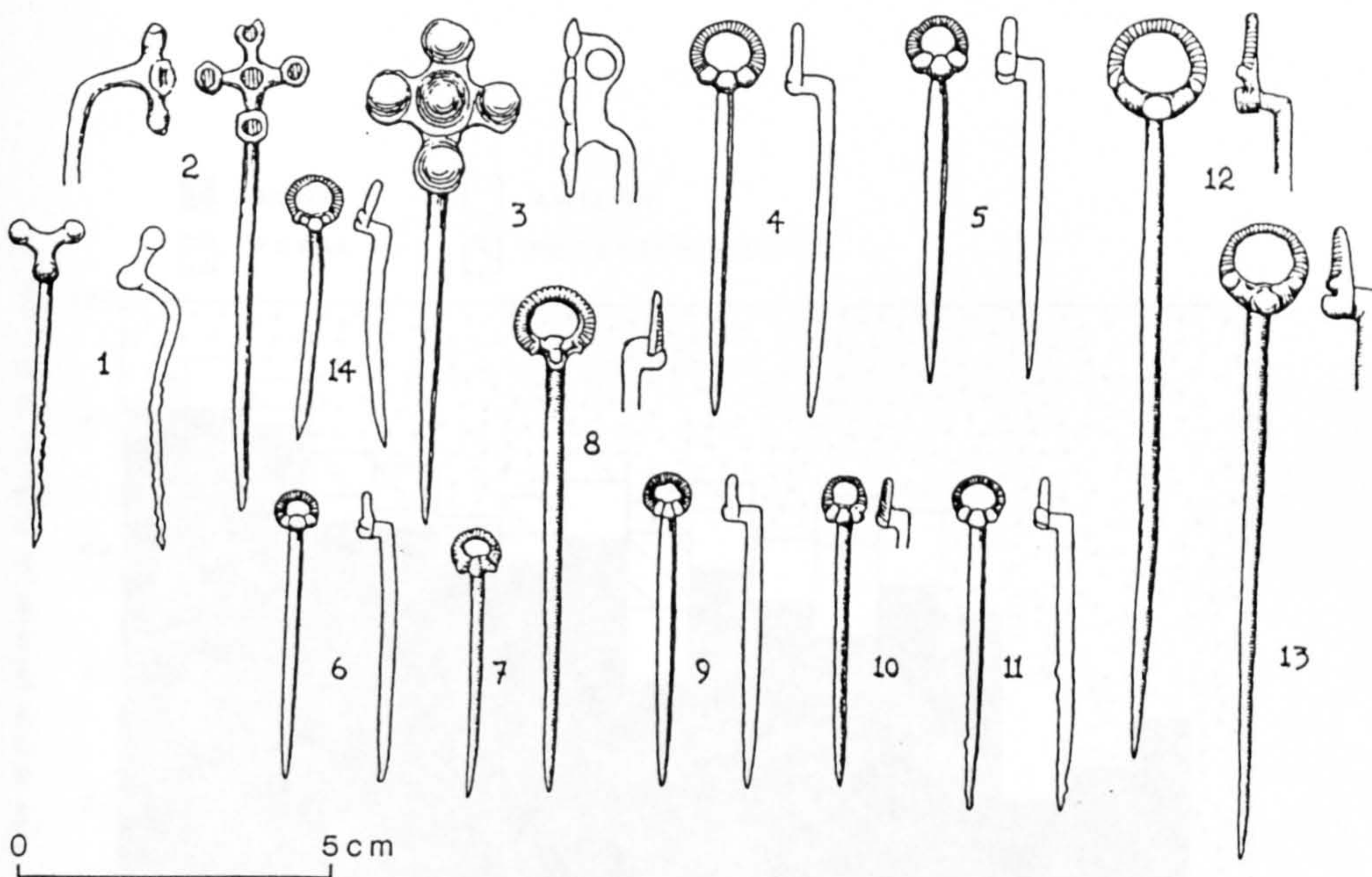


Figure 19. **Degenerate ibex** 1 Bruathach a Tuath (372); 2 Balevullin (1763); 3 Co Waterford; **Corrugated and beaded** 4 North Berwick; 5-7, 9 Covesea (648, -, 652, 651, 650); 10 Lydney, Glos; **Ibex-headed** 8 Sandy, Bedfordshire; 12-13 Ireland (after Kilbride-Jones 1980b).



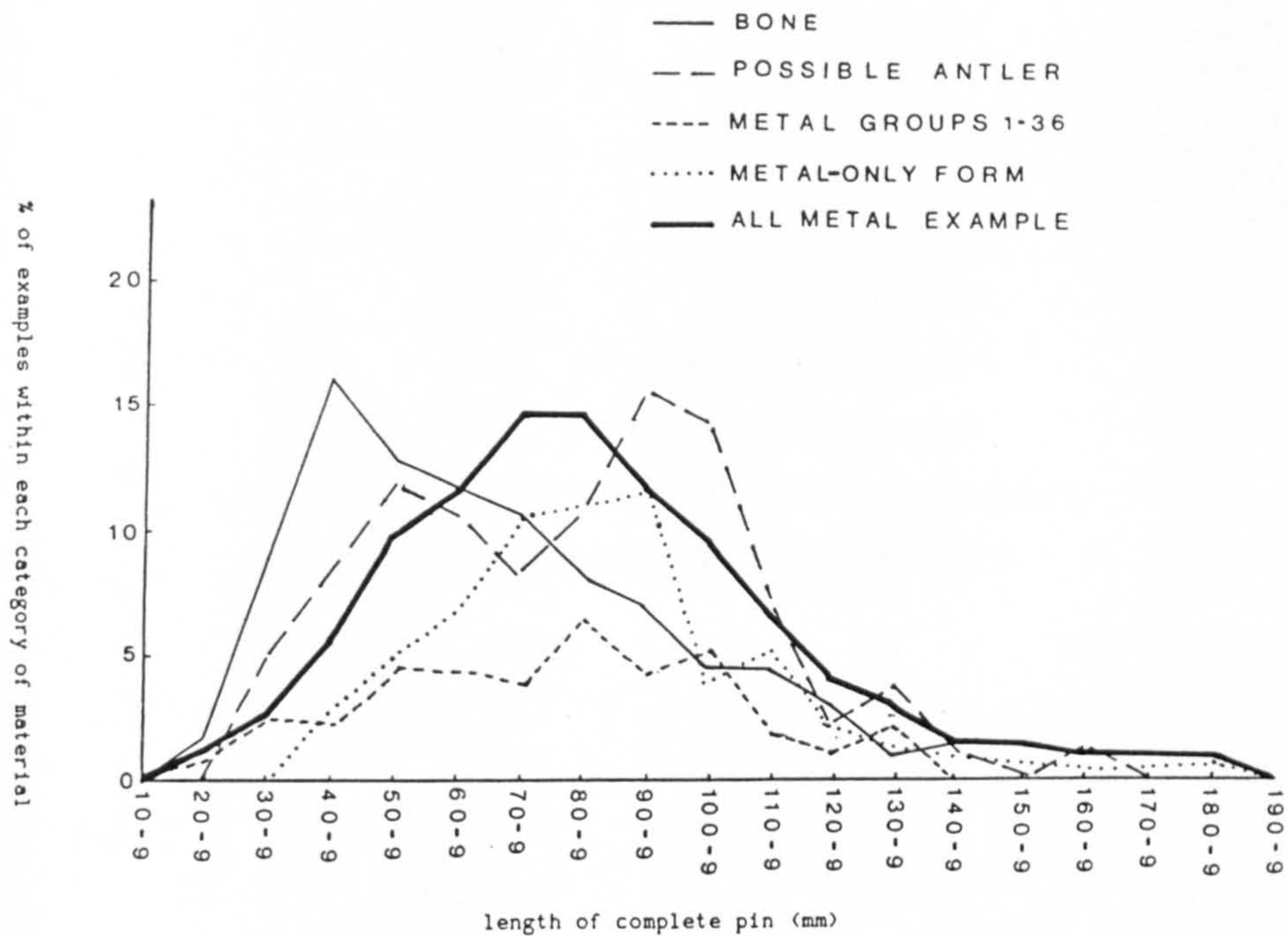


Figure 20. Comparison of pin length for different categories of material.

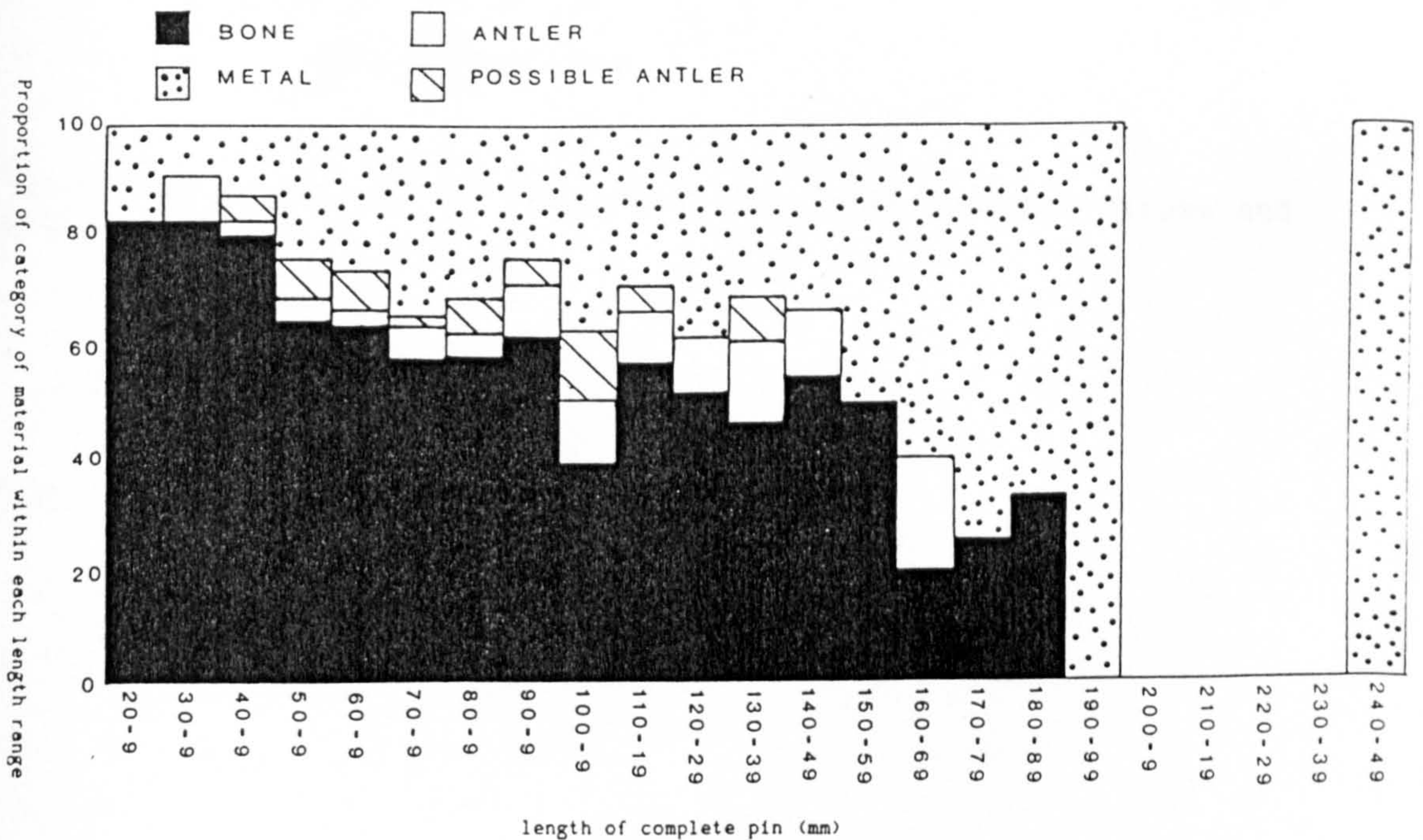


Figure 21. Comparison of proportions of category of material within each range of pin lengths.

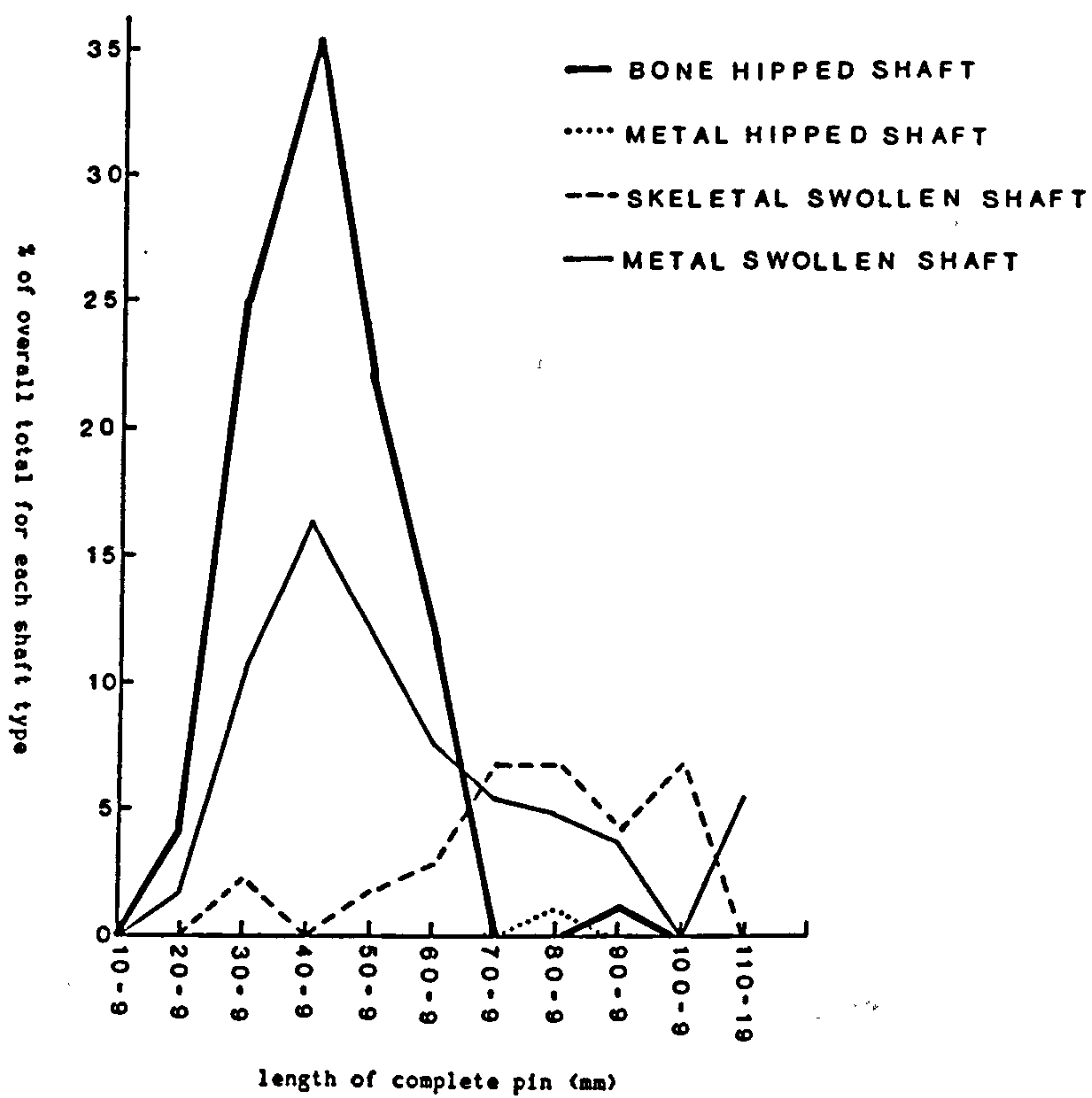


Figure 22. Comparison of lengths of metal and skeletal hipped and swollen shafts.



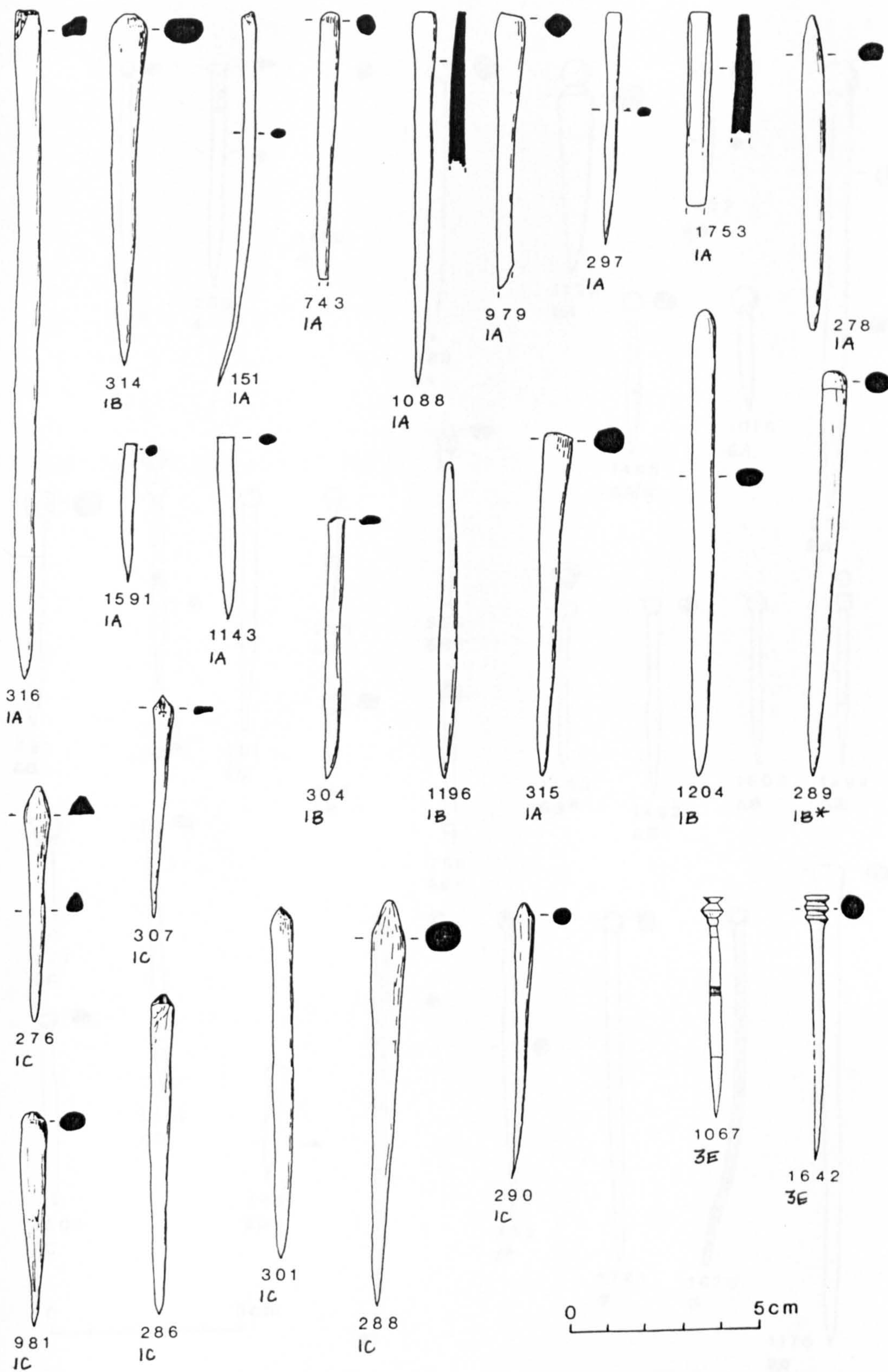


Figure 23. Pins of groups 1-3.

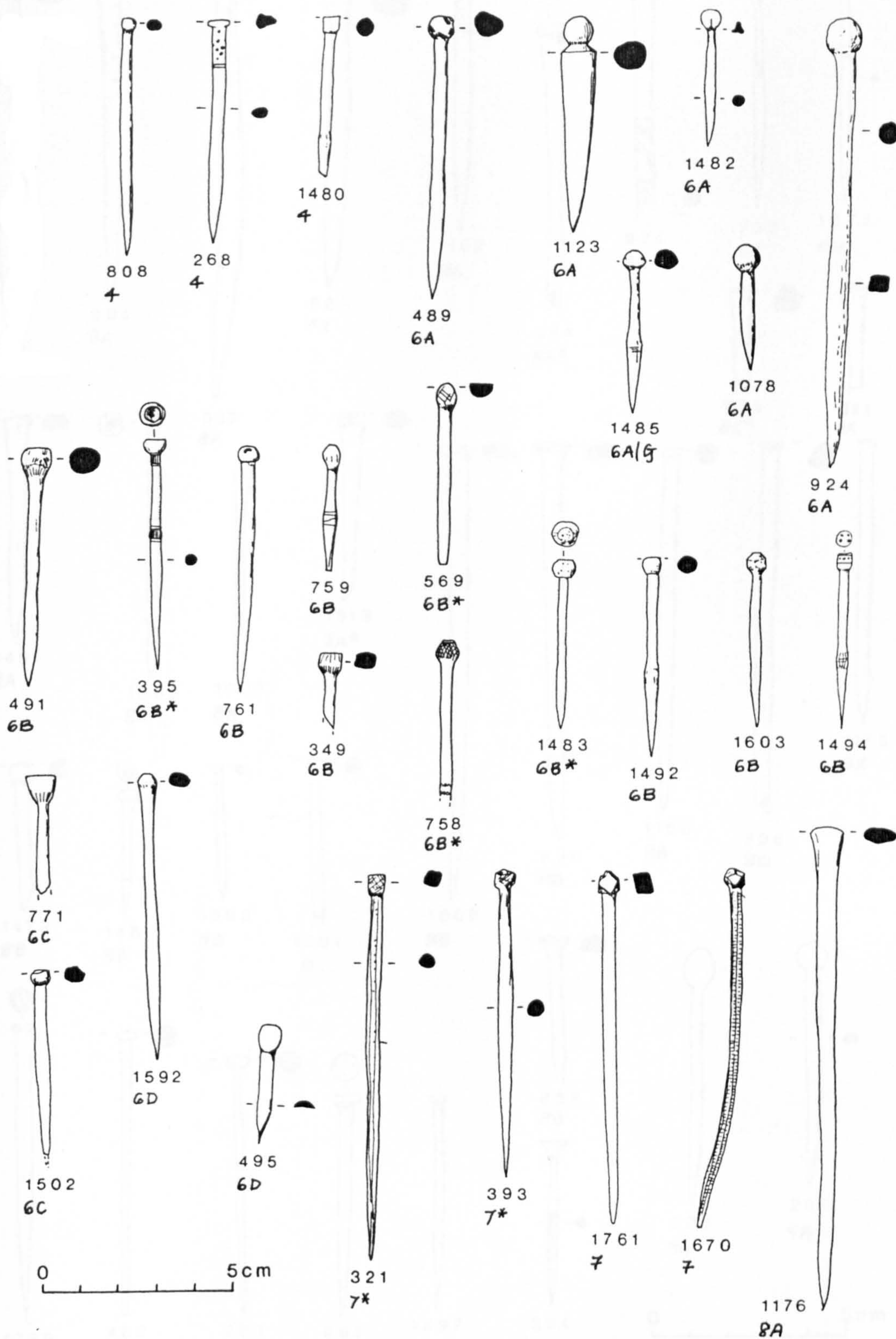


Figure 24. Pins of groups 4-8.



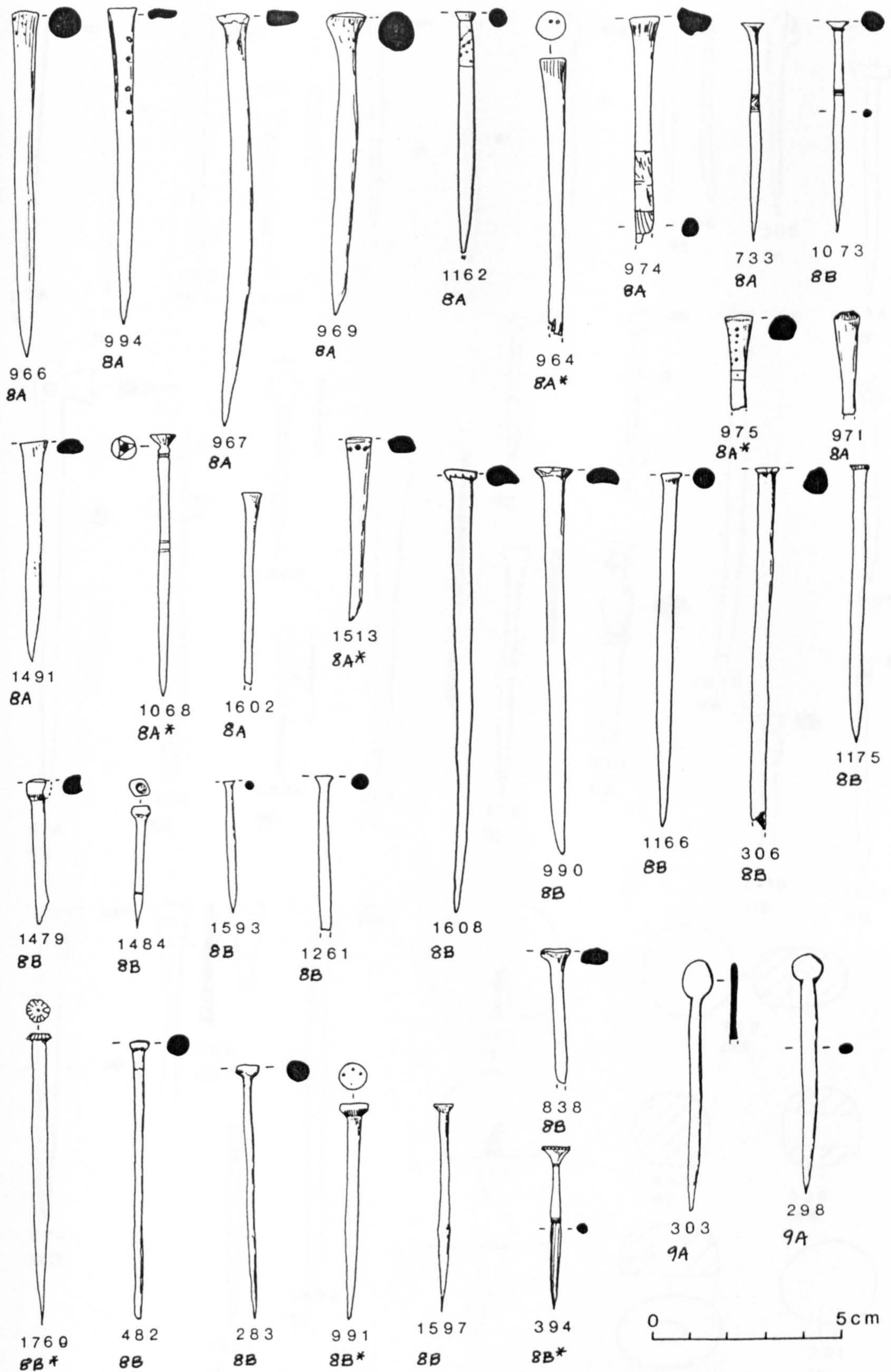


Figure 25. Pins of groups 8-9.



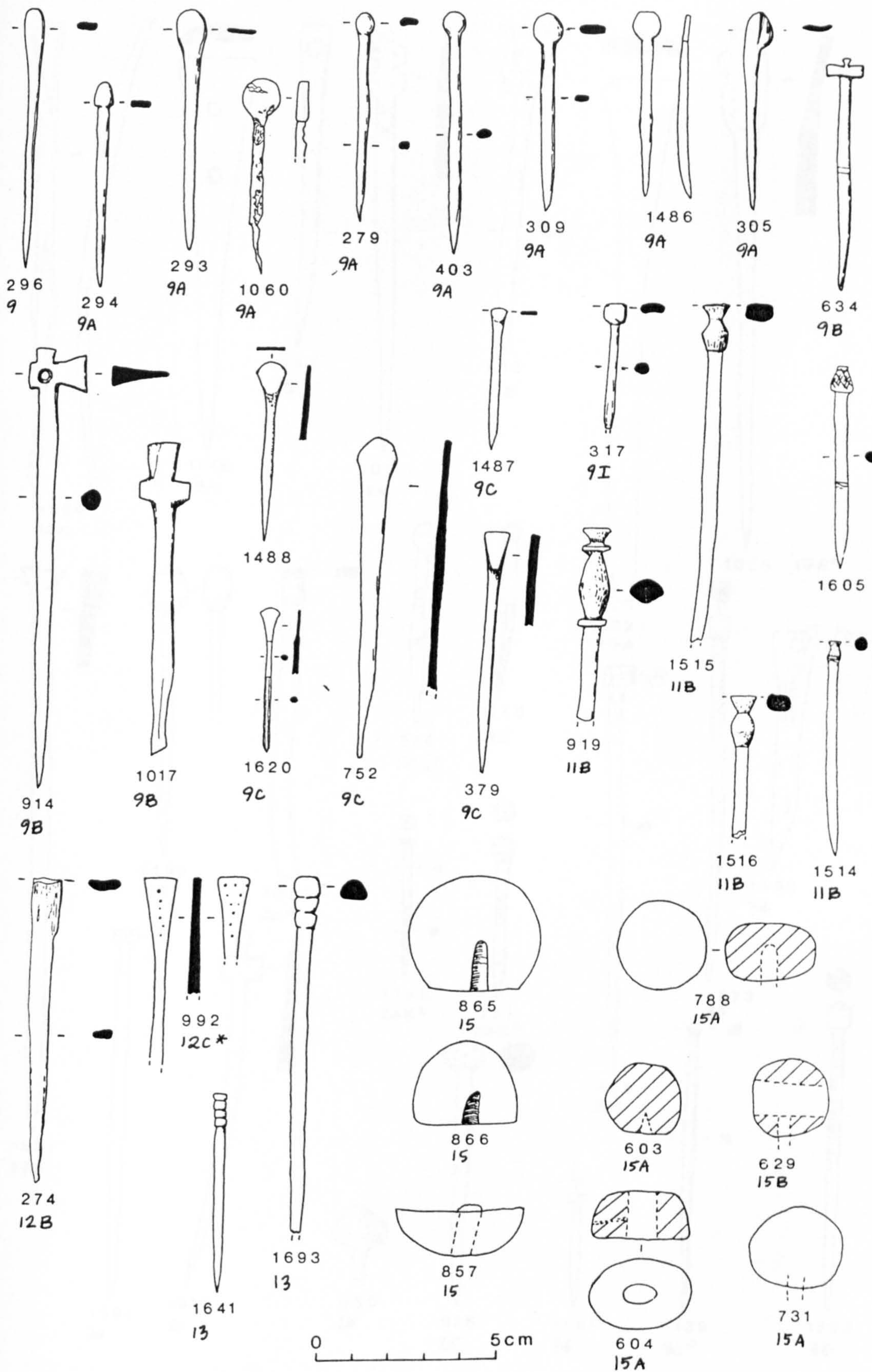


Figure 26. Pins of groups 9-15.



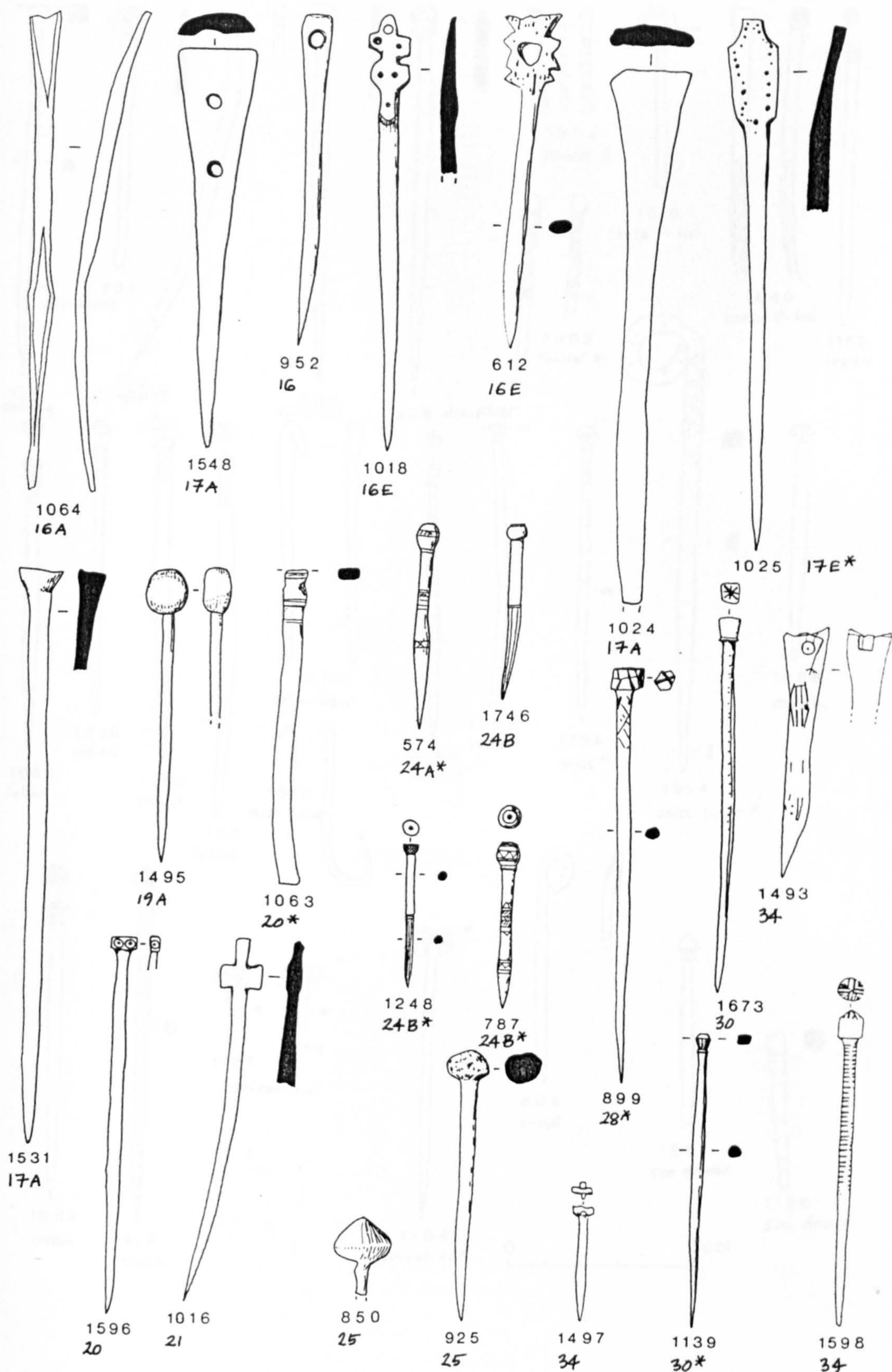


Figure 27. Pins of groups 11-34.

0 10cm



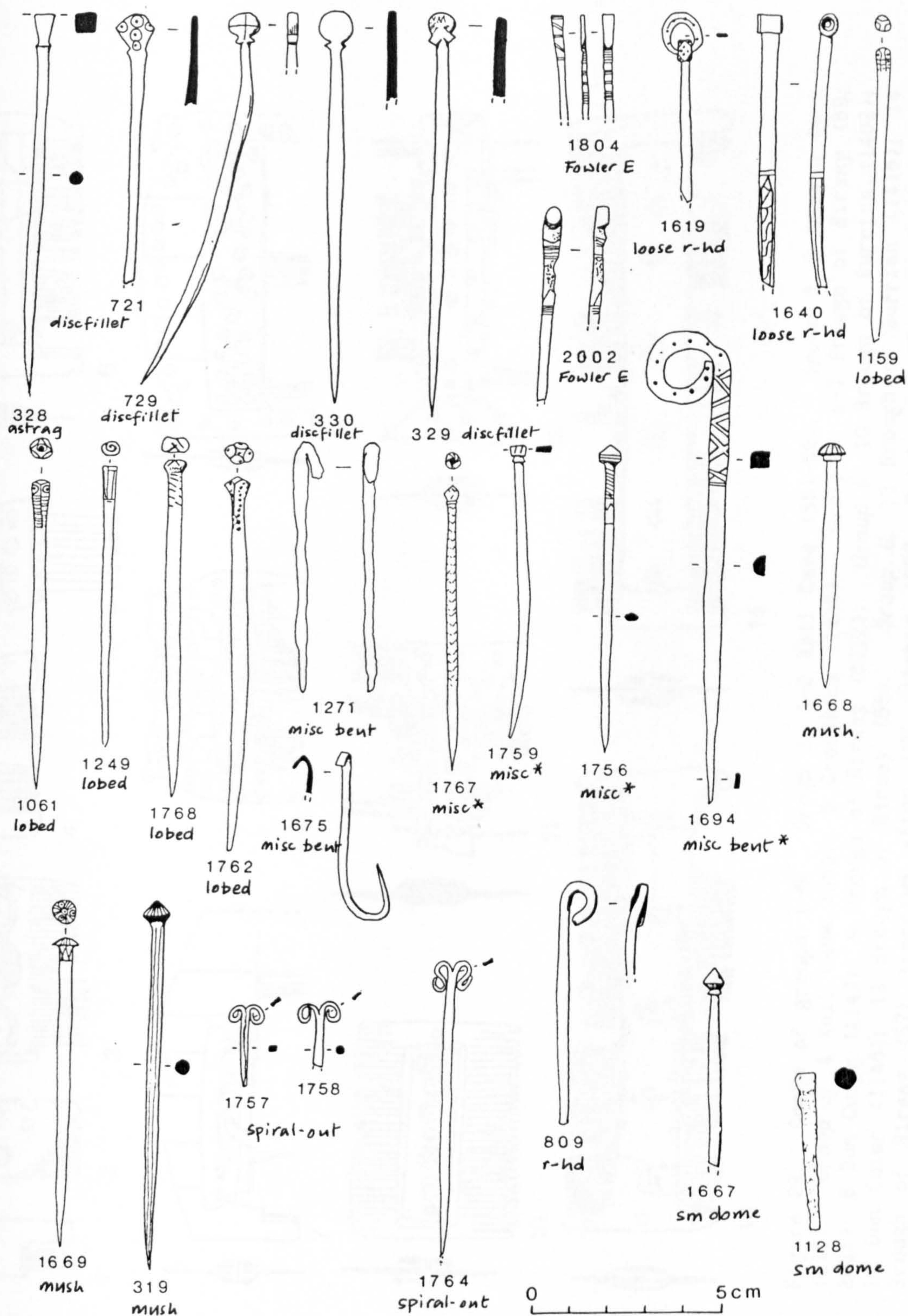


Figure 28. Metal-only pin forms.



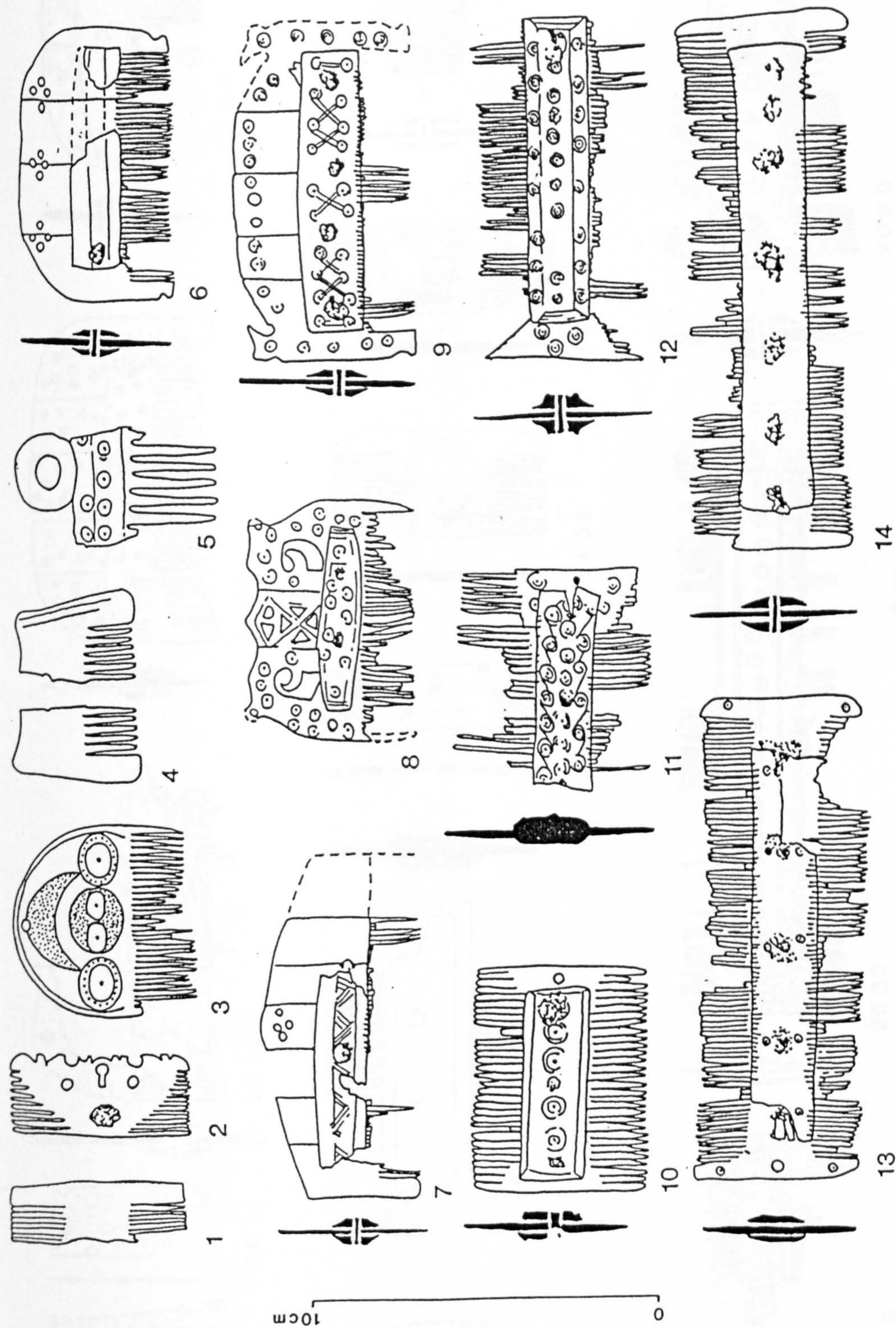


Figure 29. Combs of groups 1-6. Group 1: 1-2 Keil Cave (551-52). Group 2: 3 Ghegan Rock (215). Group 3: 4 Keil Cave (550); 5 Crosskirk (1625). Group 4: 6-7 Brough of Birsay (59; 2011); 8 Dun Cuier (1147); 9 Brough of Birsay (2012). Group 5: 10 Brough of Burrian (1402); 11 Dun Cuier (1148); 12 Brough of Birsay (56). Group 6: 13 Brough of Burrian (1415); 14 Brough of Birsay (57) (redrawn after JNG Ritchie 1967, Fairhurst 1984, CL Curle 1982, MacGregor 1974, Young 1956).



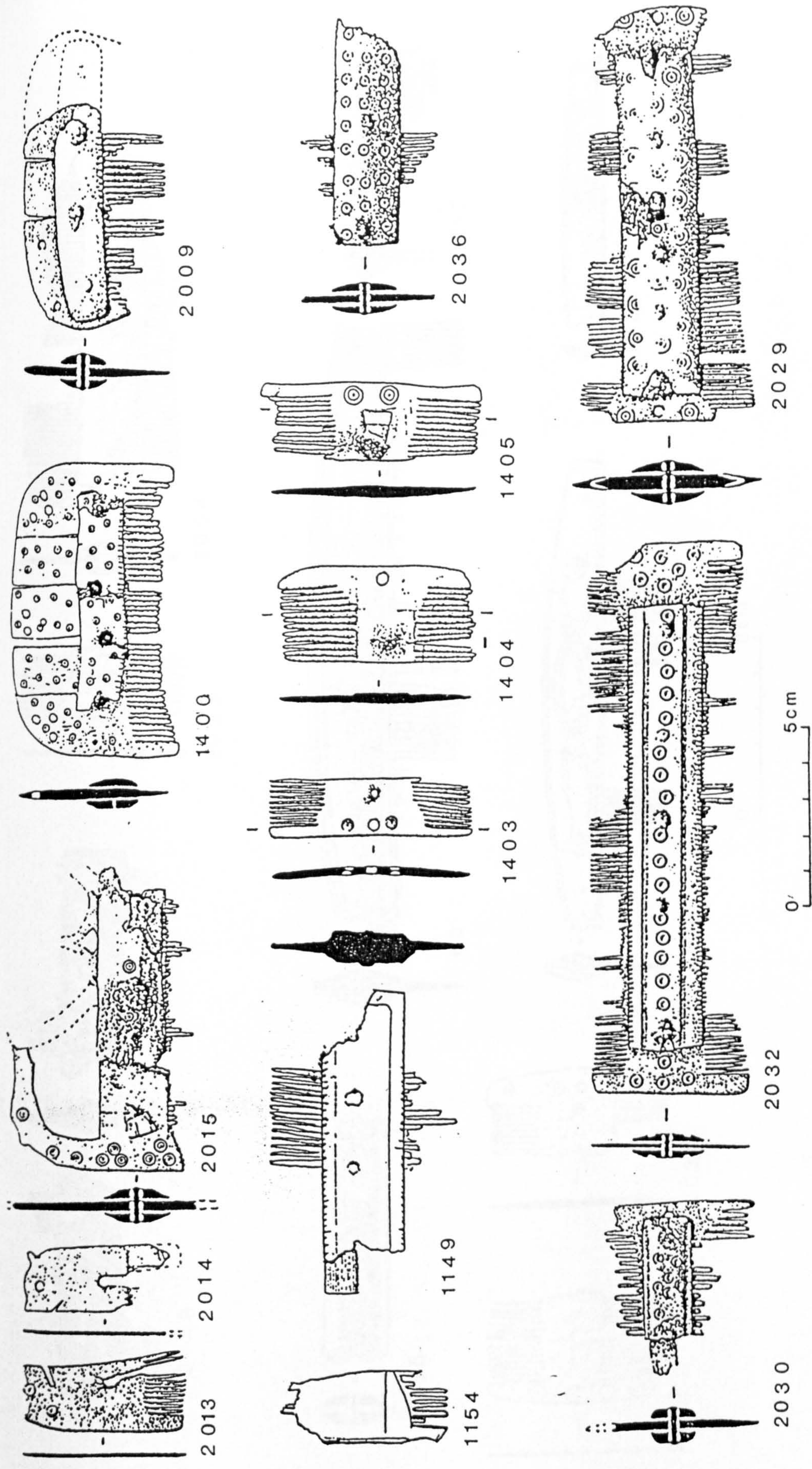


Figure 30. Examples of combs of groups 4-5 (after C L Curle 1982; MacGregor 1974; Young 1956).



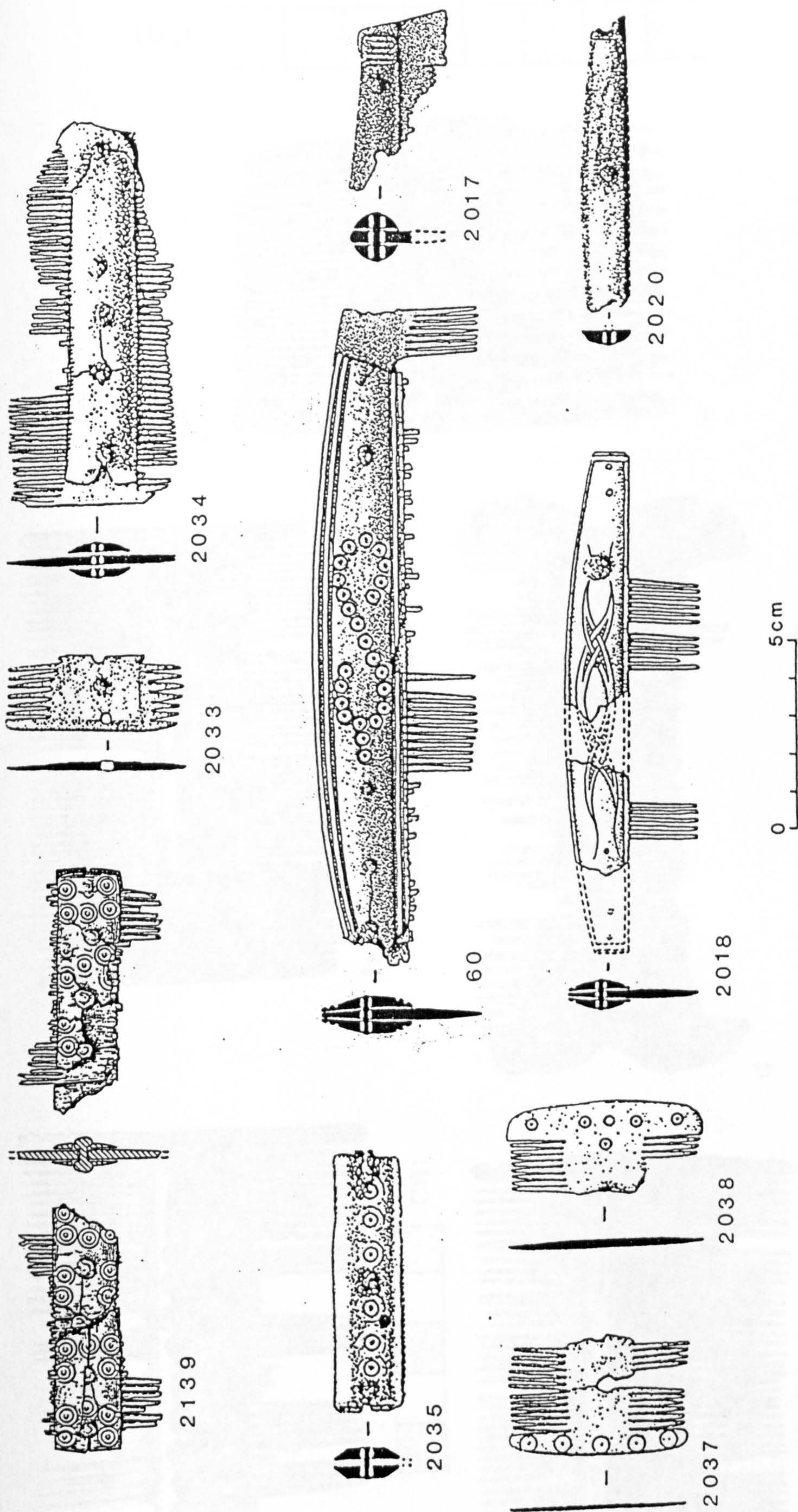


Figure 31. Examples of combs of groups 6-8 (after Current Archaeology 112; C L Curle 1982).



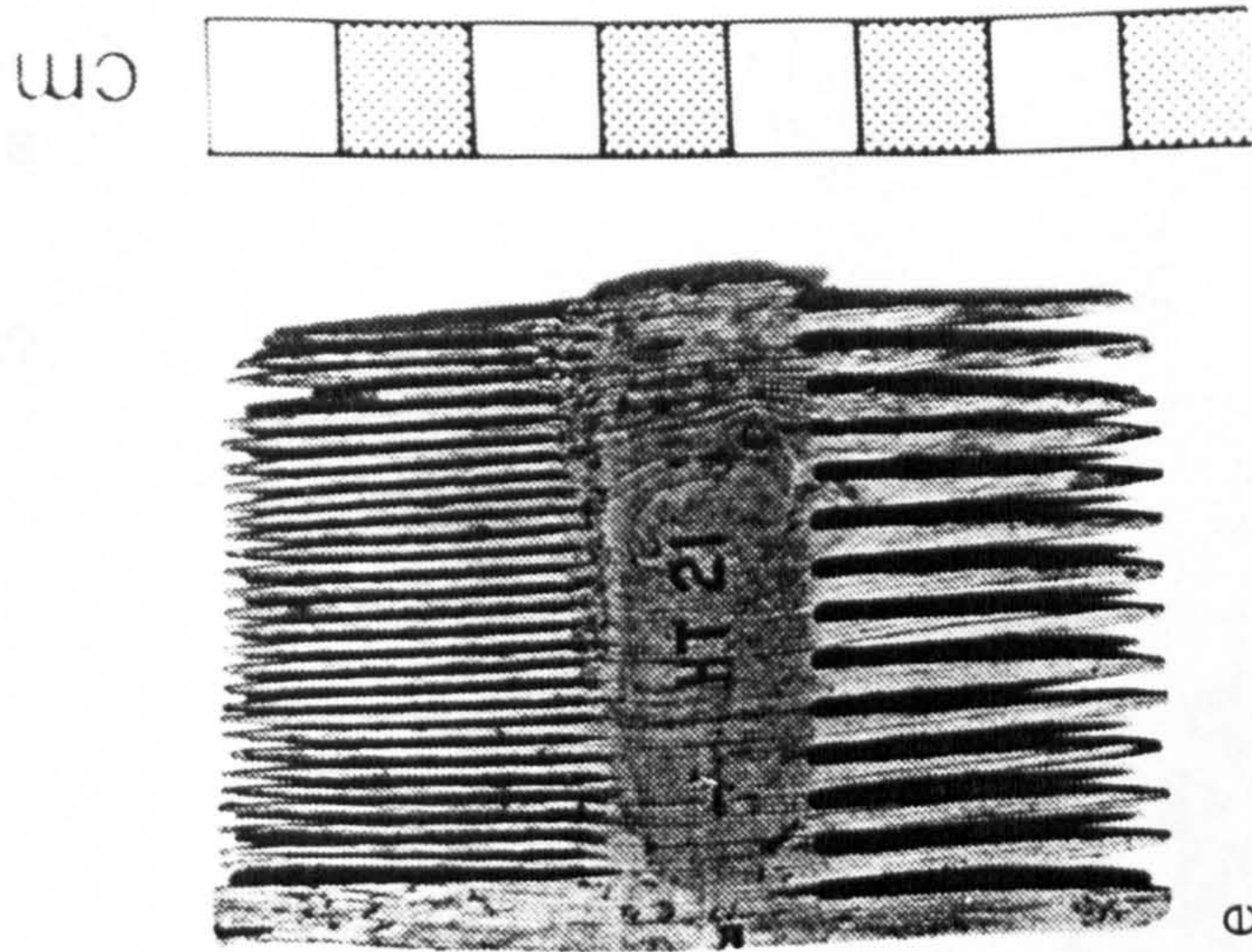
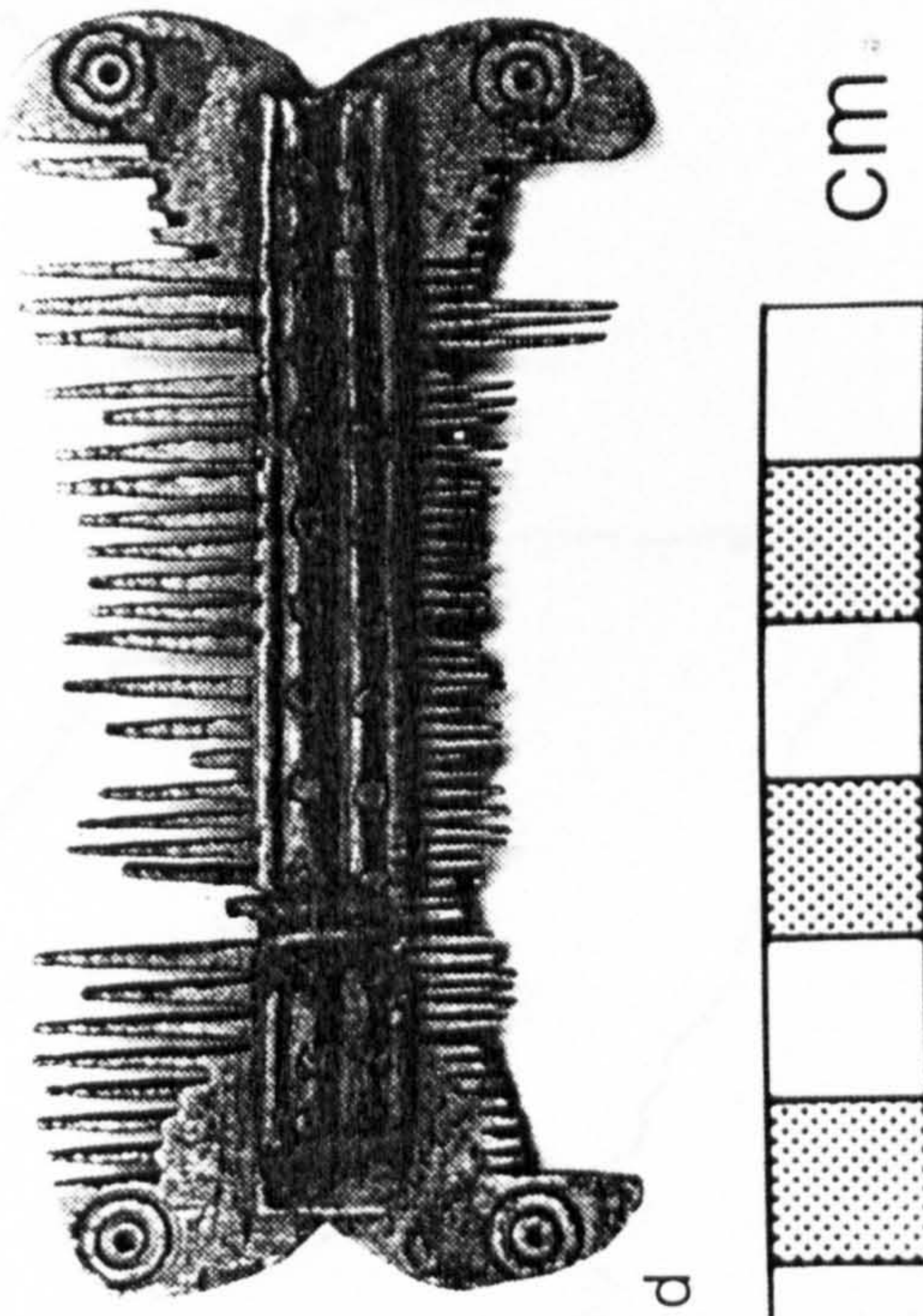
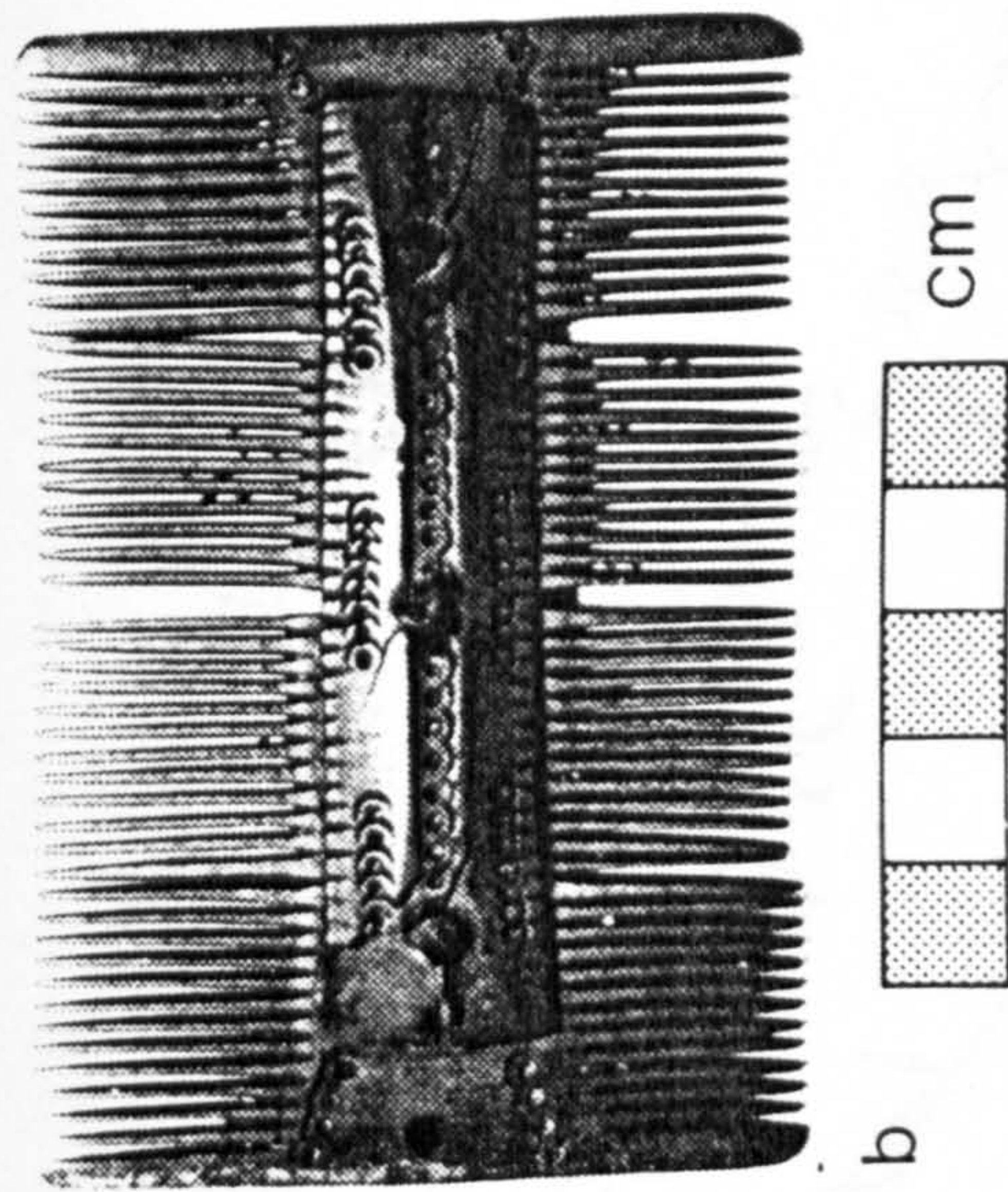
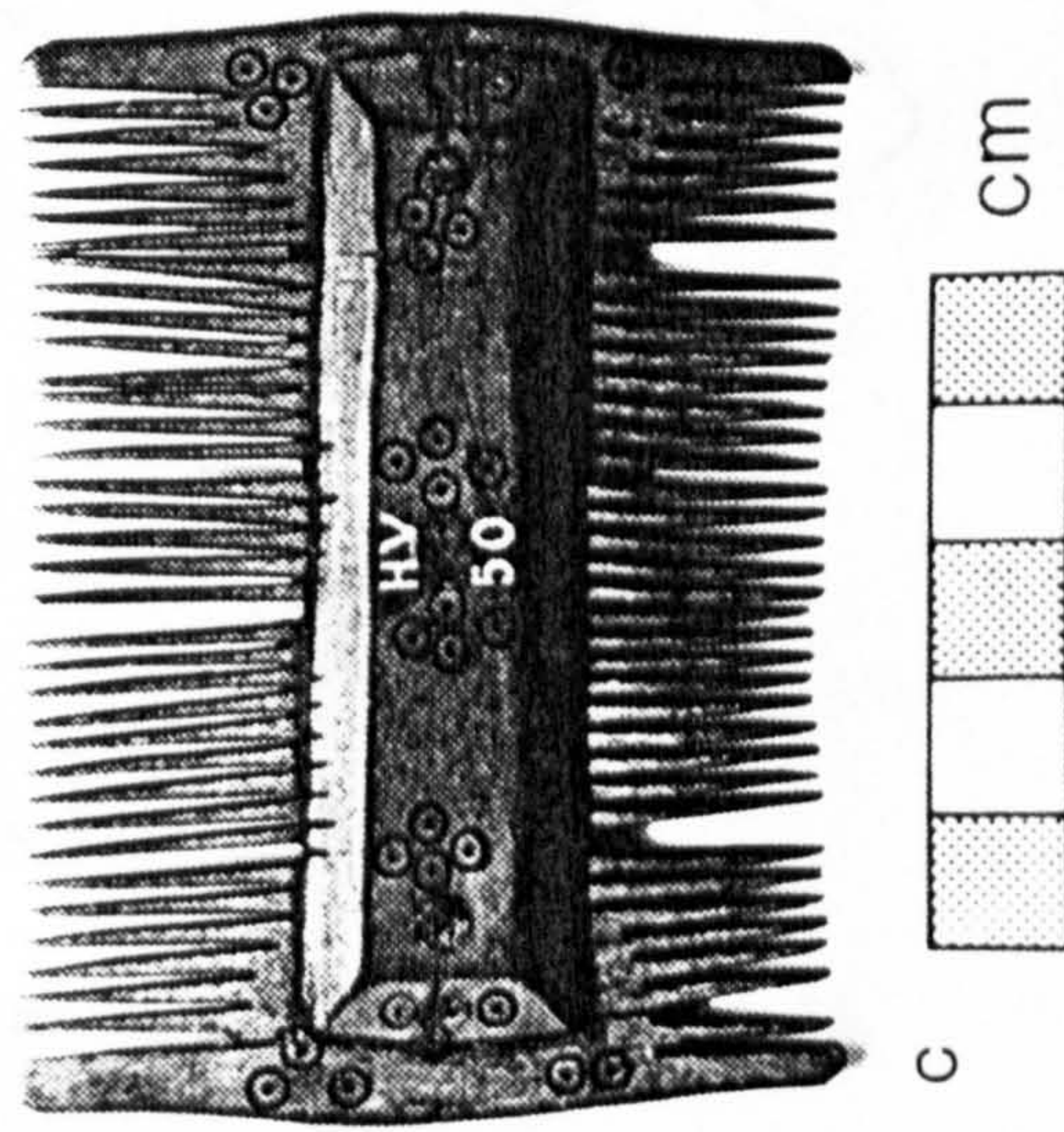
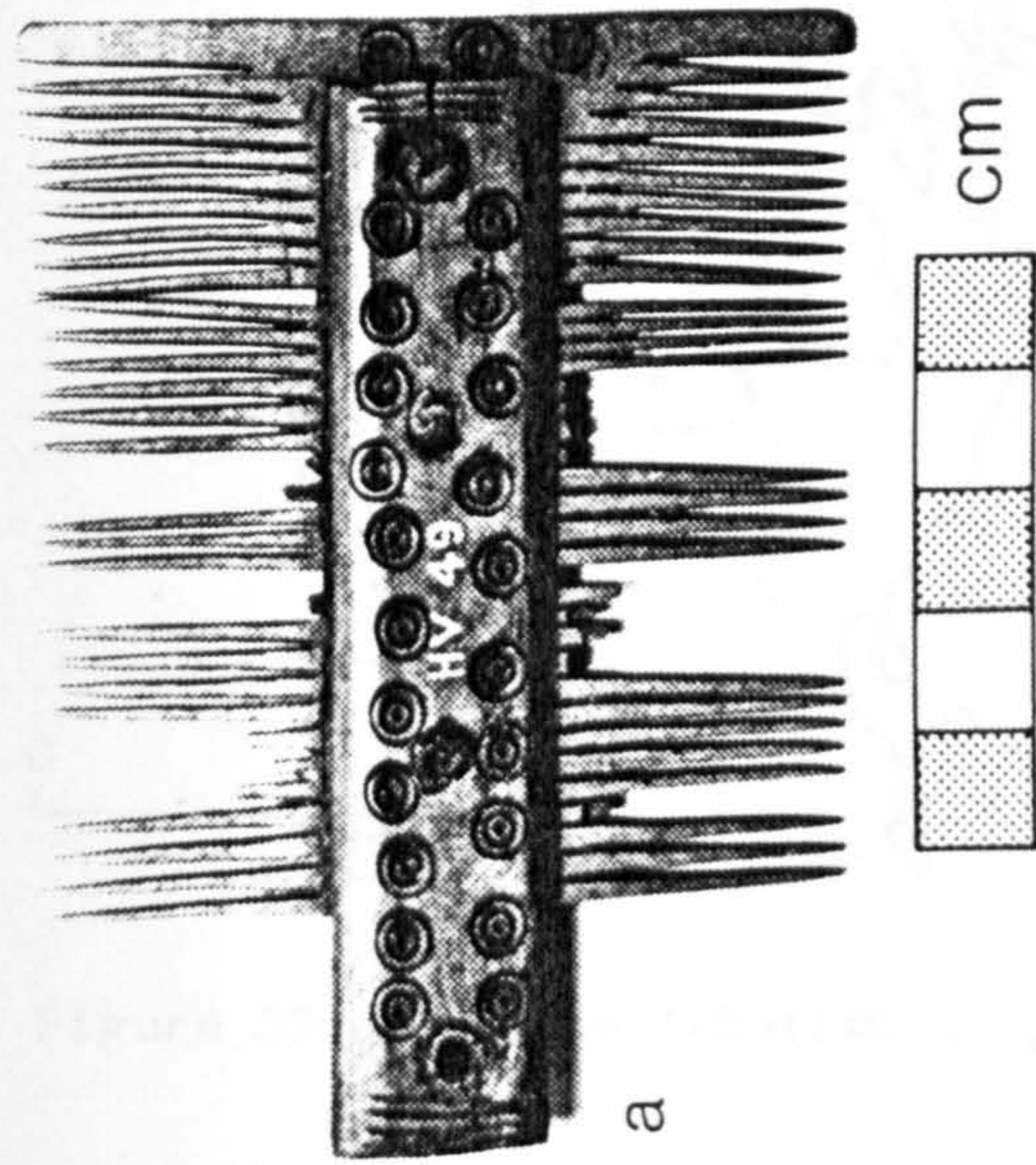


Figure 32. Photographs of miscellaneous combs: a-c Buiston (710-12); d Orkney (1075); e Ledaig Moss (642).



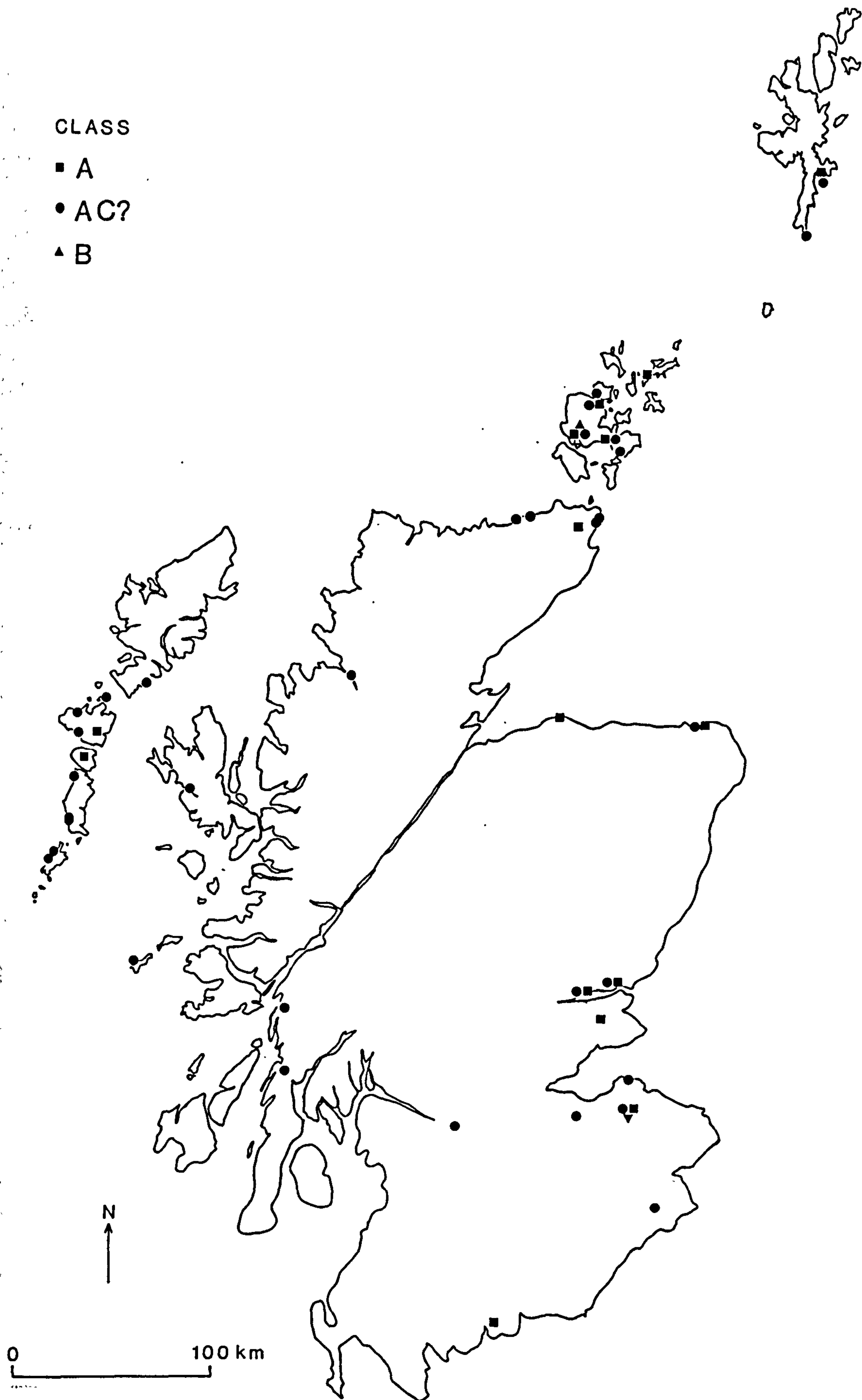


Figure 33. The distribution of pins of classes A, AC? and B.

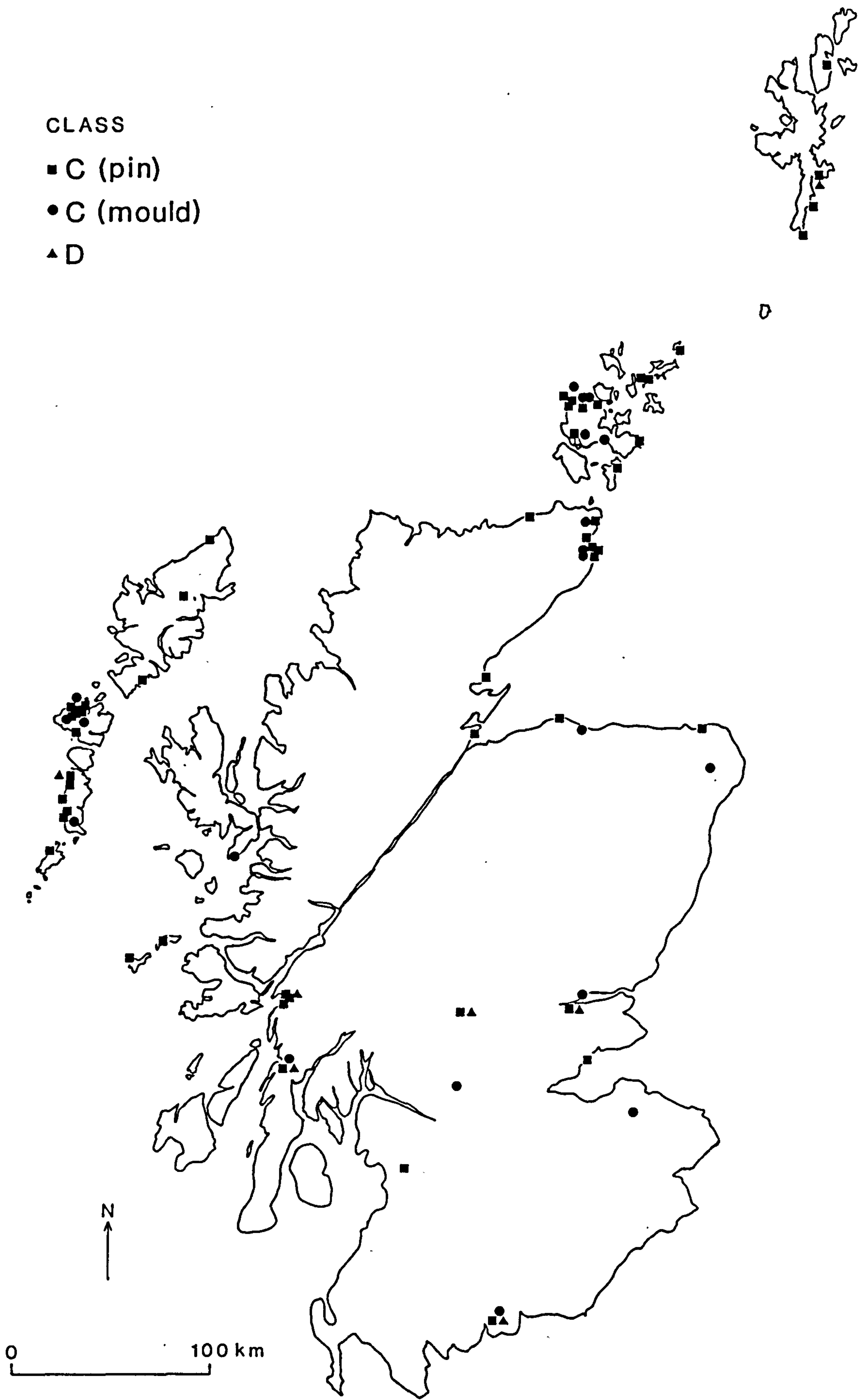


Figure 34. The distribution of class C pins and moulds, and class D pins.



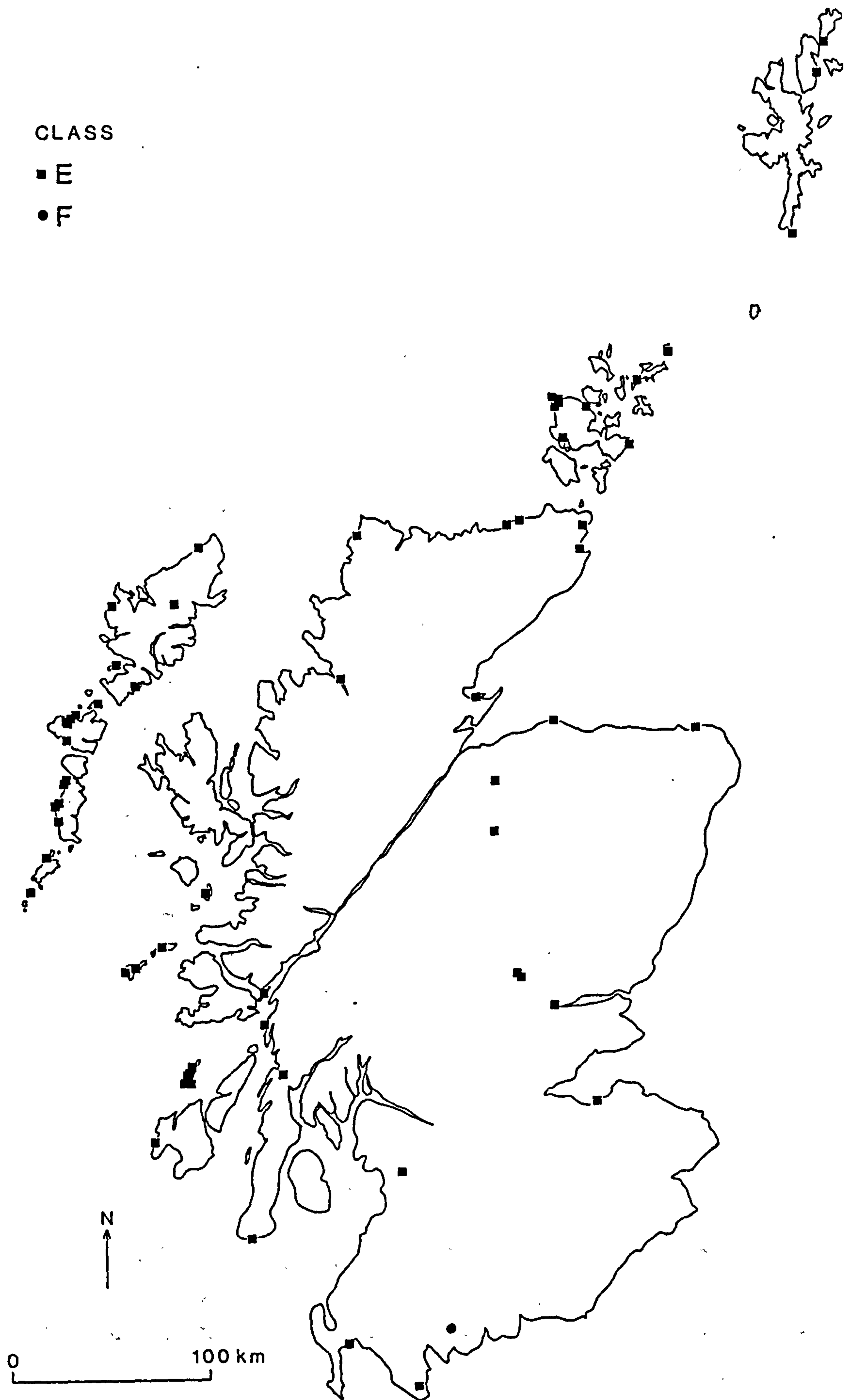


Figure 35. The distribution of class E and F pins.

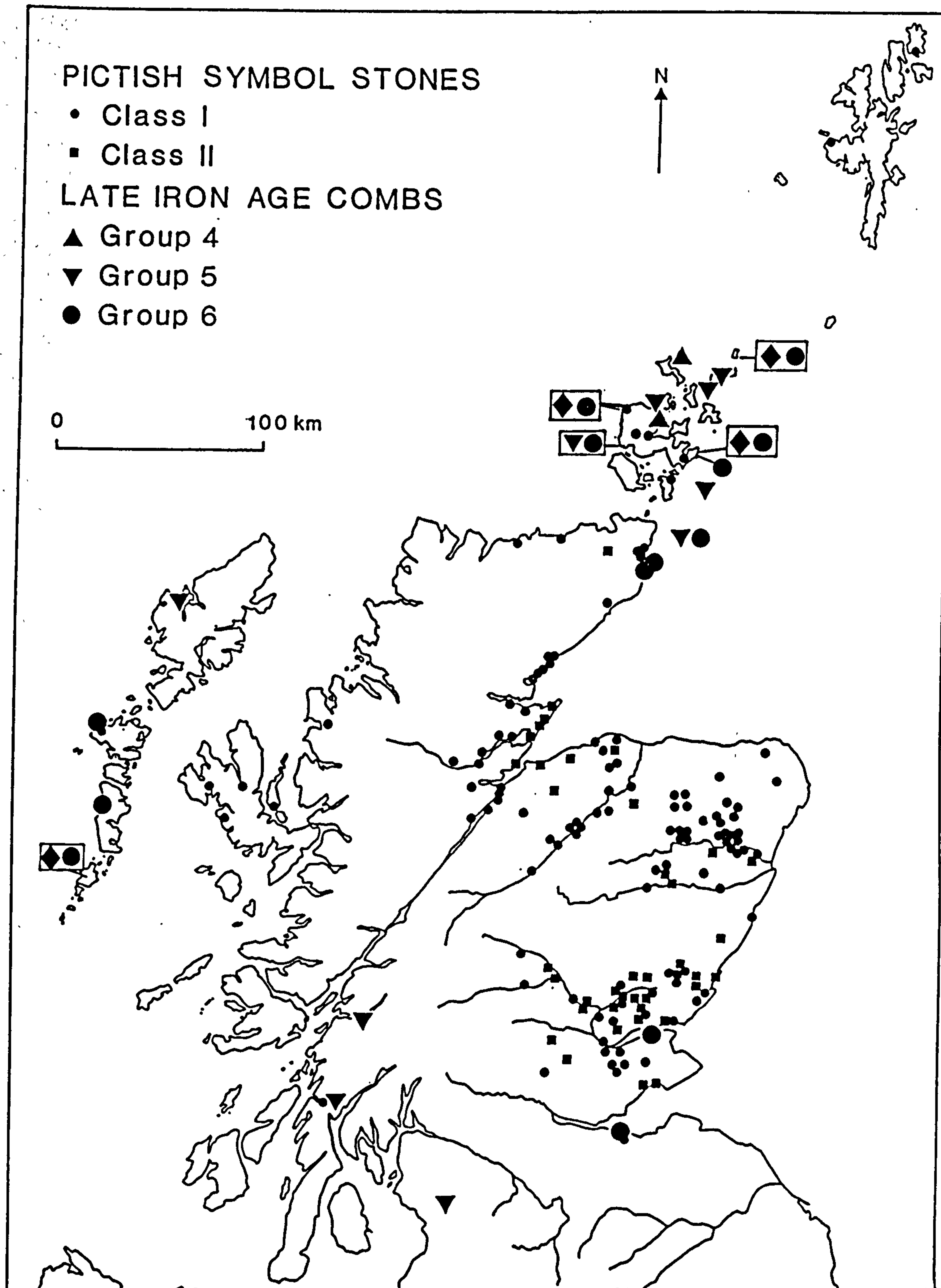


Figure 36. Comparison of the distribution of class I and II Pictish symbol stones (redrawn after McNeill and Nicholson 1975, figs 8-9) and LIA combs of groups 4-6.



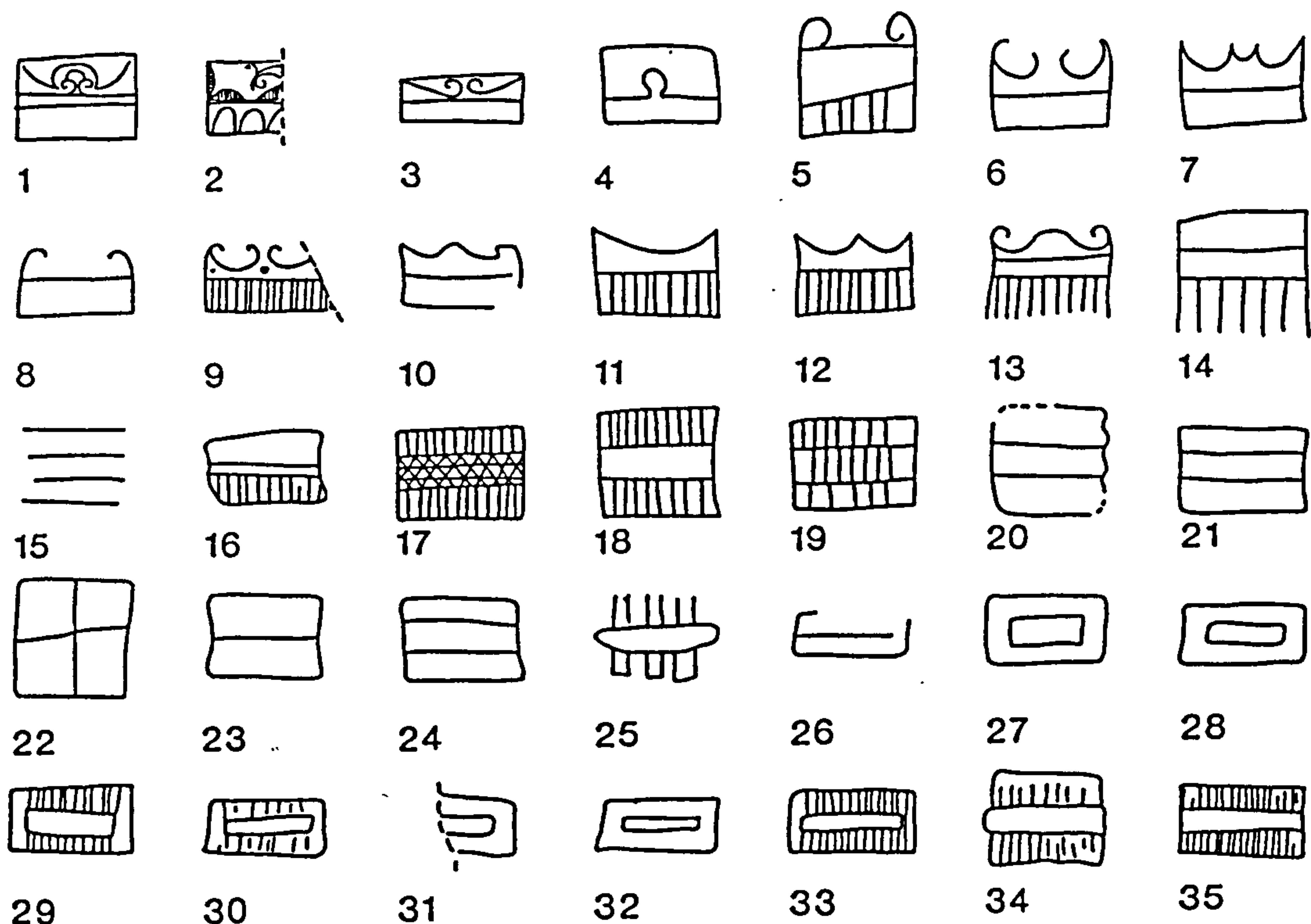


Figure 37. Selected depictions of combs on Pictish symbol stones. All figures are redrawn, unless otherwise stated after Allen and Anderson 1903. Class I: 1-2 Clynekirkton nos 1-2; 3 Benbecula; 4 Sandness; 5 Collace (Henderson and Small 1962); 6 Daviot; 7 Rhynie no 5; 8 Park House; 9 Newbigging Leslie; 10 Easterton of Roseisle; 11 Inveraron no 2; 12 Kintradwell no 3 ; 13 Clynemilton no 2; 14 Dunnichen; 15 Sandside House; 16 Golspie no 2 (Davidson 1943); 17 Dunrobin Castle; 18 Upper Manbeam; 19 Drumbuie no 2; 20 Inveraron no 1; 21 Drummies; 22 Keith Hall; 23 Aberlemno; 24 Bourtie; 25 Cuillaird (Stevenson 1959); 26 Nether Corskie (Ritchie 1915); 27 Covesea. Class II: 28 Hilton of Cadboll; 29 Kingoldrum no 1; 30 Kirriemuir no 1; 31 Meigle no 7; 32 St Vigean's no 1; 33 Monifieth 1; 34 Meigle 1; 35 Maiden Stone. Not to scale.

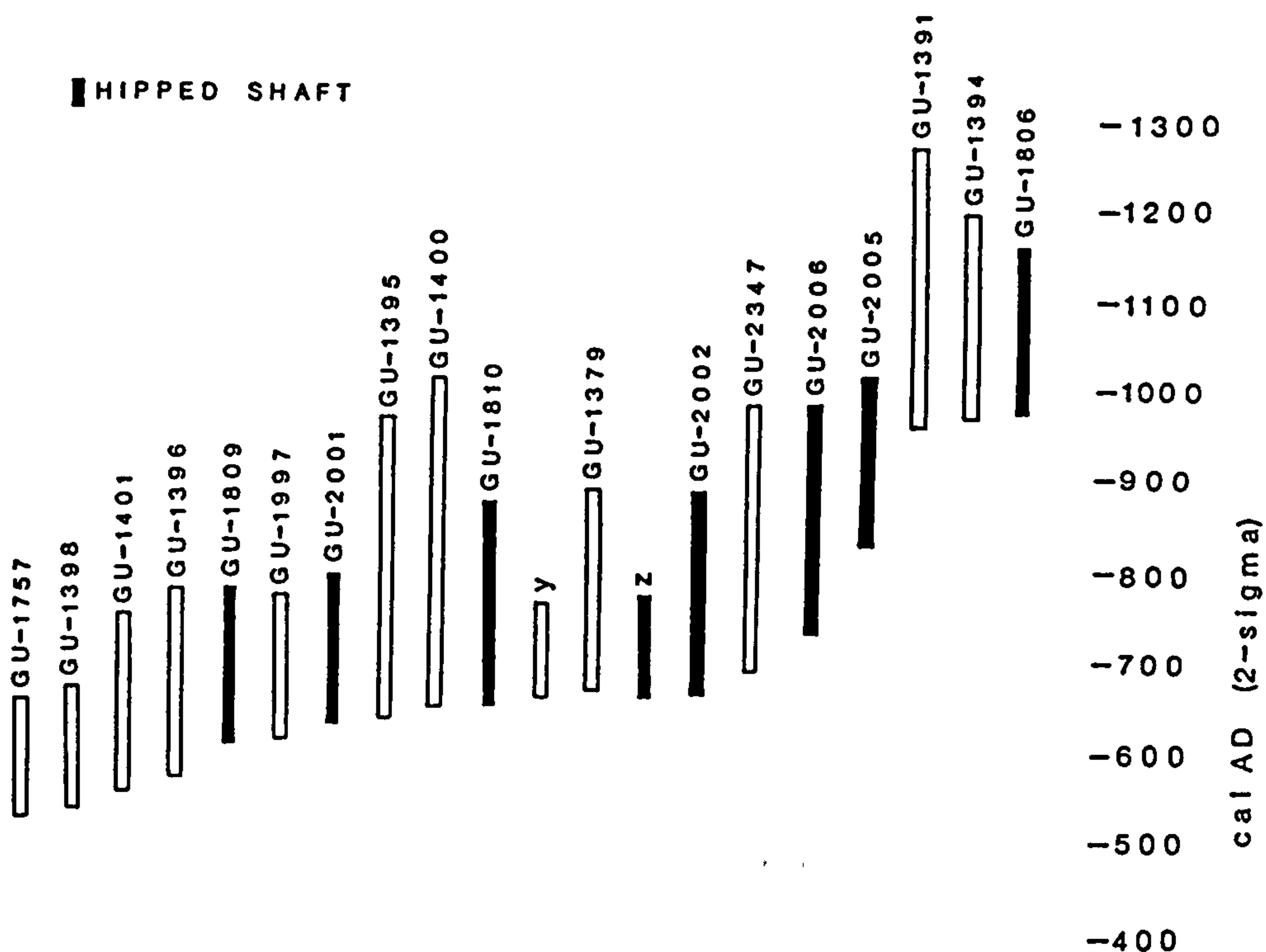


Figure 38. The distribution of C-14 dates for contexts producing LIA pins and combs (calibrated to the 2-sigma level). y = weighted mean for Dunollie phase 1 (GU-1395-97; GU-1398); z = weighted mean for Pool phase 4g (GU-1809; GU-2001-02). Unpublished provisional dates from Pool incorporated with kind permission of Dr J Hunter; author's calibration.



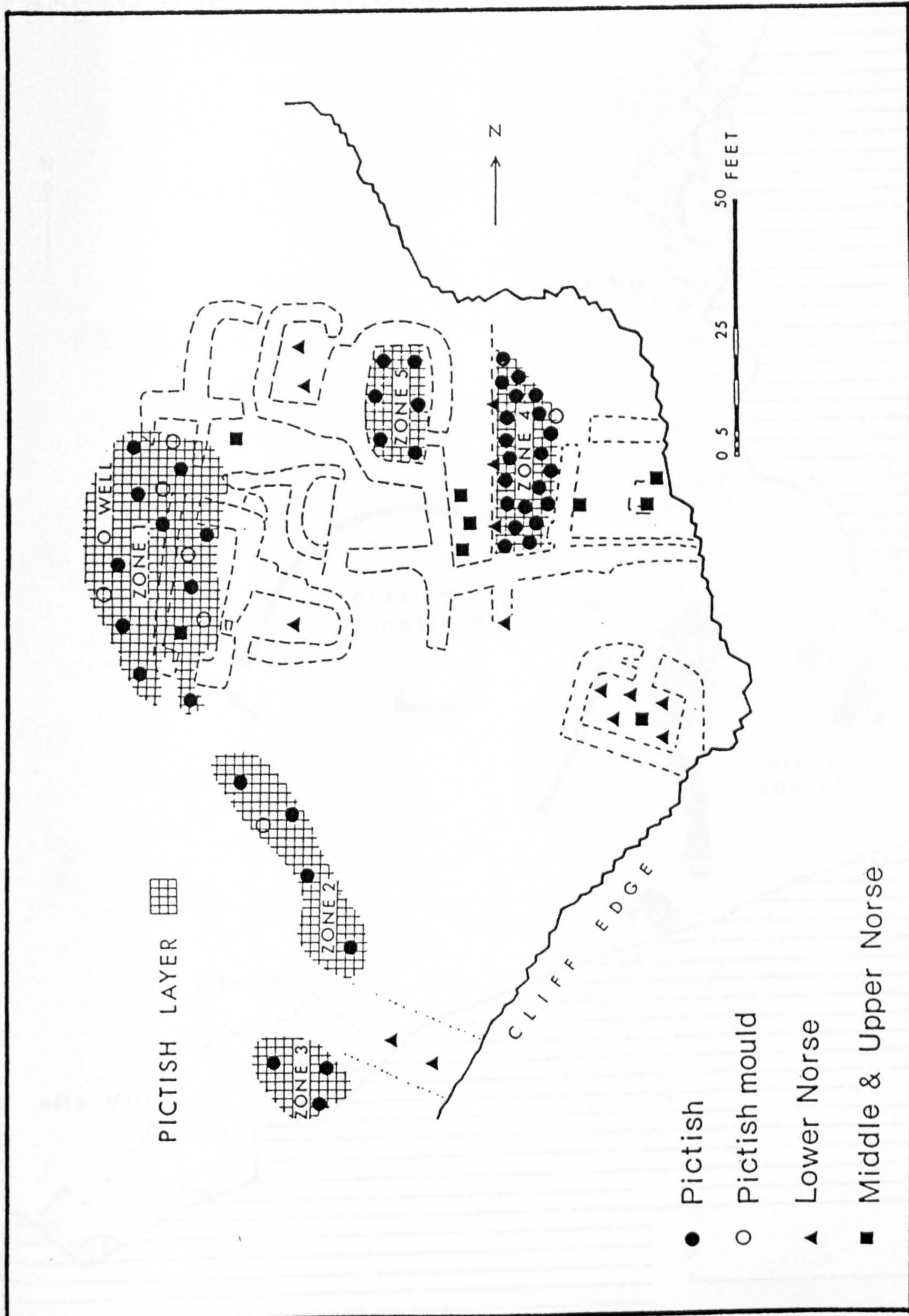


Figure 39. Distribution at the Brough of Birsay of LIA fashion pins by phase and Pictish [LIA] moulds. (Spatial distribution only approximate; base map after C L Curle 1982).



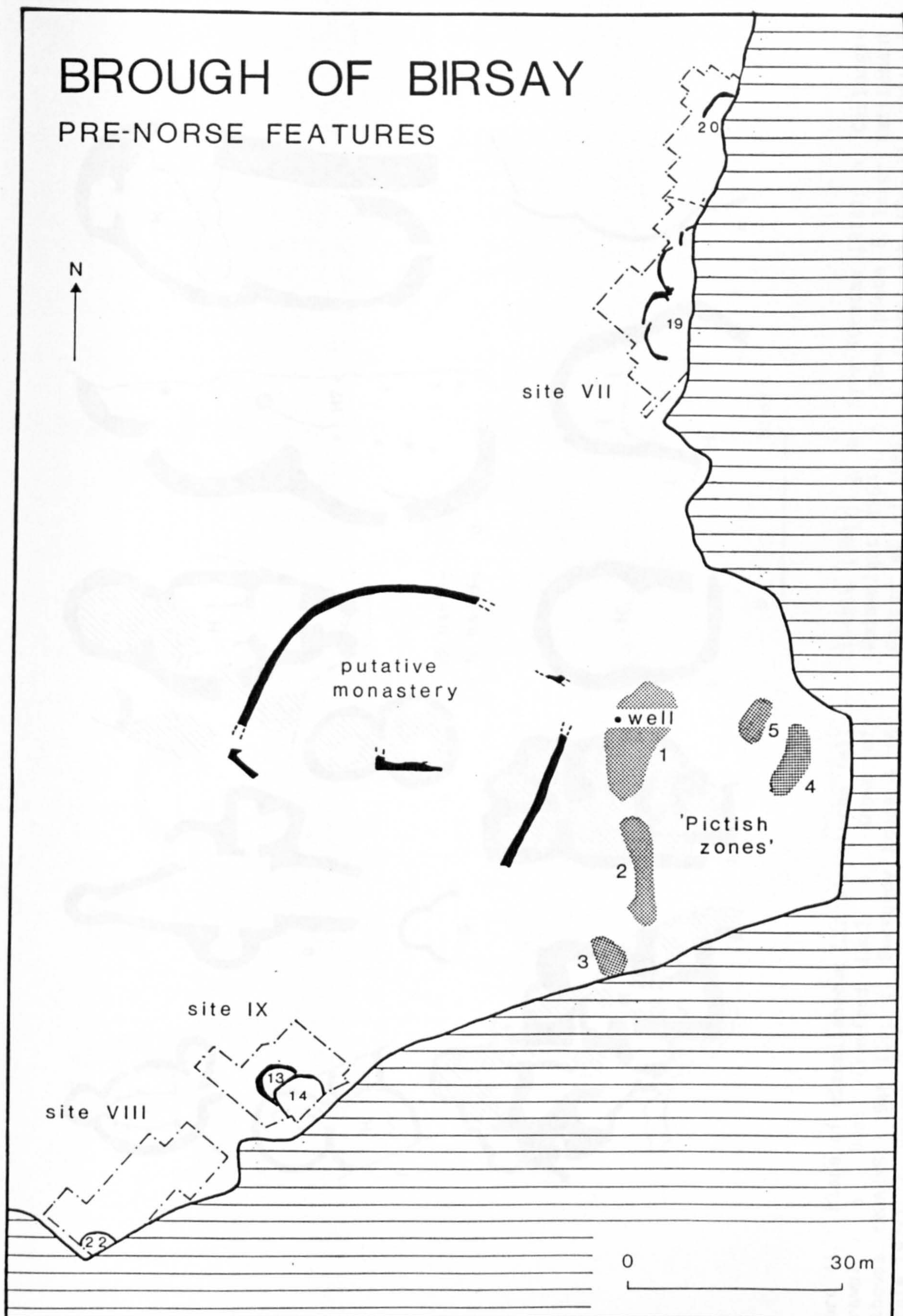


Figure 40. Summary of pre-Norse features at the Brough of Birsay (compiled and modified after Cruden 1965, C L Curle 1982 and Hunter 1986).



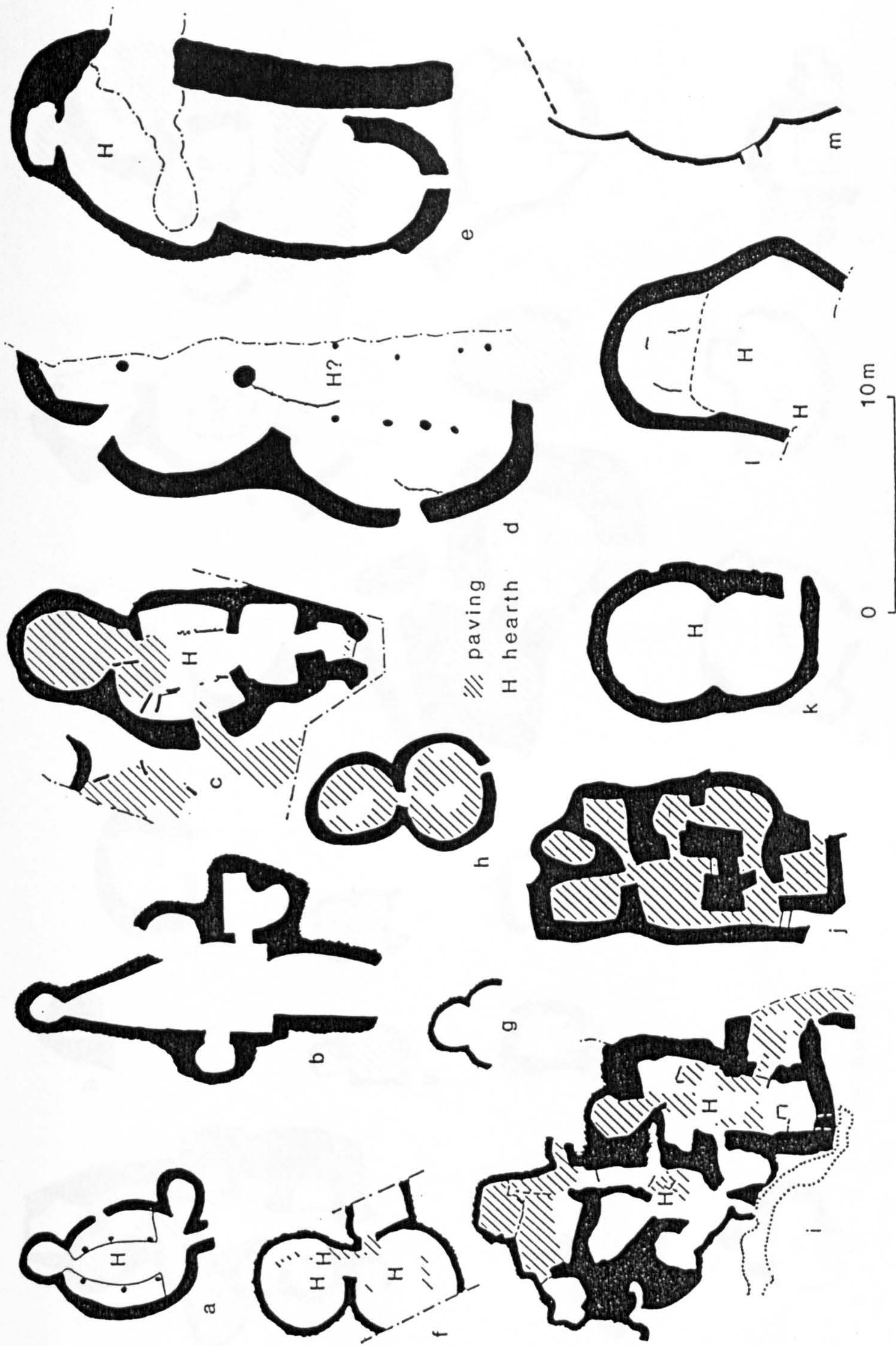


Figure 41. Plans of miscellaneous LIA structures (all redrawn) : a Udal (Crawford 1983; b Knowe of Nesthouse (RCAHMS 1946 II); c Buckquoy house 4 (A Ritchie 1977); d Brough of Birsay structure 19 (Hunter 1986); e Ness (RCAHMS 1911a); f Machrins (J N G

Ritchie 1981); g, m Ayre (Graeme 1914); h Carlungie (Wainwright 1963); i Howe phase 8 later settlement (Carter et al 1984); j Stenabreck (Traill 1885); k Red Craig (Hunter 1986; Morris 1983); l Brough of Birsay structures 13-14 (Hunter 1986).



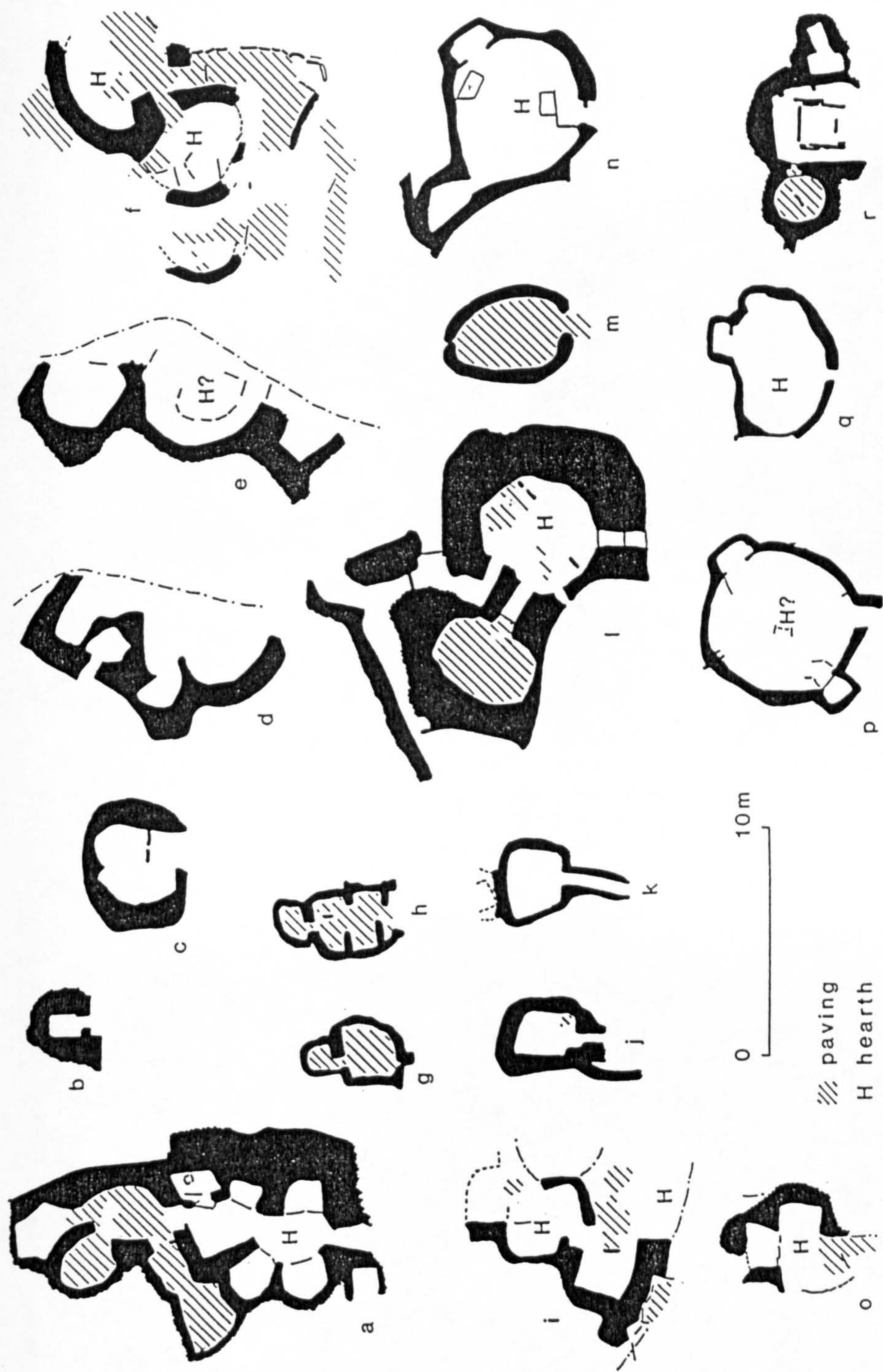


Figure 42. Plans of miscellaneous LIA structures (all redrawn): a, c-e, j Gurness (Hedges II 1987); b Borwick (RCAHMS 1946 II); f Calf of Eday (Calder 1939); g-h Yarrowes (Anderson 1901); i Buckquoy house 6 (A Ritchie 1977); k, n, p-q Nybster (Anderson 1901); l Wag of Forse buildings D and C (Calder 1948); m Carlungie (Wainwright 1963, fig 32); o Buckquoy house 5 (Ritchie 1977); r Broch of Burrian (MacGregor 1974).





Figure 43A St Boniface's, Papa Westray. Broch wall can be seen in section eroded by sea.



Figure 43B Midhowe. Internal W wall of outbuilding H.



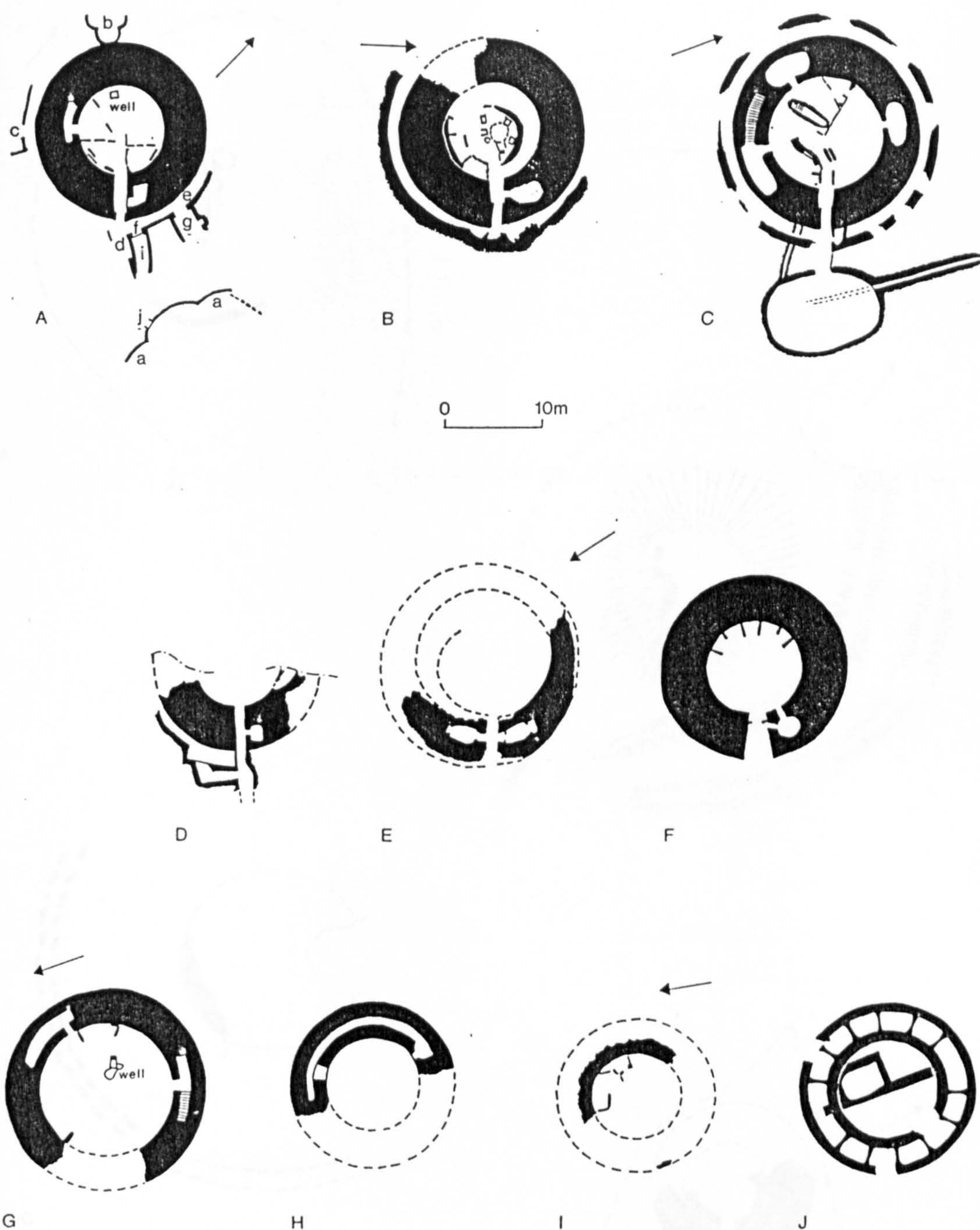


Figure 44. Plans of Orkney brochs (all redrawn): A Ayre (Graeme 1914); B Burrian 2 (Petrie 1890); C Netlater (RCAHMS 1946; Petrie 1890); D Castle of Bothie (RCAHMS 1946 II); E Lamb Head (RCAHMS 1946 II); F Howe of Hoxa (Thomas 1852); G East Burray (Petrie 1890); H Oxtro (Petrie 1890); I Burray West (RCAHMS 1946 II); J Wasso (RCAHMS 1946 II); K Bugar (Thomas 1852).





Figure 45. Plans of Orkney brochs (all redrawn): A St Tredwells (modified after RCAHMS 1946 II); B Weems Castle (RCAHMS 1946 II); C Backaskail (RCAHMS 1946 II); D Broch of Borwick (RCAHMS 1946 II).



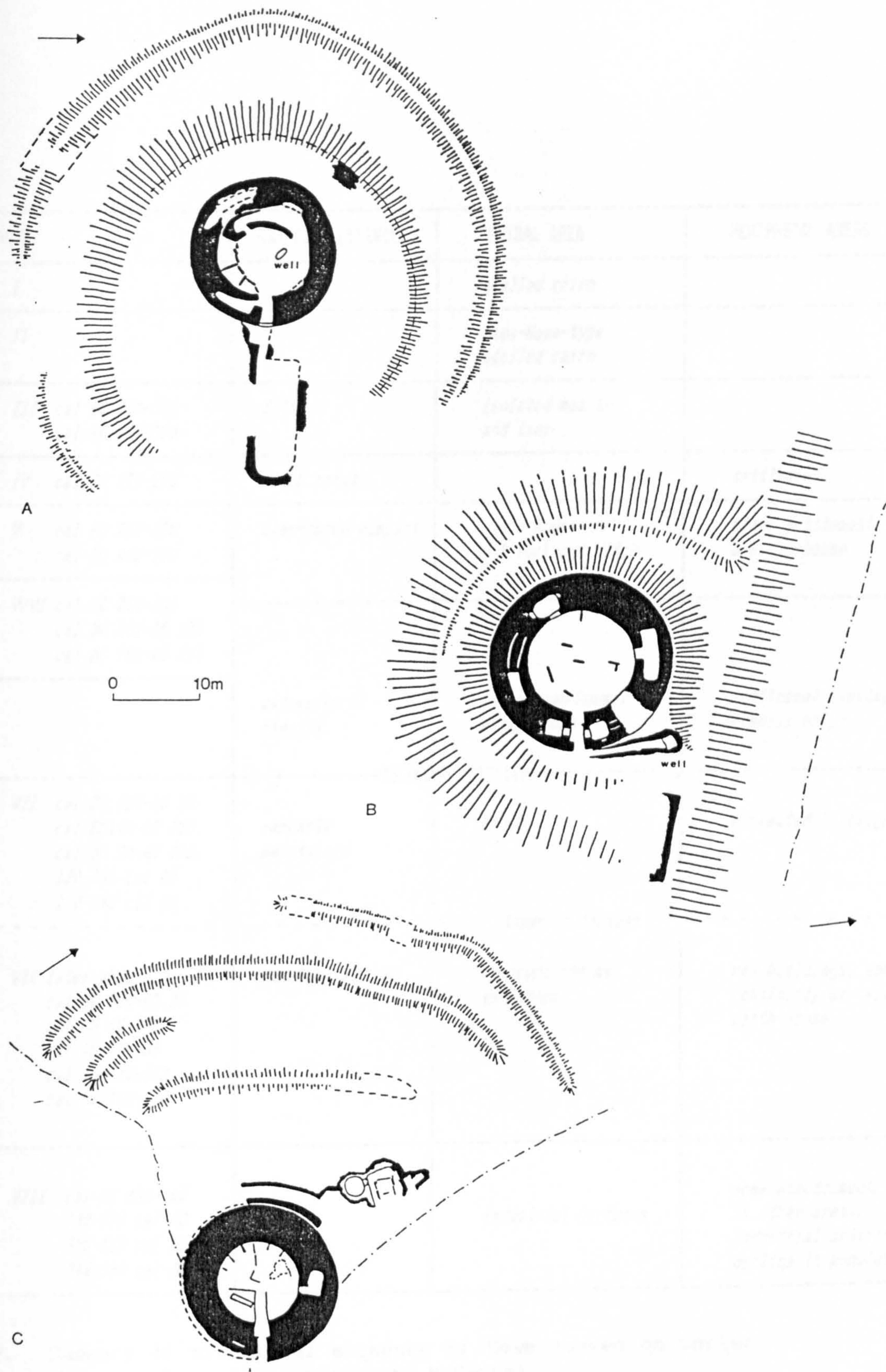


Figure 46. Plans of Orkney brochs (all redrawn): A Burroughston (RCAHMS 1946 II); B Burray East (Petrie 1890); C Broch of Burrian (MacGregor 1974; RCAHMS 1946 II).



PERIOD	PHASE	EXTERNAL DEFENCES	CENTRAL AREA	PERIPHERAL AREAS
N E O	I		<i>stalled cairn</i>	
	II		<i>Maes-Howe-type stalled cairn</i>	
B A	III <i>cal BC 790-380 cal BC 780-390</i>	<i>ditch</i>	<i>isolated hearth and tank</i>	
	IV <i>cal BC 510-200</i>	<i>ditch recut</i>		<i>settlement</i>
	V <i>cal BC 760-390 cal BC 405-200</i>	<i>clay-cored rampart</i>	<i>round house and &amp; rock-cut ditch</i>	<i>minor settlement &amp; earth-house</i>
E A I A	V/VI <i>cal BC 751-200 cal BC 332-AD 372 cal BC 100-AD 210</i>			
	VI	<i>extension of rampart</i>	<i>later roundhouse/ early broch</i>	<i>settlement (vestigial remains only)</i>
<-----THOROUGH LEVELLING----->				
M A I A	VII <i>cal BC 332-AD 20 cal BC 110-AD 130 cal BC 90-AD 212 120-390 cal AD 230-540 cal AD</i>	<i>ramparts maintained</i>	<i>broch</i>	<i>nucleated 'village'</i>
<-----tower collapses----->				
L A I A	VII later phase <i>cal BC 390-AD 20 cal AD 60-316 cal AD 80-339 cal AD 110-373 cal AD 130-410</i>	<i>ditches fill up</i>	<i>reoccupation as workshops</i>	<i>new buildings, some continuity of 'village' earth-house</i>
	VIII <i>cal BC 400-100 399-600 cal AD 530-660 cal AD 714-980 cal AD</i>		<i>industrial horizons</i>	<i>some abandonment, growth in other areas, industrial activity decline in population</i>

Figure 47. Summary of structural sequence at Howe (based on Carter et al 1984 and personal communication with B Smith).



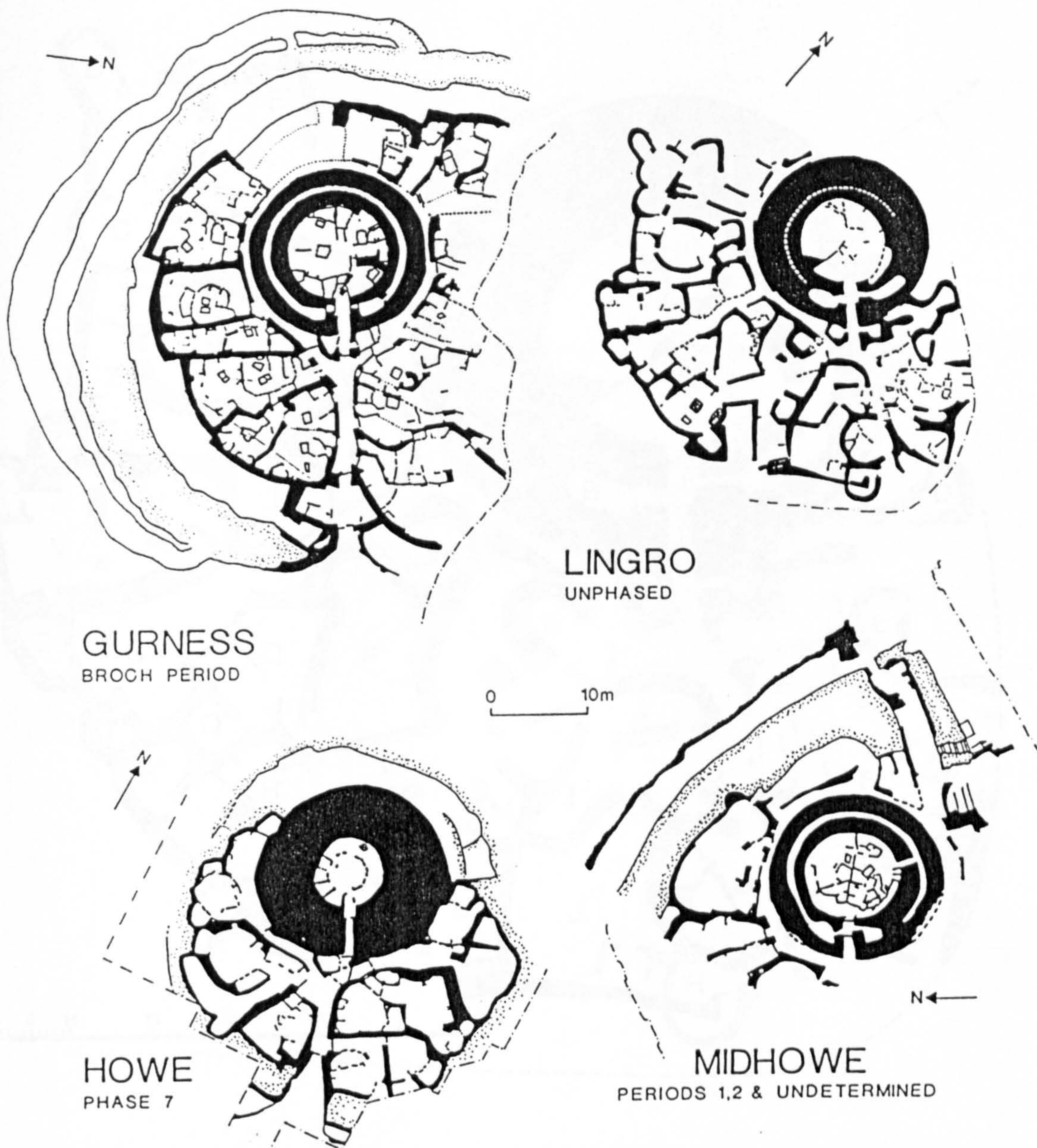


Figure 48. Plans of Orkney brochs with nucleated settlement (all redrawn): A Gurness (Hedges 1987 II); B Lingro (Anderson 1883; after Petrie); C Howe (Carter et al 1984); D Midhowe (Callander and Grant 1934).











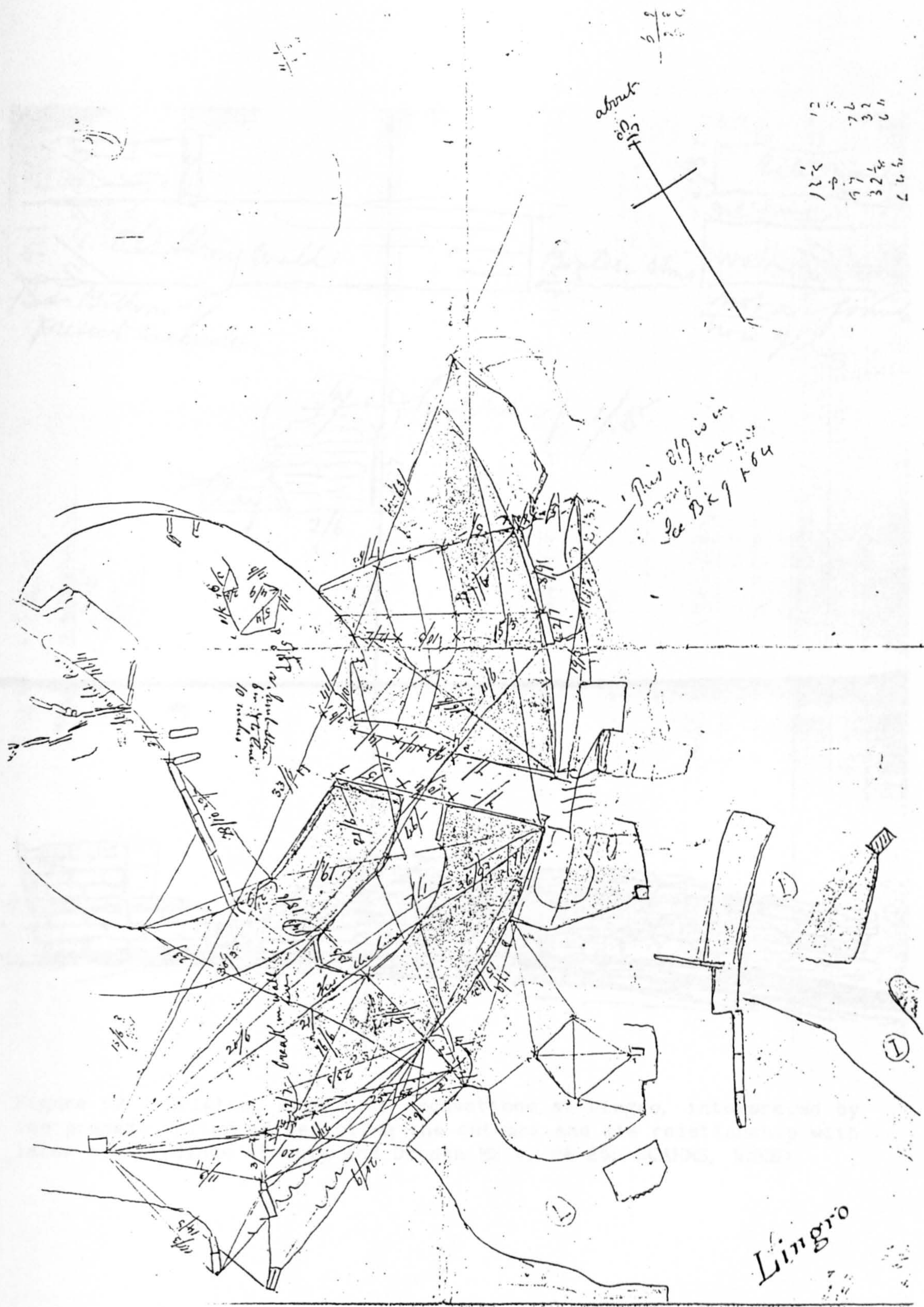


Figure 51. Original sketch of area outside broch entrance at Lingro (Dryden and Petrie MS a; RCAHMS, NMRS).



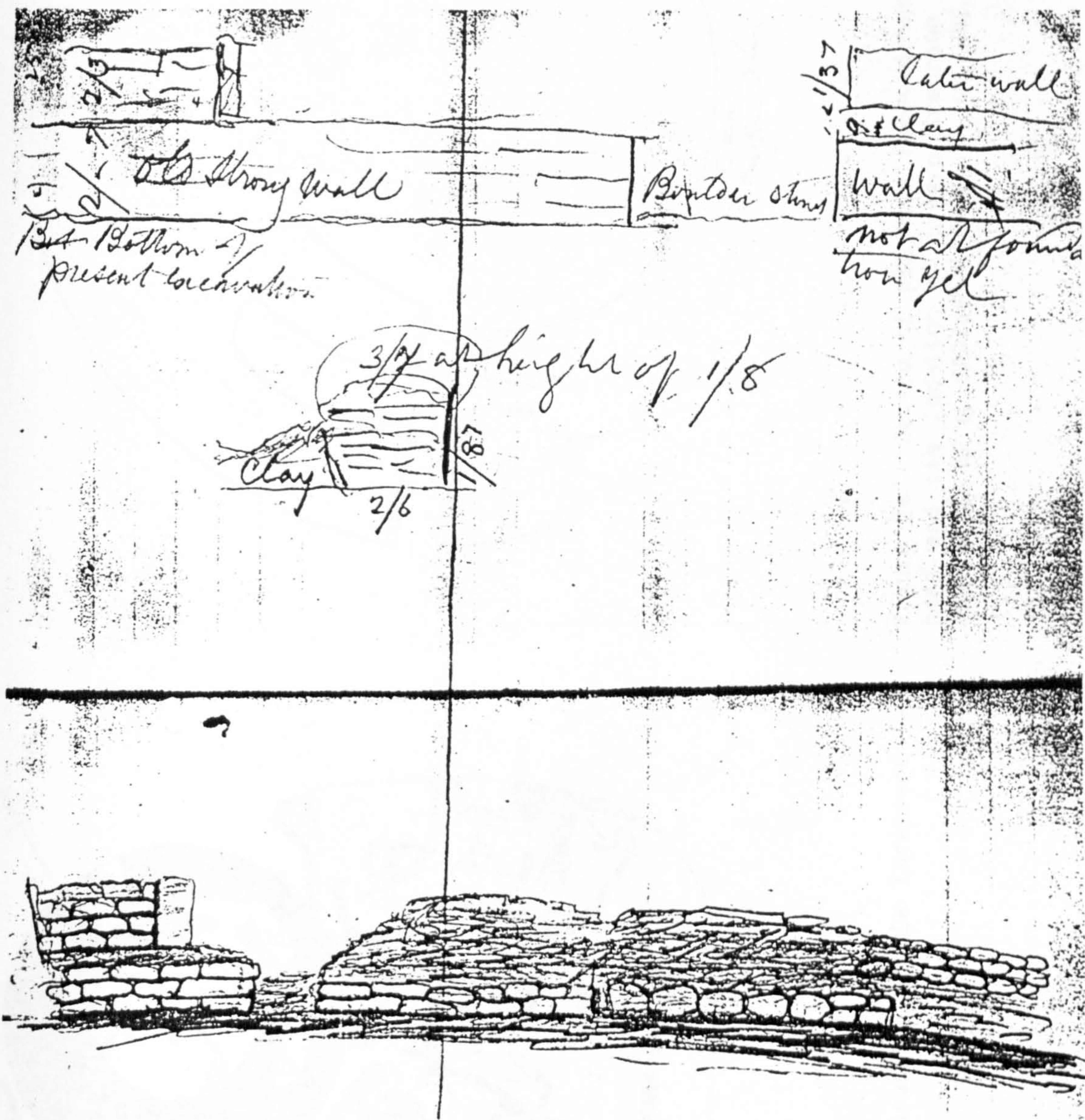


Figure 52. Original sketch of excavations at Lingro, interpreted by the present writer as depicting the outwork and its relationship with later outbuildings (Petrie and Dryden MS c, 24-25; RCAHMS, NMRS).



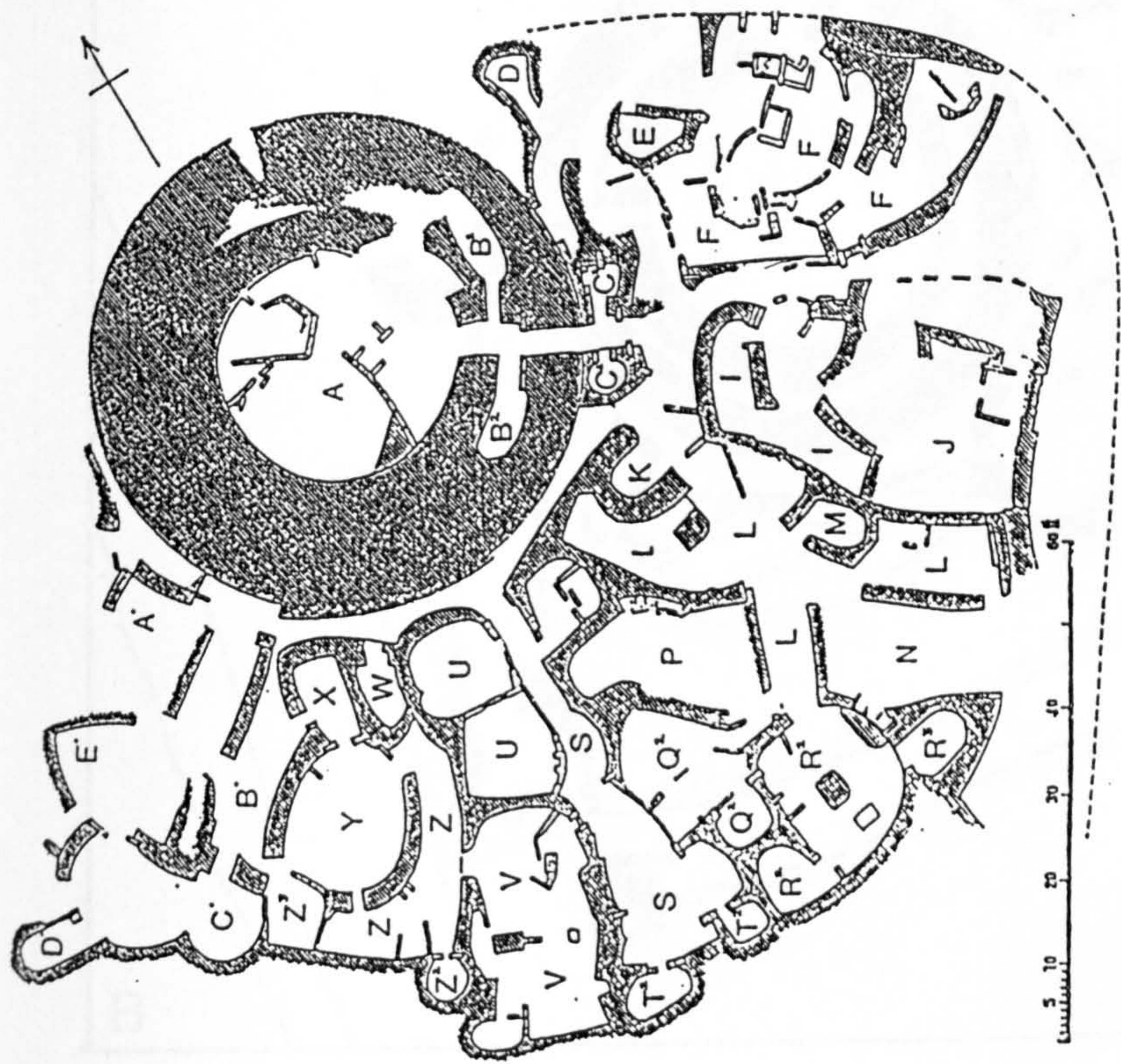


Figure 53. Suggested reconstruction of MIA forecourt at Lingro.

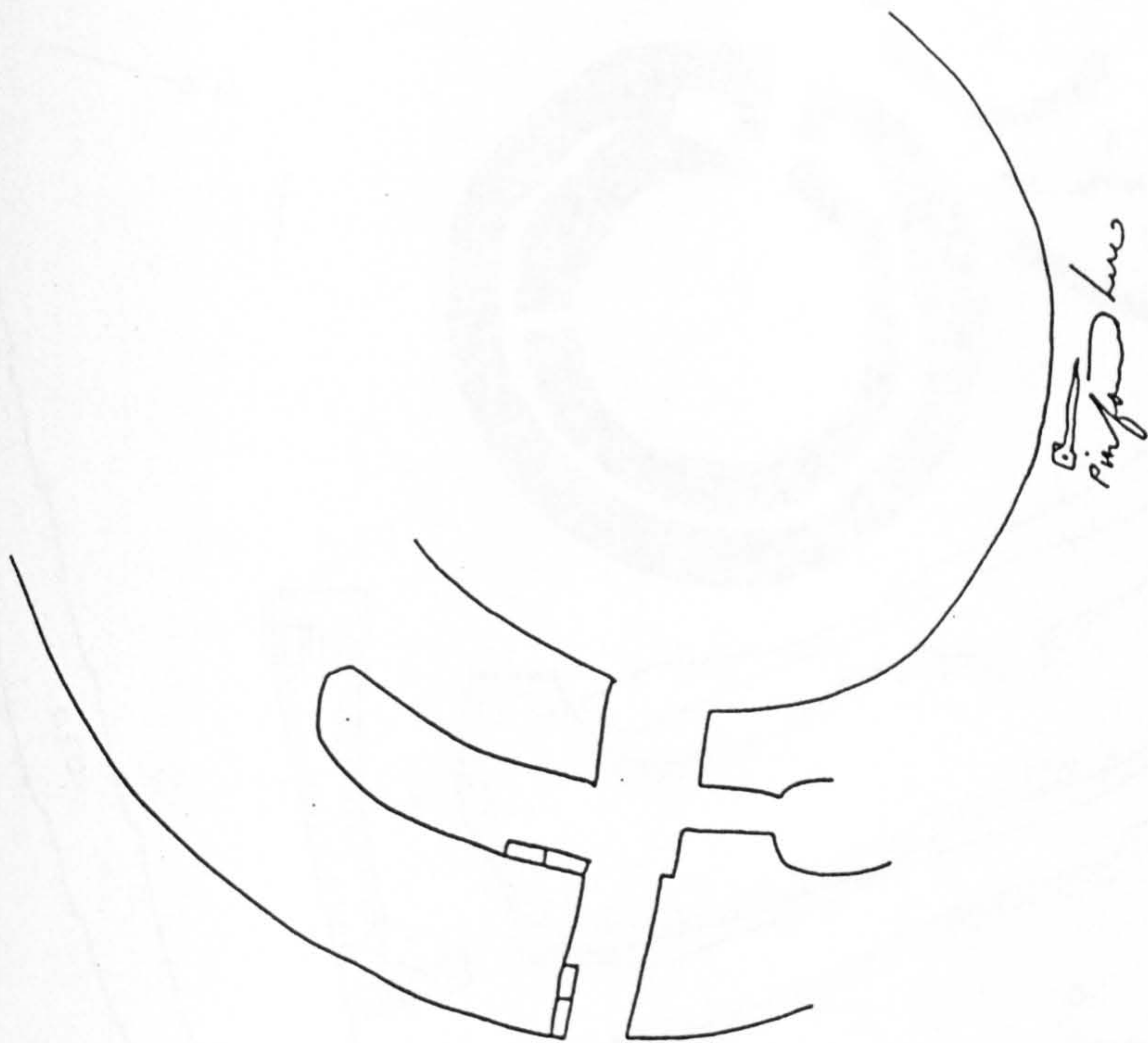


Figure 54. Sketch of pin with faceted and perforated head and its location at Lingro (redrawn from Dryden and Petrie MS a, ORD/182/6, reverse (RCAHMS, NMRS))



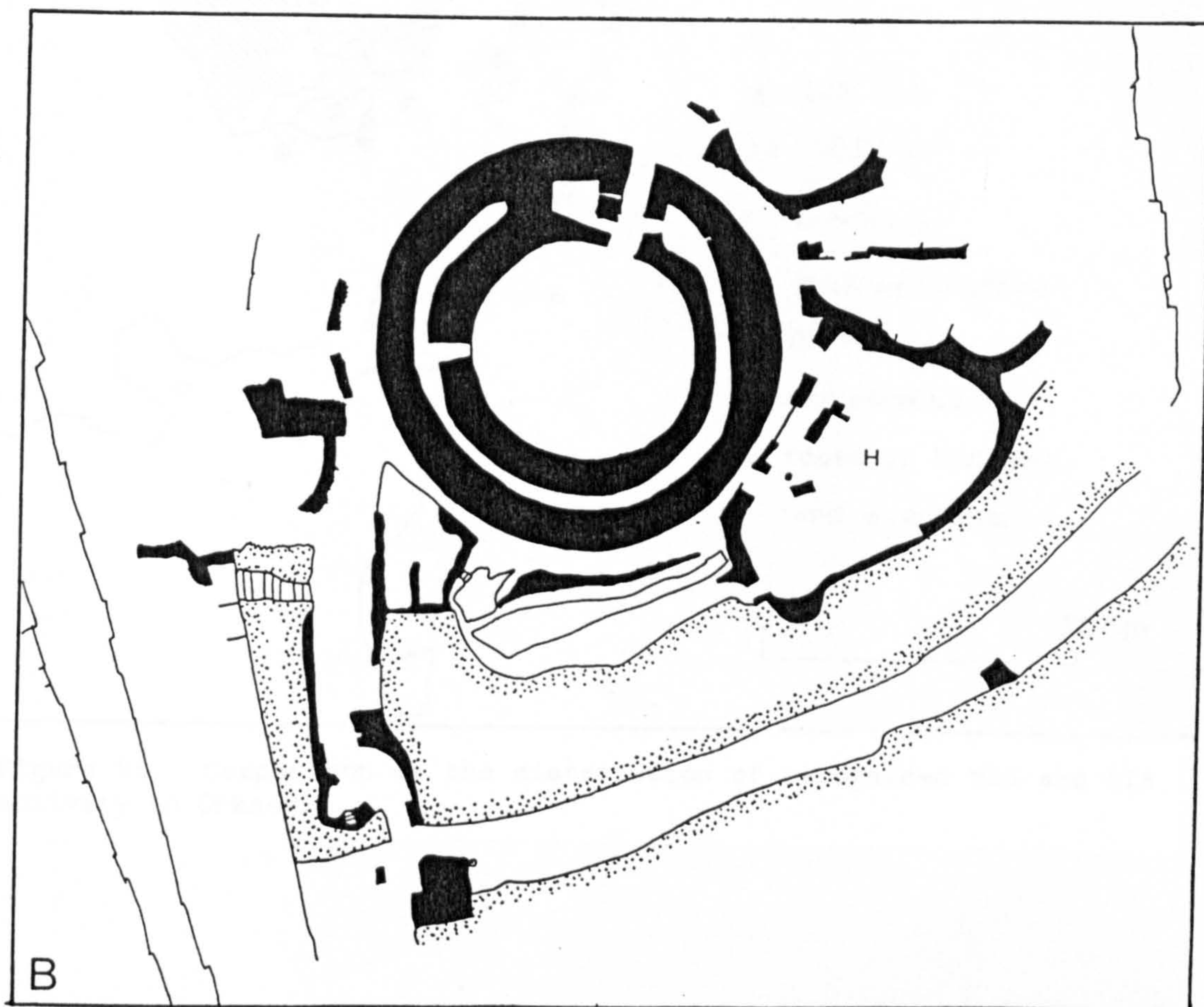
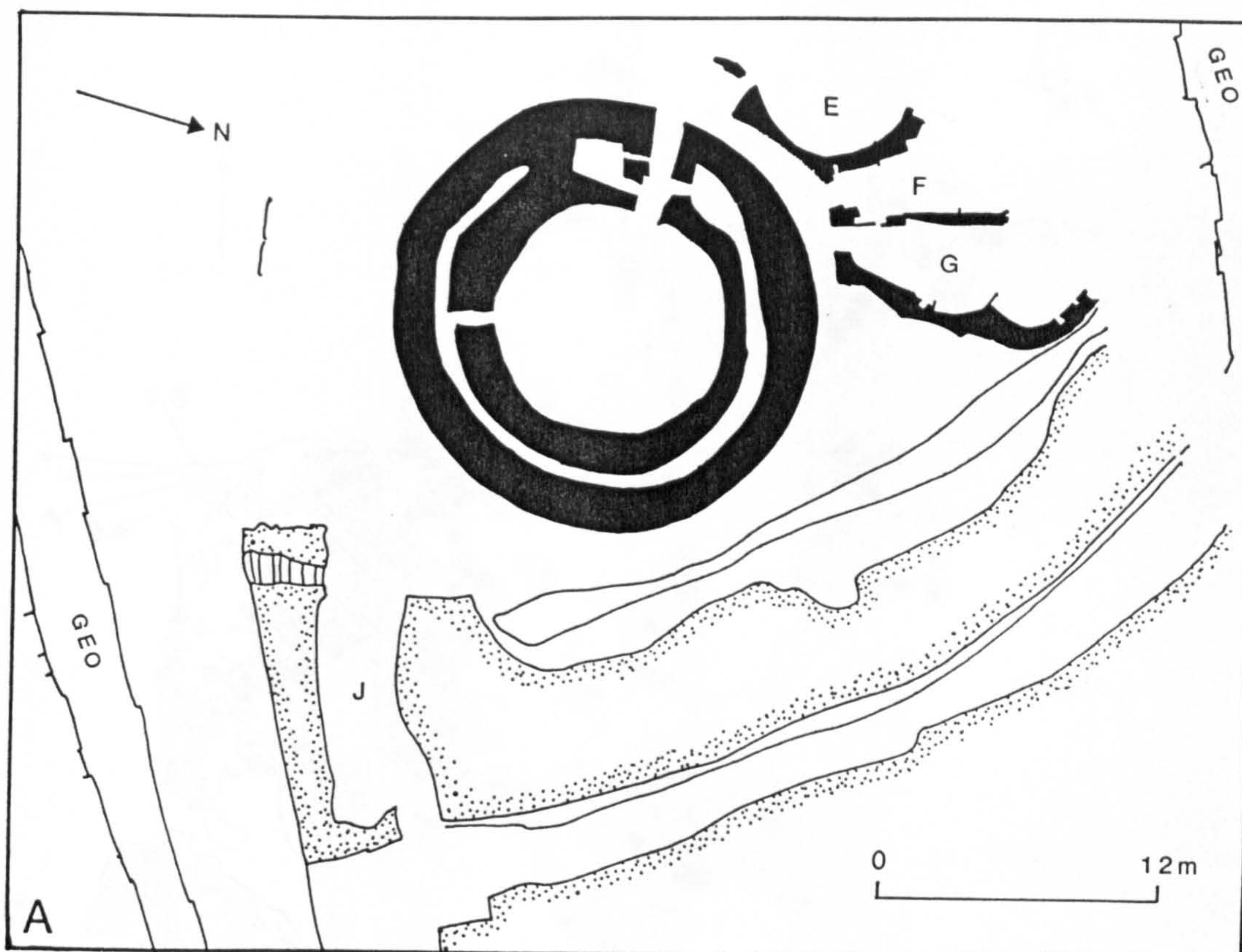


Figure 55. Suggested stages in the development of the outbuildings at Midhowe (modified after Callander and Grant 1934): A prior to the construction of building H; B prior to the collapse of the upper storeys of the broch, after the construction of building H. Broch internal features are omitted.



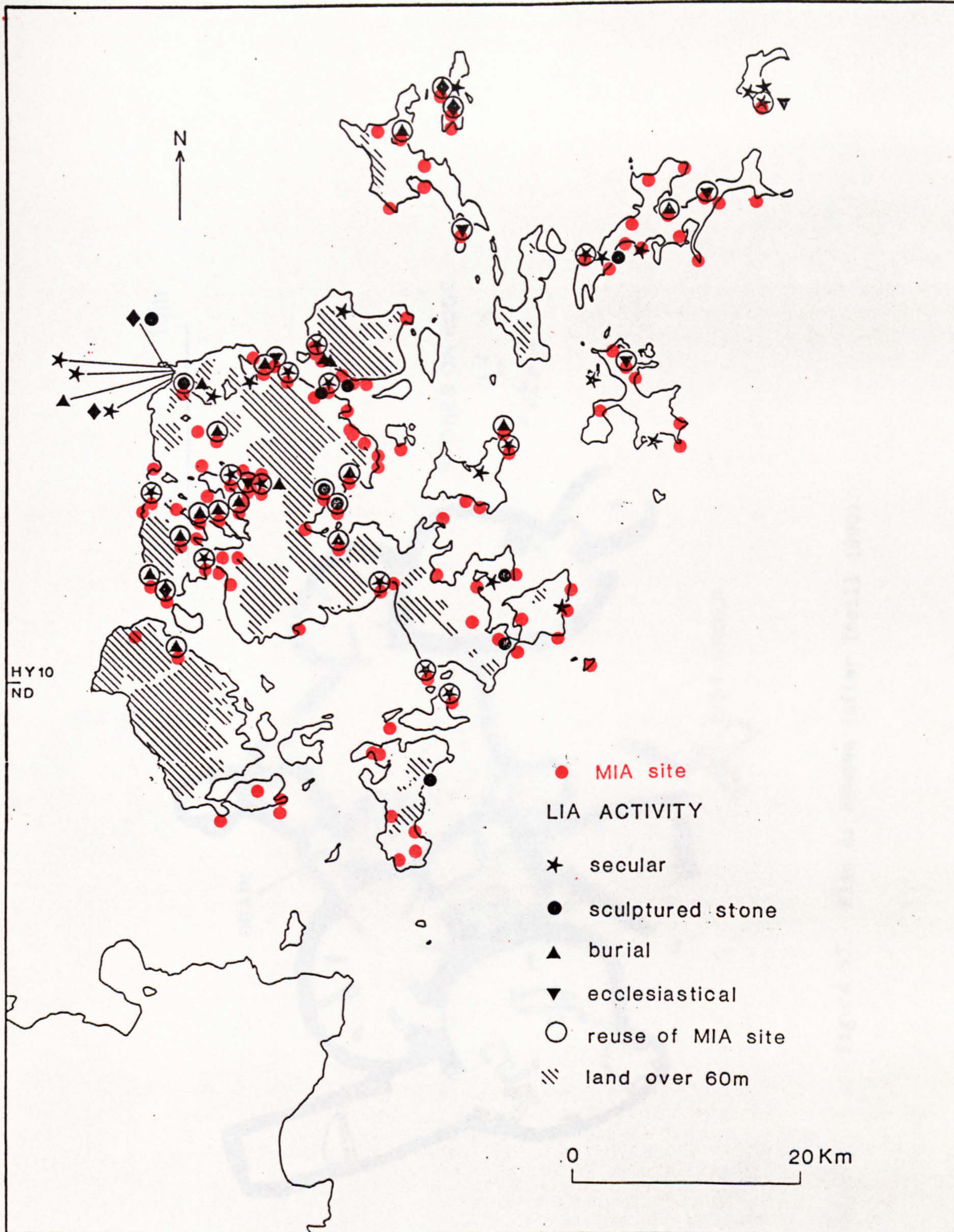


Figure 56. Comparison of the distribution of recognised MIA and LIA activity in Orkney.



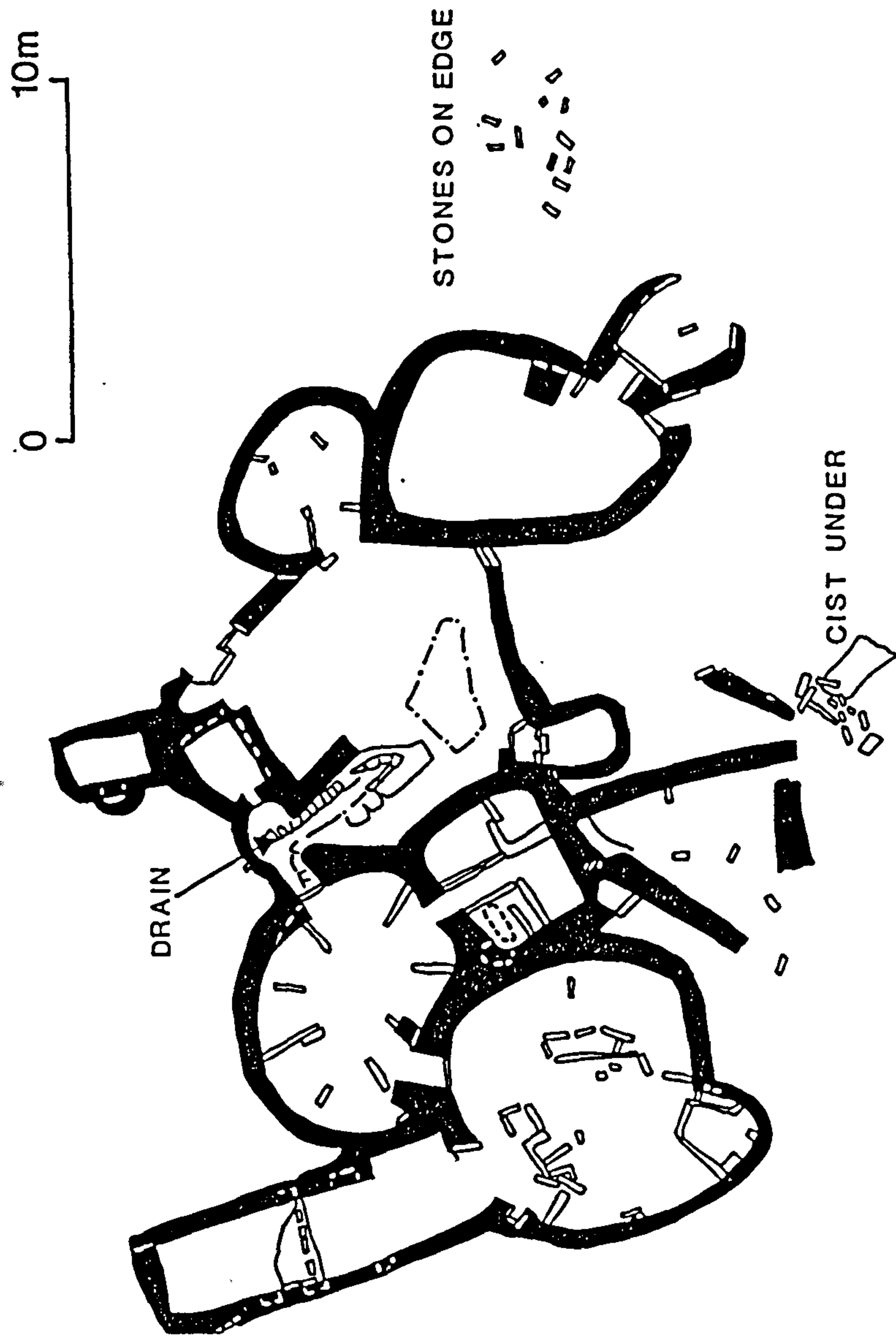


Figure 57. Plan of Howmae (after Traill 1890).



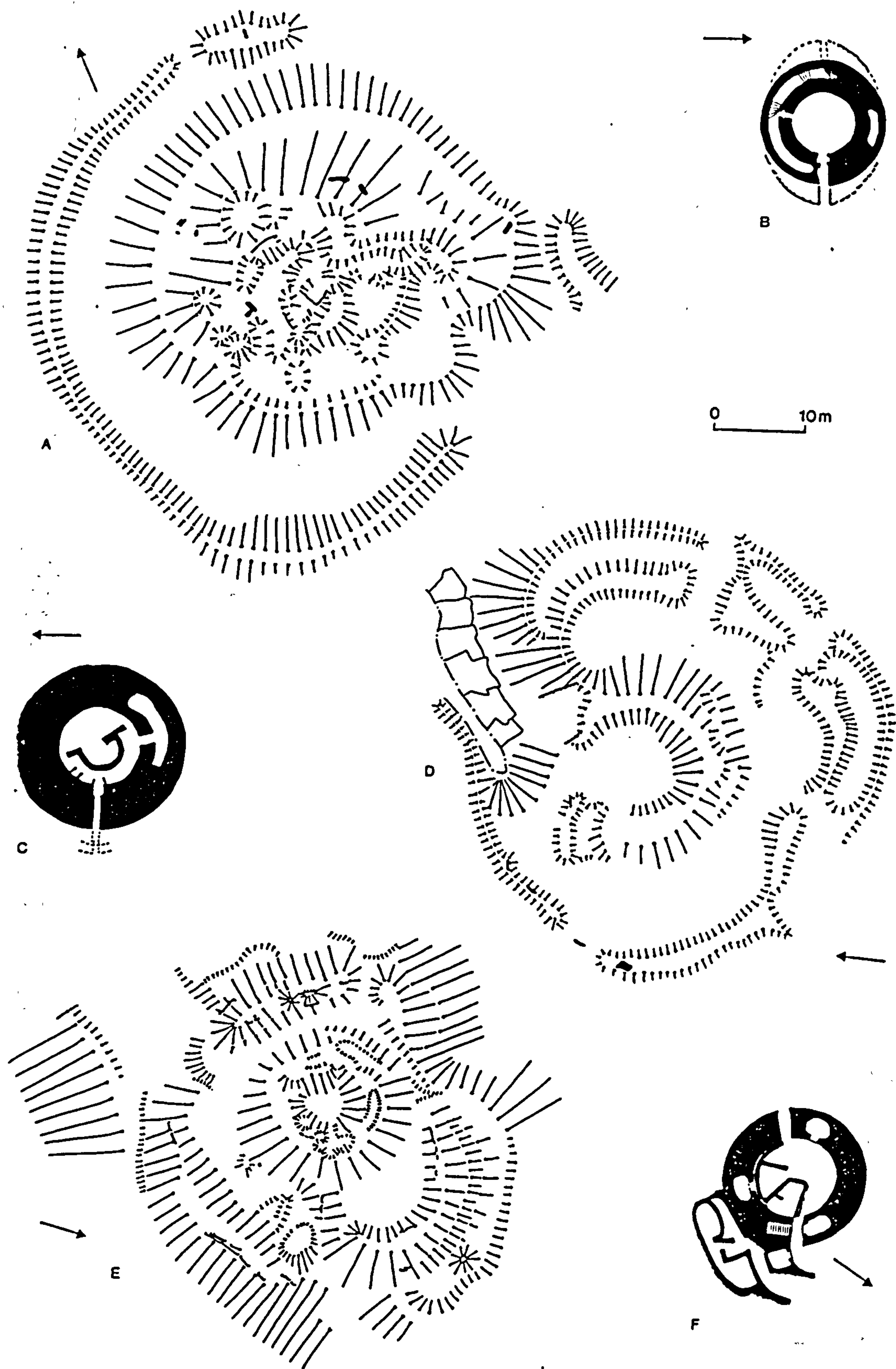


Figure 58. Plans of Caithness brochs (all redrawn): A Thing's Va (Mercer 1981); B Acharole (RCAHMS 1911a); C Coghill (RCAHMS 1911a); D Green Tulloch (Mercer 1981); E Loch Watenan/Watenan South (Mercer 1985); F Freswick Sands (RCAHMS 1911a).

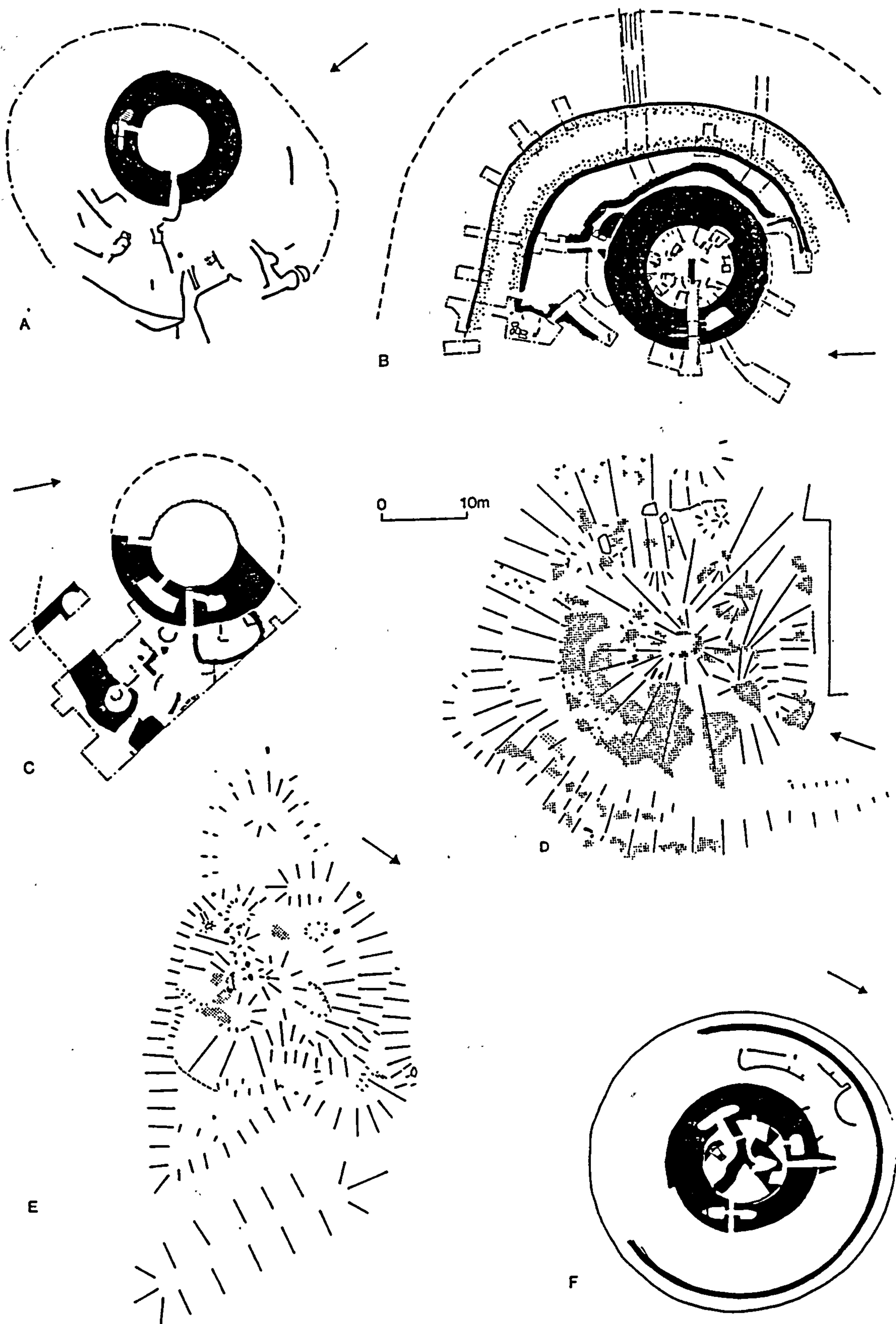


Figure 59. Plans of Caithness brochs (all redrawn with the exception of D-E): A Wester (RCAHMS 1911a); B Kilmster (Calder 1948); C Crosskirk (Fairhurst 1984); D Upper Borgue (Morrison forth); E Achorn (*ibid*); F Kettleburn (Rhind 1853). D and E planned by SMF, GS, and KW; drawn by DL.



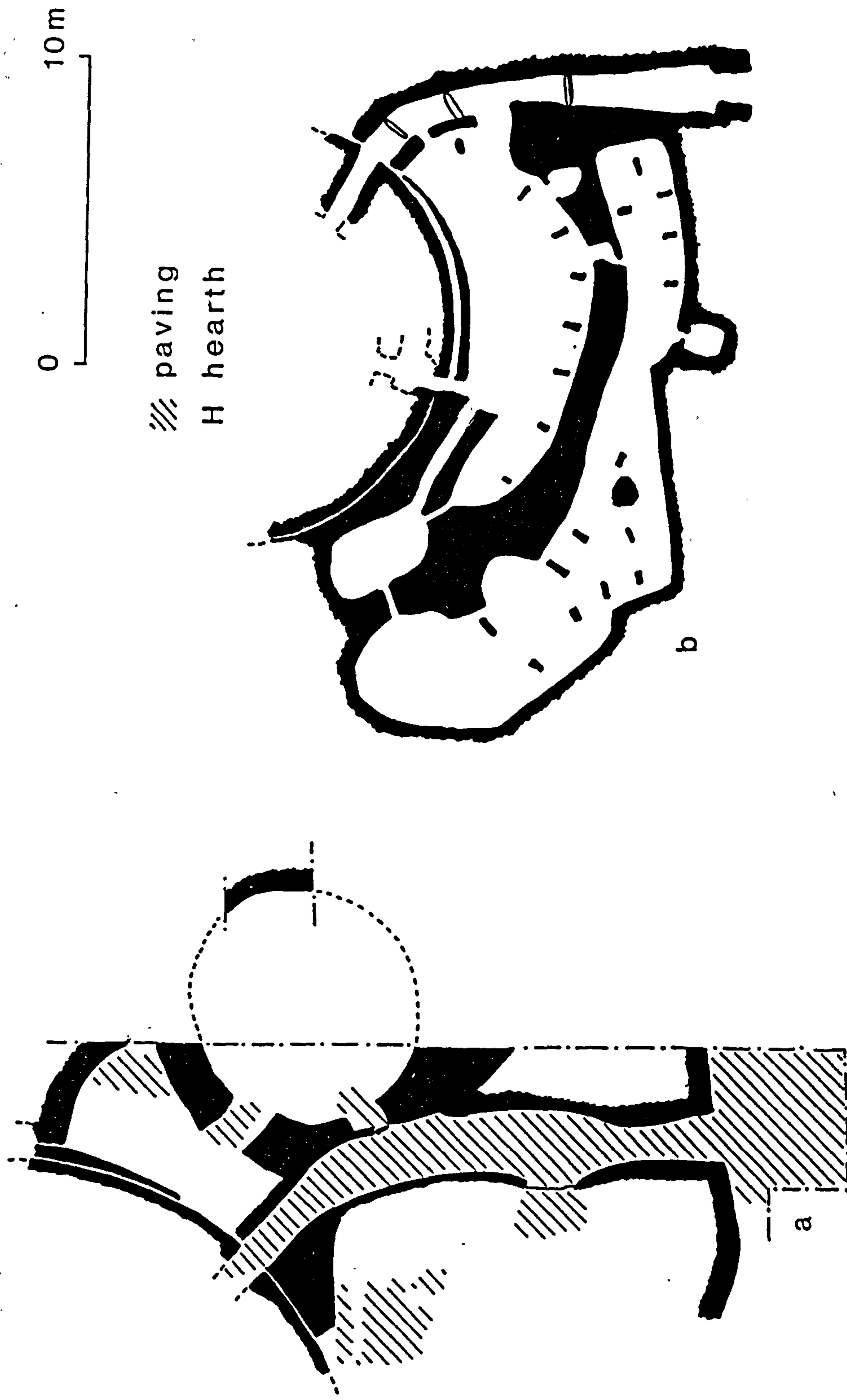


Figure 60. Comparison of plans of extended passageways: a Crosskirk (redrawn after Fairhurst 1984); b Yarrows (redrawn after Anderson 1901).

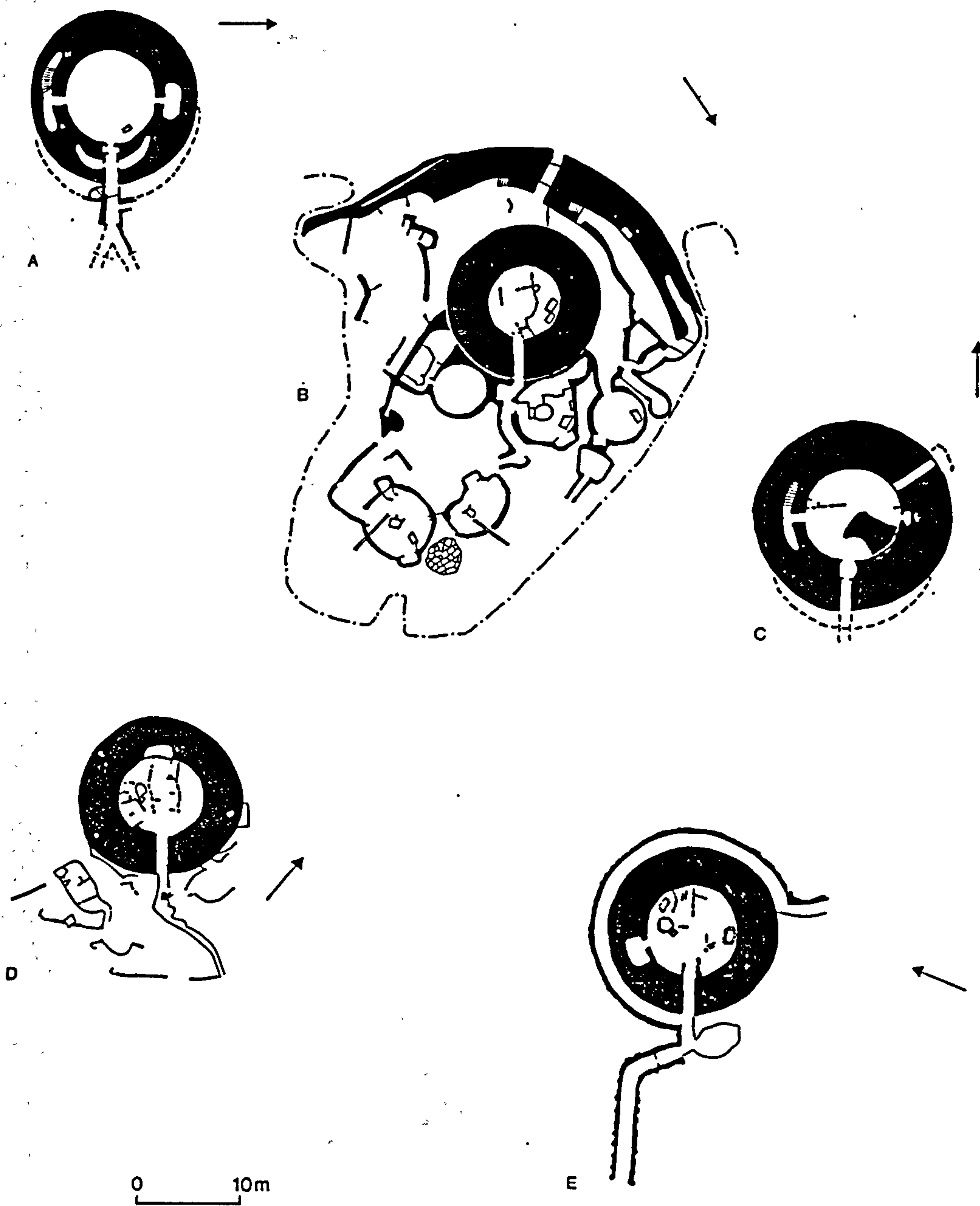


Figure 61. Plans of Caithness brochs (all redrawn): A Hillhead (RCAHMS 1911a); B Nybster (Anderson 1901); C Elsay (RCAHMS 1911a); D Keiss North (RCAHMS 1911a); E Hill of Works (RCAHMS 1911a).



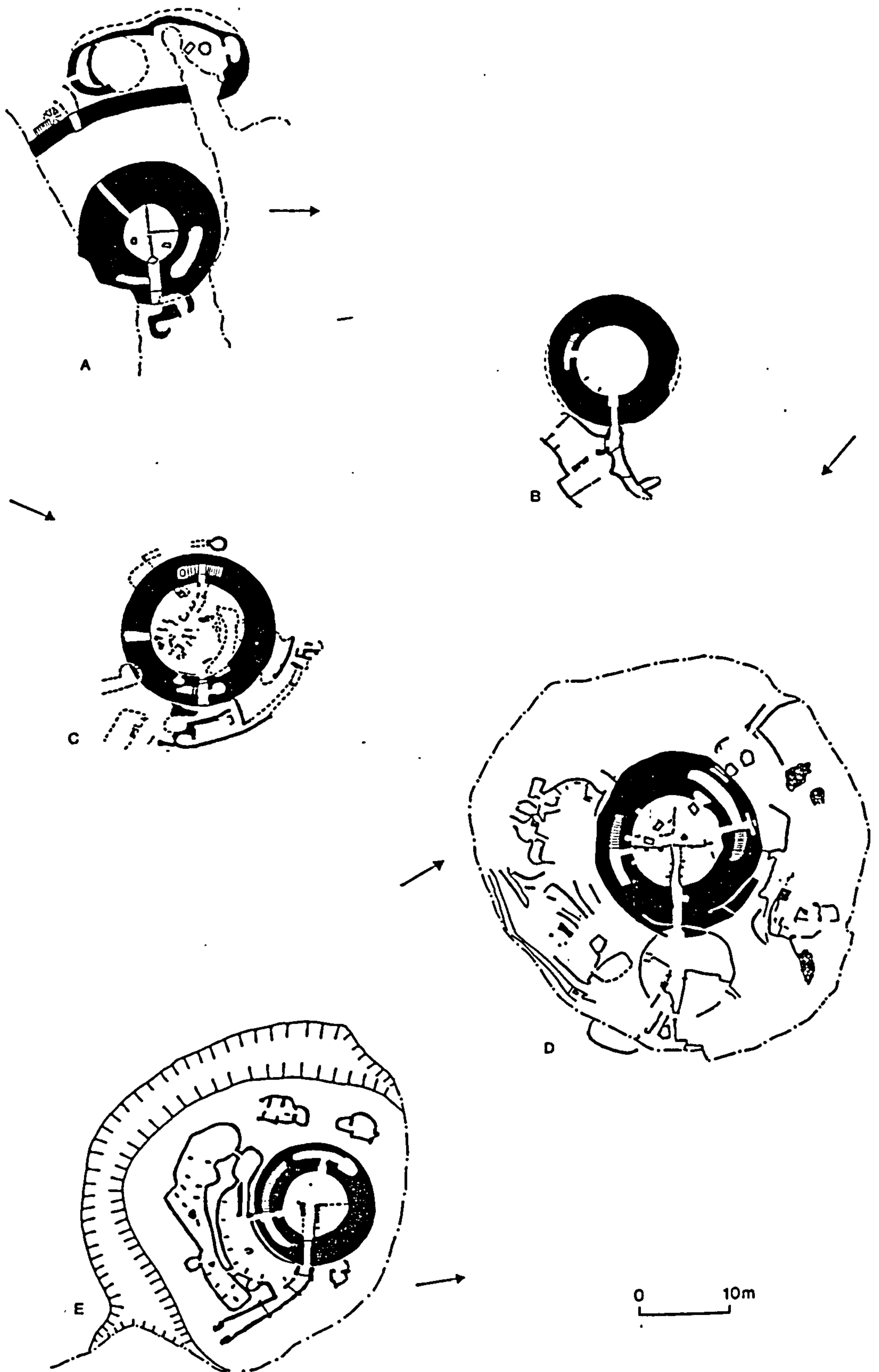


Figure 62. Plans of Caithness brochs (all redrawn): A Ness (RCAHMS 1911a); B Norwall (RCAHMS 1911a); C Keiss South (RCAHMS 1911a); D Keiss West (RCAHMS 1911a); E Yarrows (Anderson 1901).

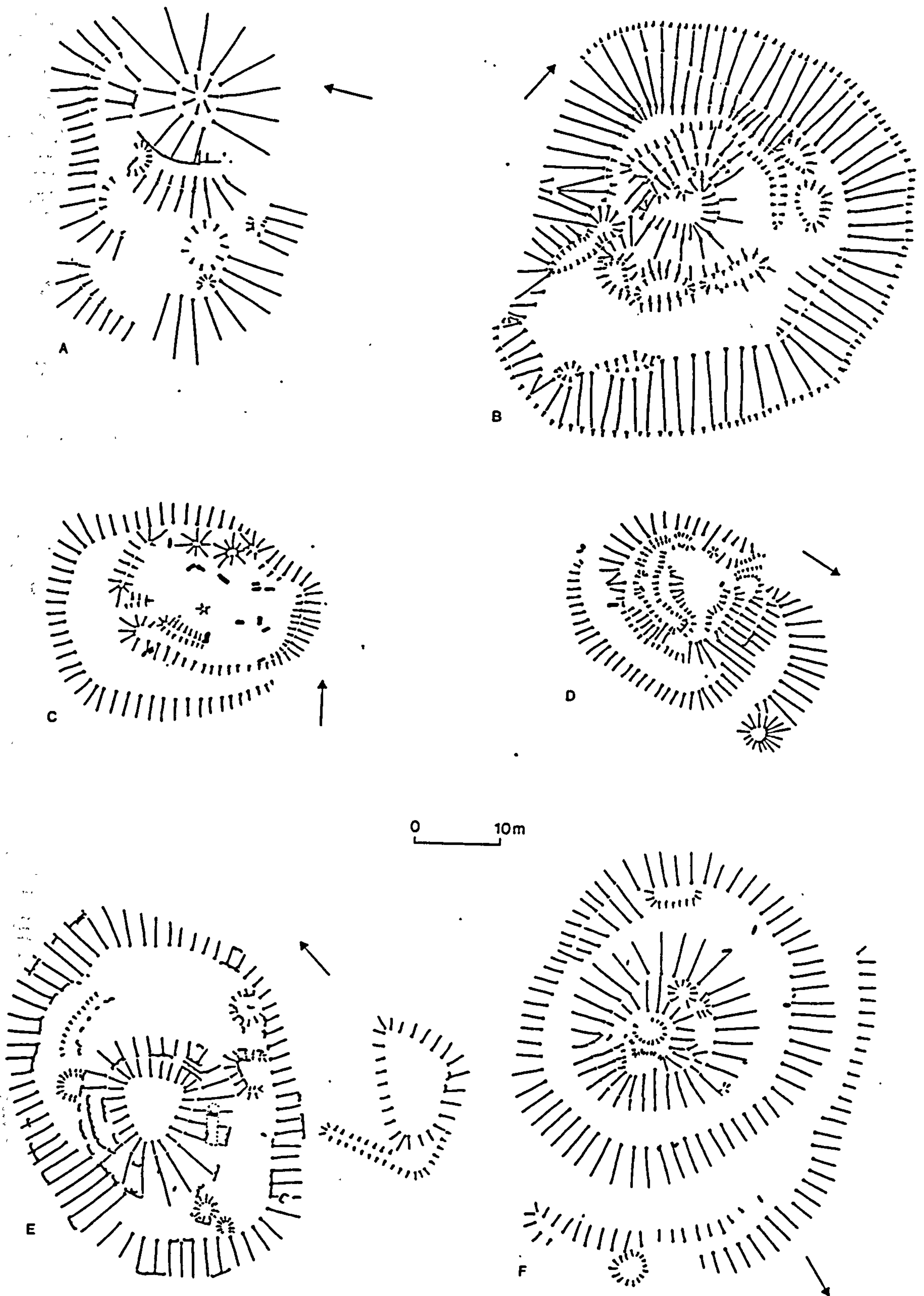


Figure 63. Plans of Caithness brochs (redrawn after Mercer 1985): A Warehouse; B Murkle; C Tulach Gorm; D Tota an Dranndain; E Watenan North; F Bruan .



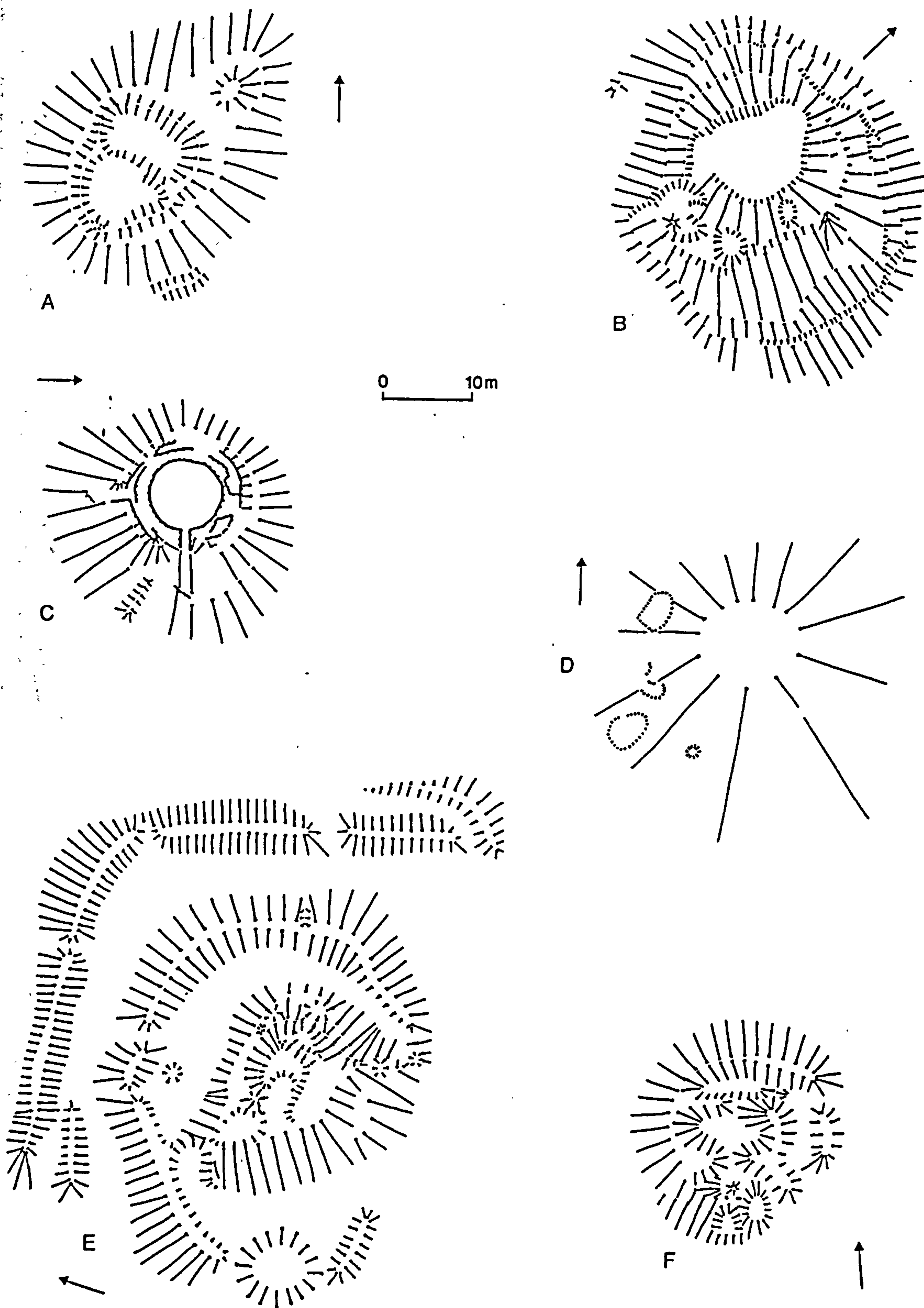


Figure 64. Plans of Caithness brochs (all redrawn); A Achbuiligan Tulloch (Mercer 1985); B Borrowston (Mercer 1985); C Brounabon (Mercer 1985); D ND 377 701 (Batey 1984); E Scrabster 2 (Mercer 1981); F Watenan West (Mercer 1985).



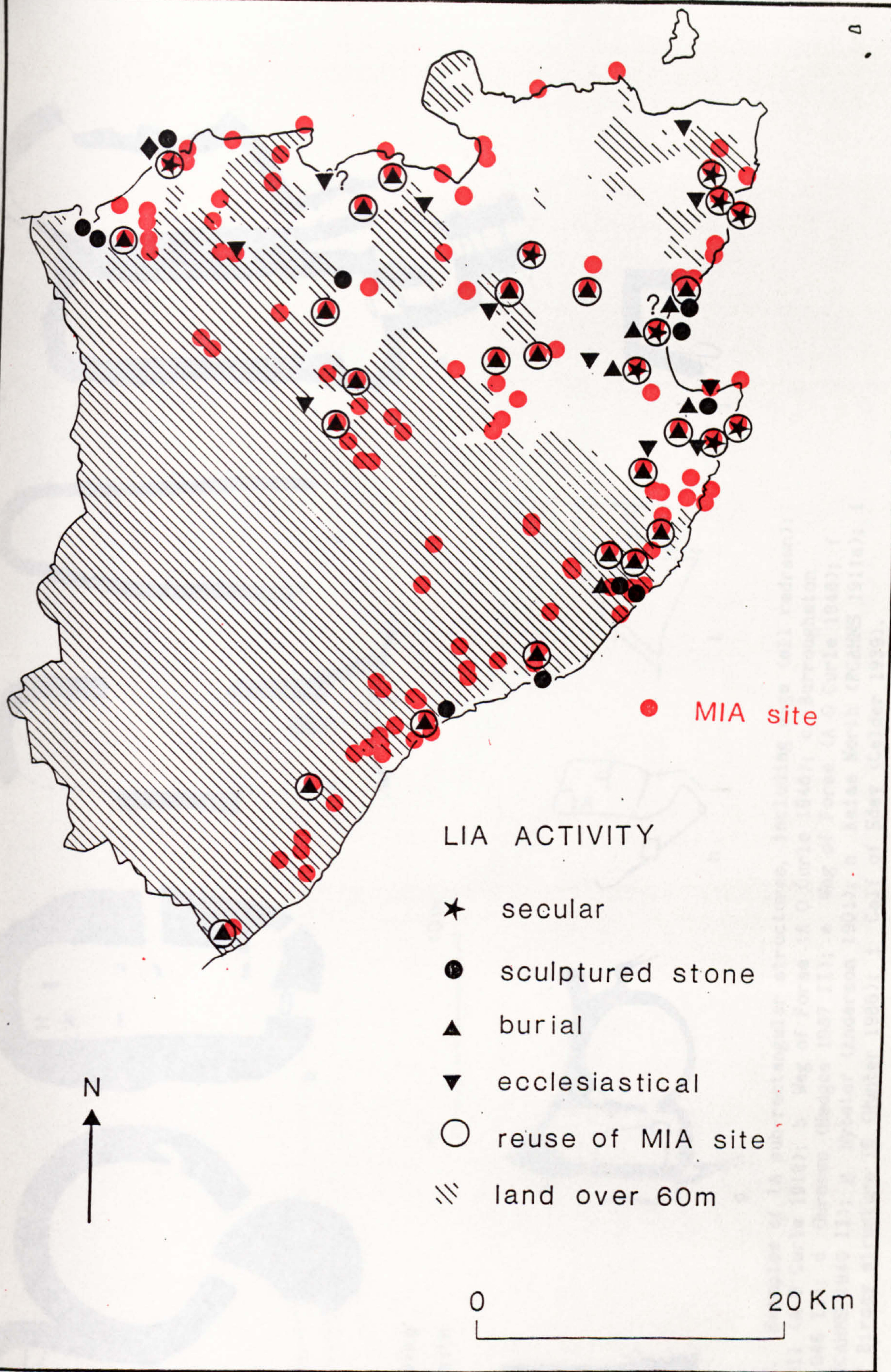


Figure 65. Comparison of distribution of recognised MIA and LIA activity in Caithness.



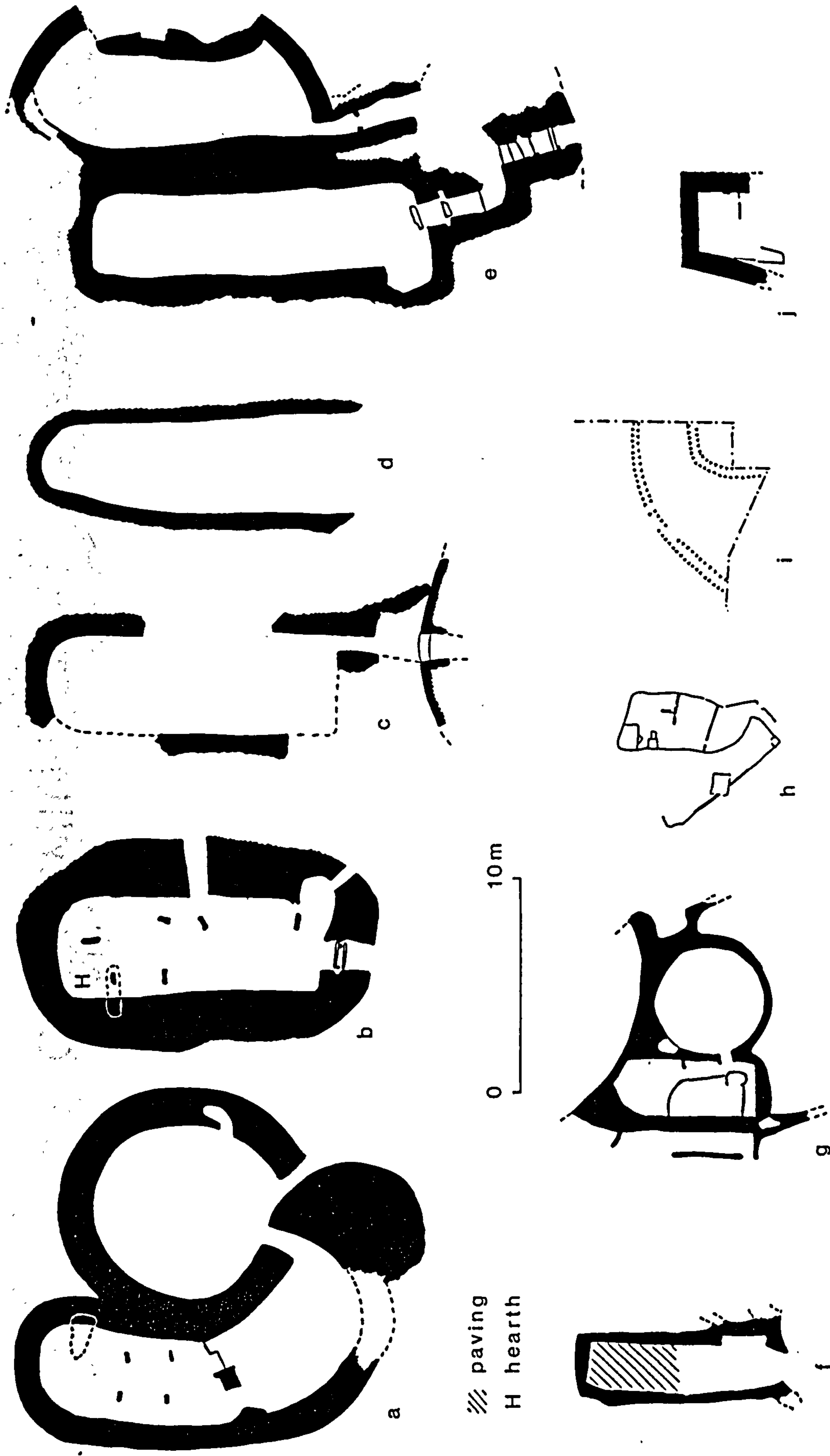
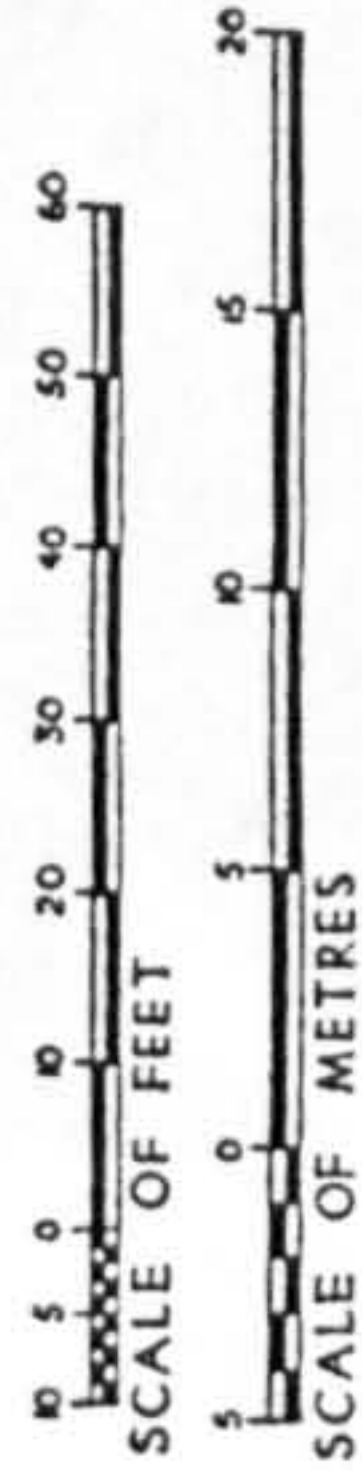
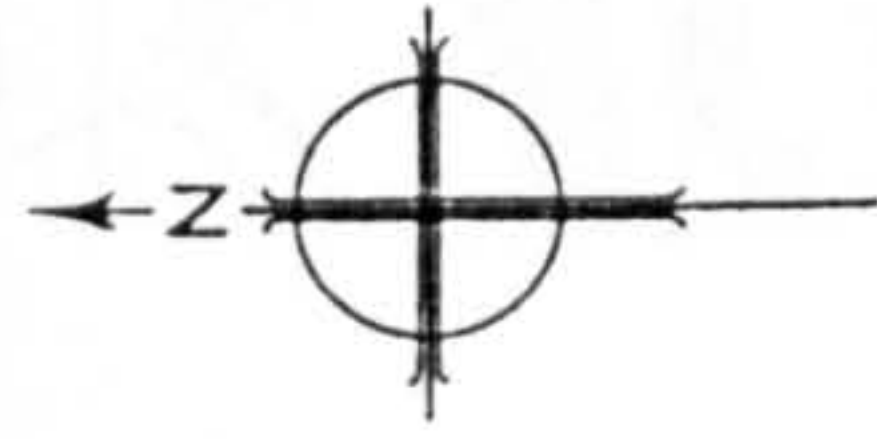


Figure 66. Examples of IA sub-rectangular structures, including wags (all redrawn):  
a Langwell (A O Curle 1912); b Wag of Forse (A O Curle 1948); c Burroughston  
(RCAHMS 1946 II); d Gurness (Hedges 1987 II); e Wag of Forse (A O Curle 1948); f  
Howmae (RCAHMS 1946 II); g Nybster (Anderson 1901); h Keiss North (RCAHMS 1911a); i  
Brough of Birsay structure 15 (Hunter 1986); j Calf of Eday (Calder 1939).



# CLICKHIMIN BROCH SHETLAND



- LATE BRONZE AGE
- ▨ IRON AGE I
- ▤ RINGWALL PERIOD I
- ▥ RINGWALL PERIOD II
- ▧ BROCH PERIOD
- ▩ WHEELHOUSE EARLY
- WHEELHOUSE LATE
- RANGES
- FI HEARTH
- HII HUT

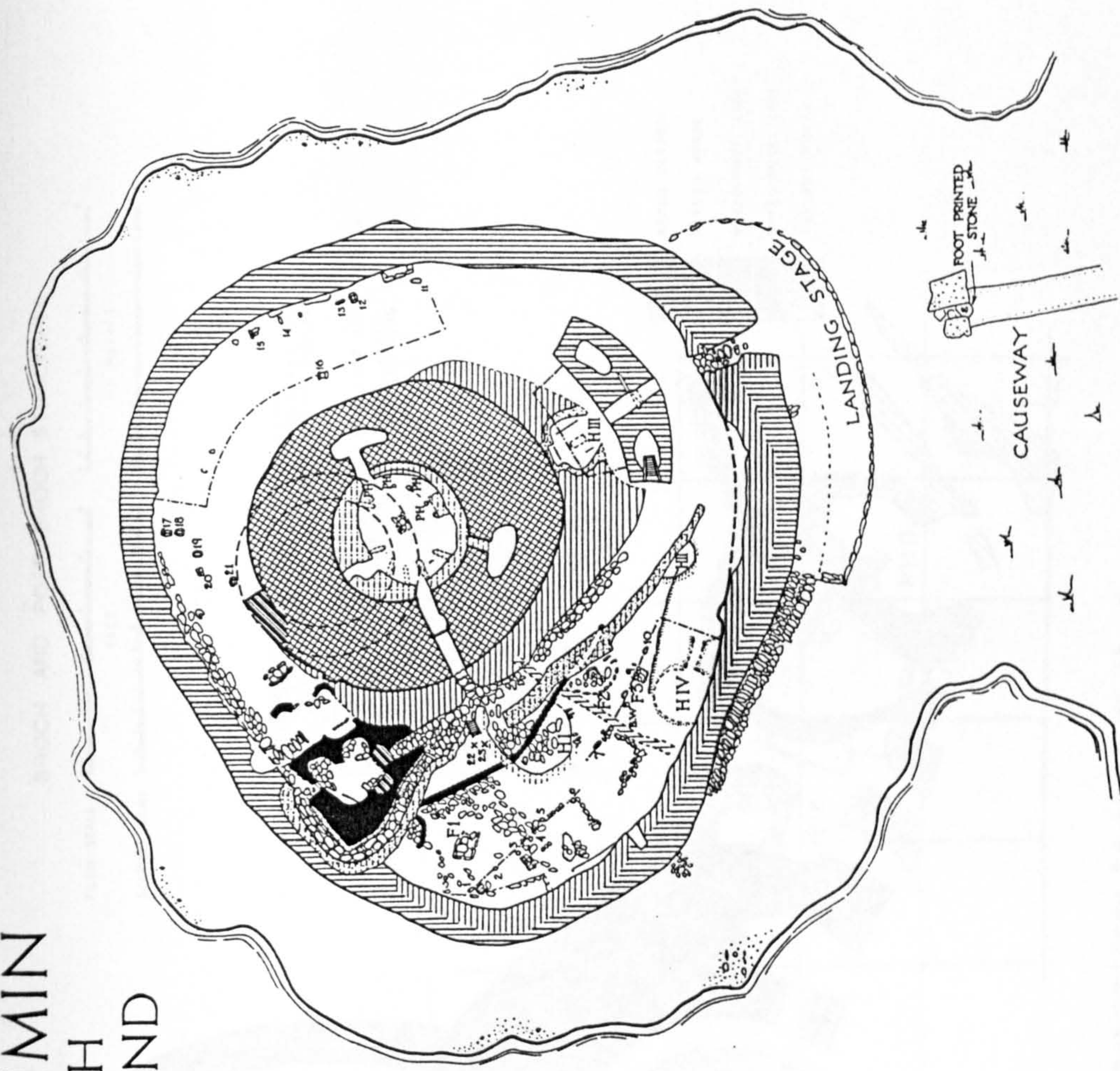


Figure 67. Phased plan of Clickhimin broch, Shetland (after Hamilton 1968a).



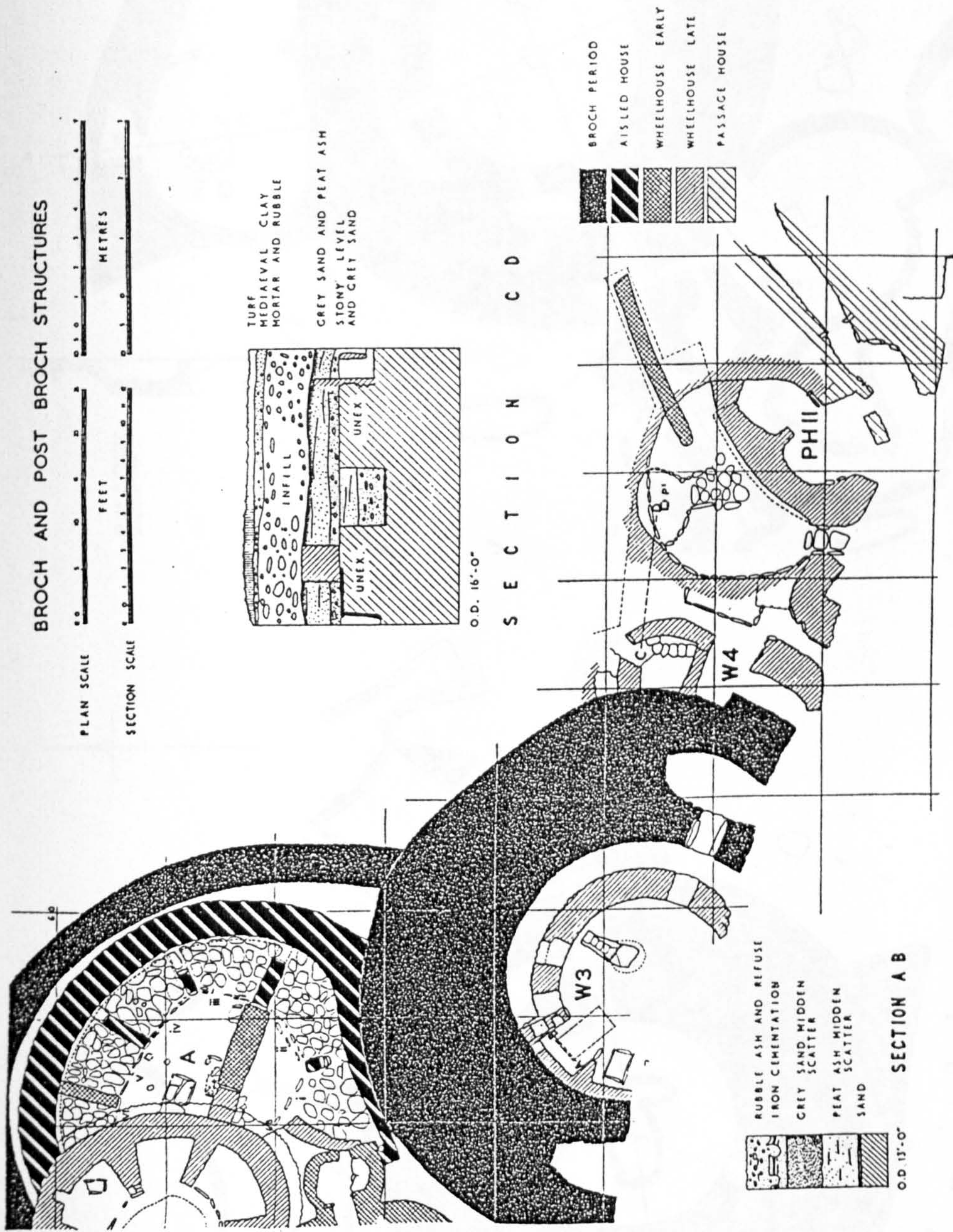


Figure 68. Plan of outstructures to the E of the broch at Jarlshof (after Hamilton 1956).



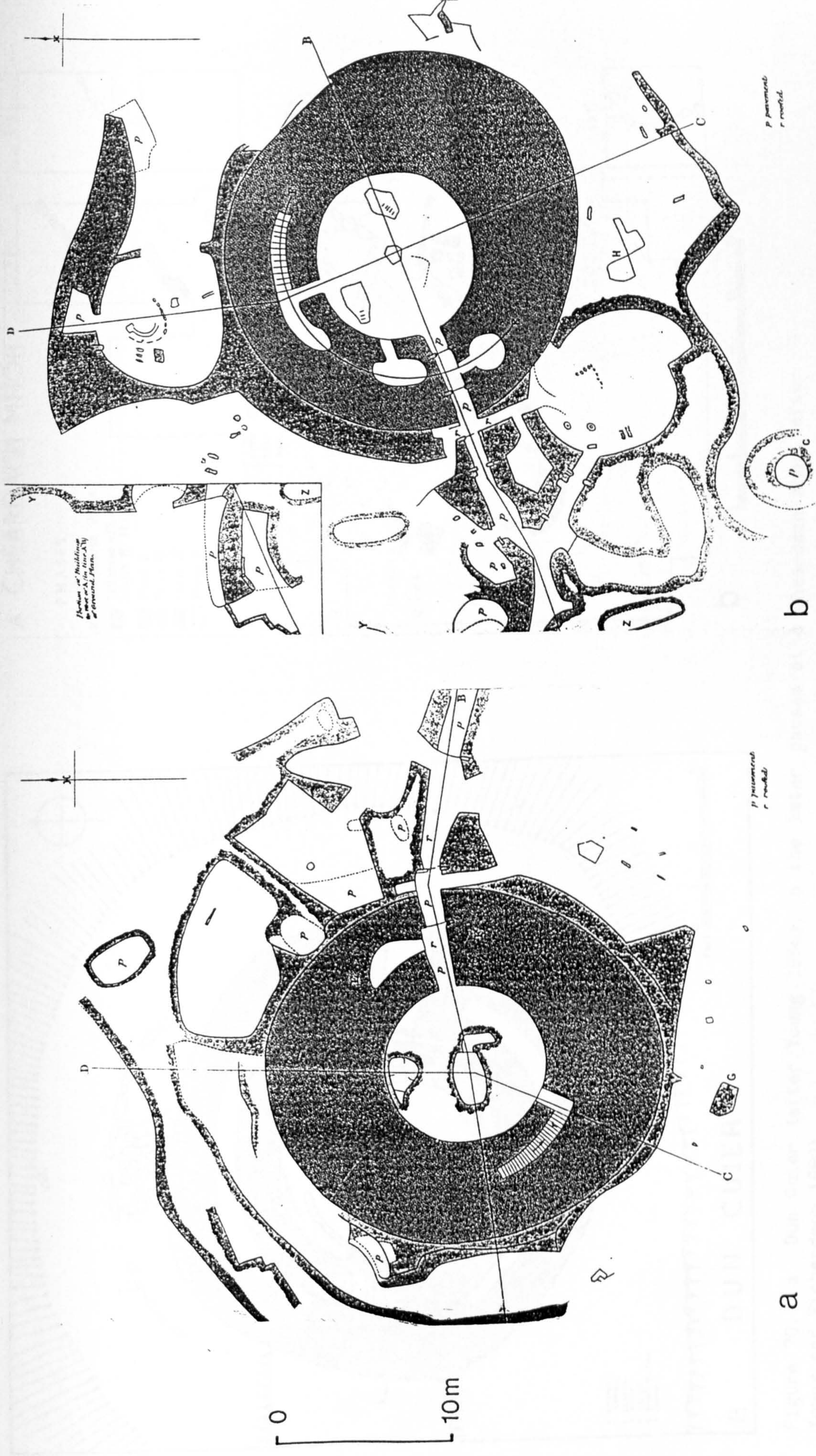


Figure 69. Plans of brochs in Sutherland: a Carn Liath; b Kintradwell (after Joass 1890).



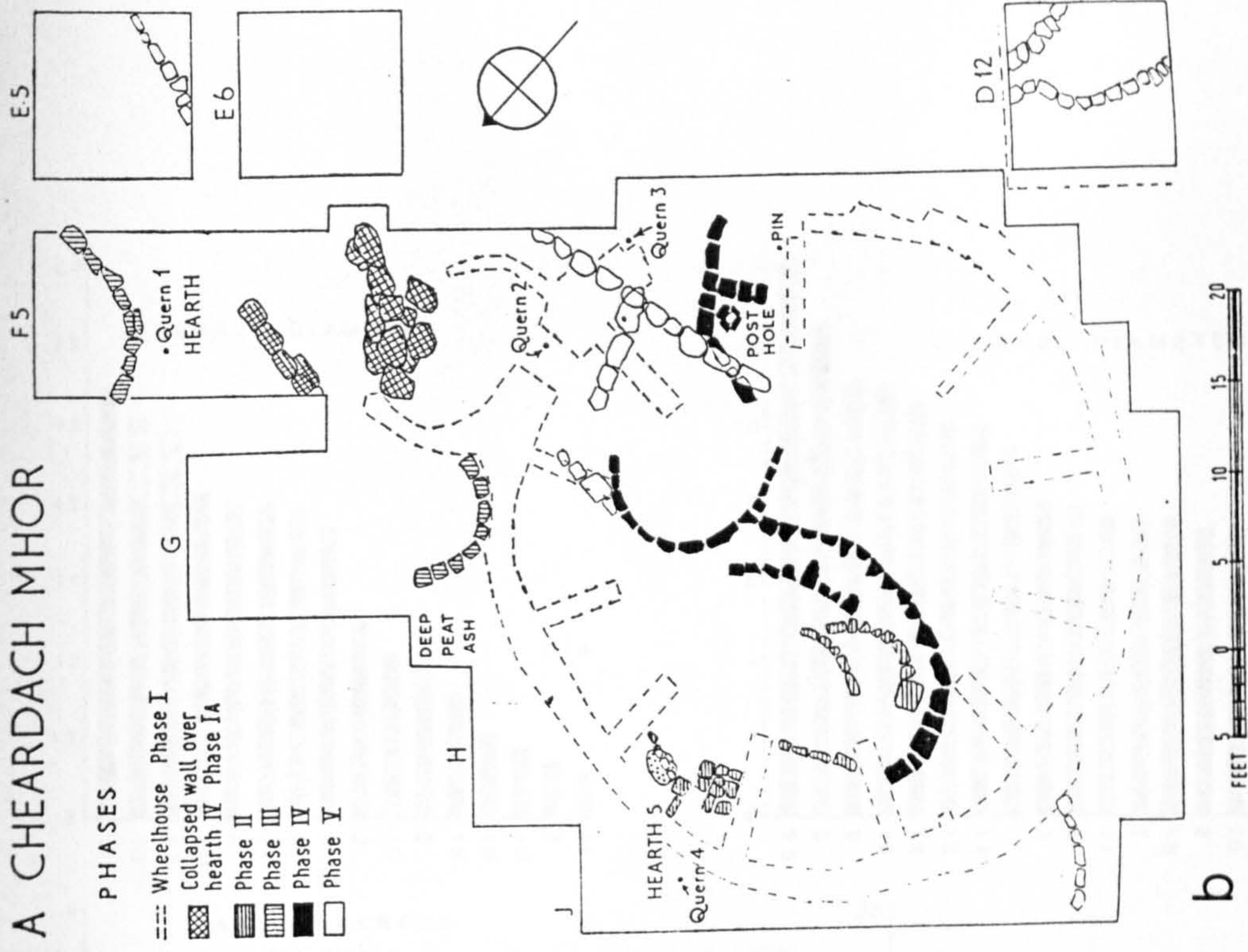
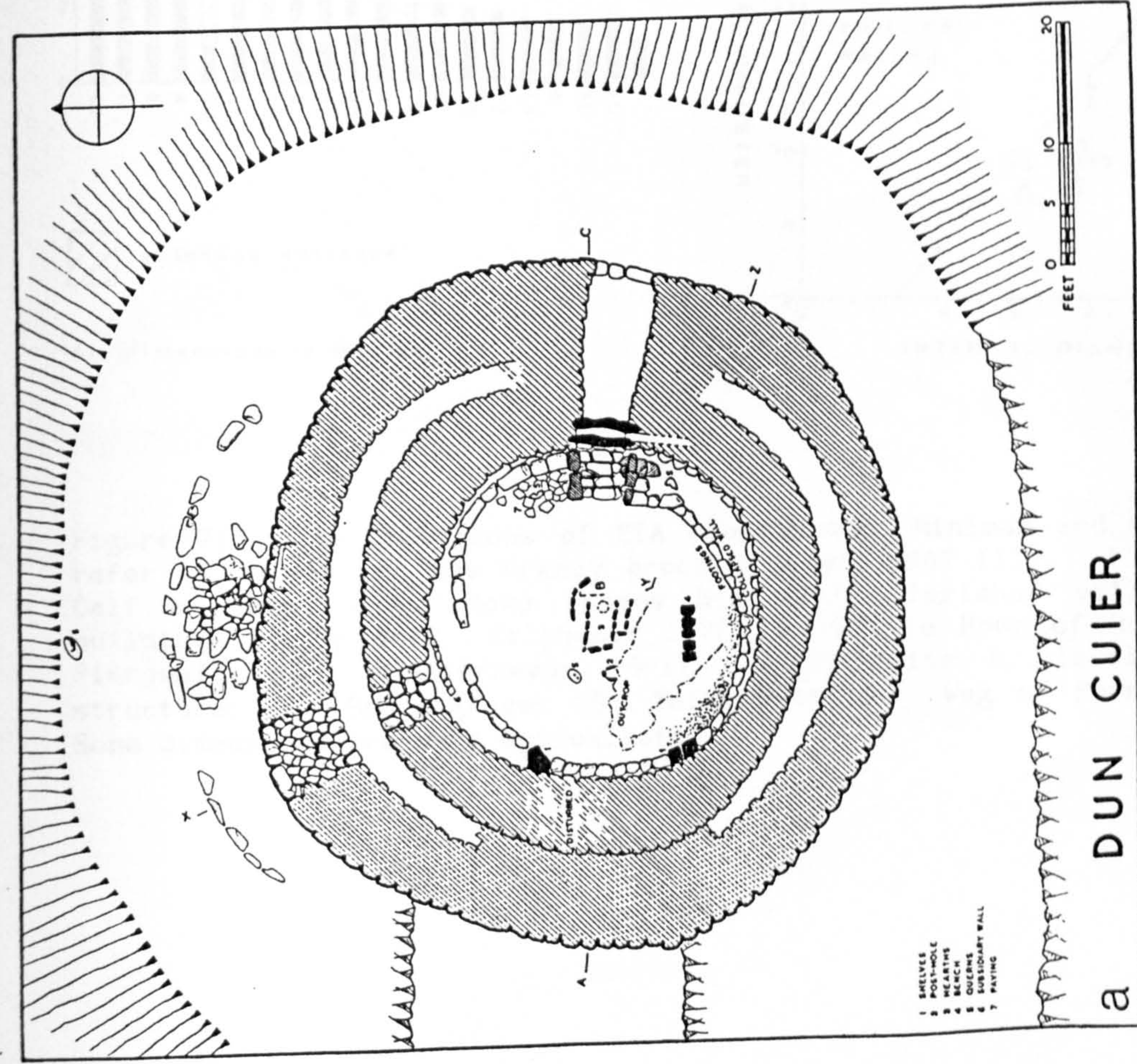
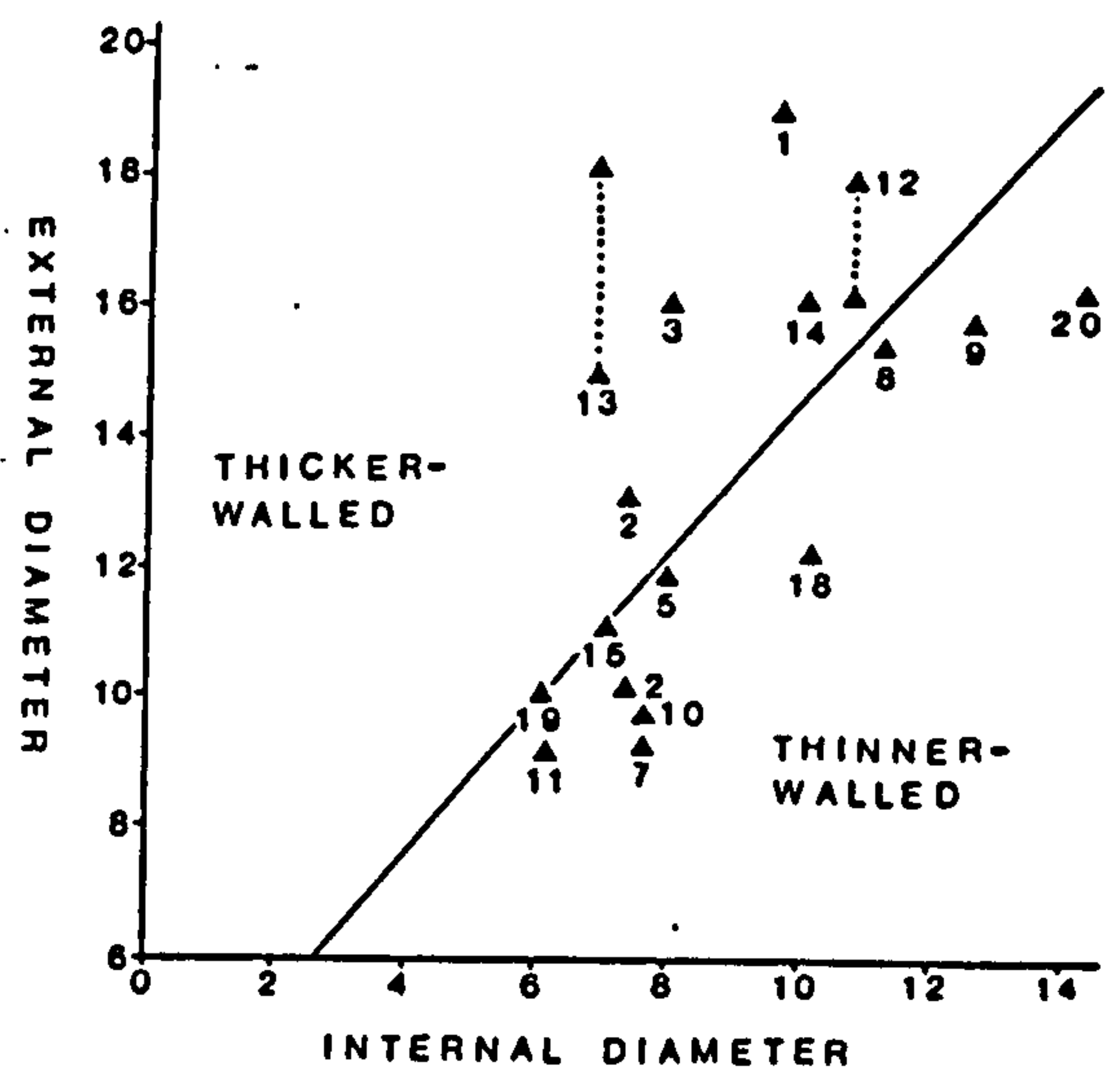
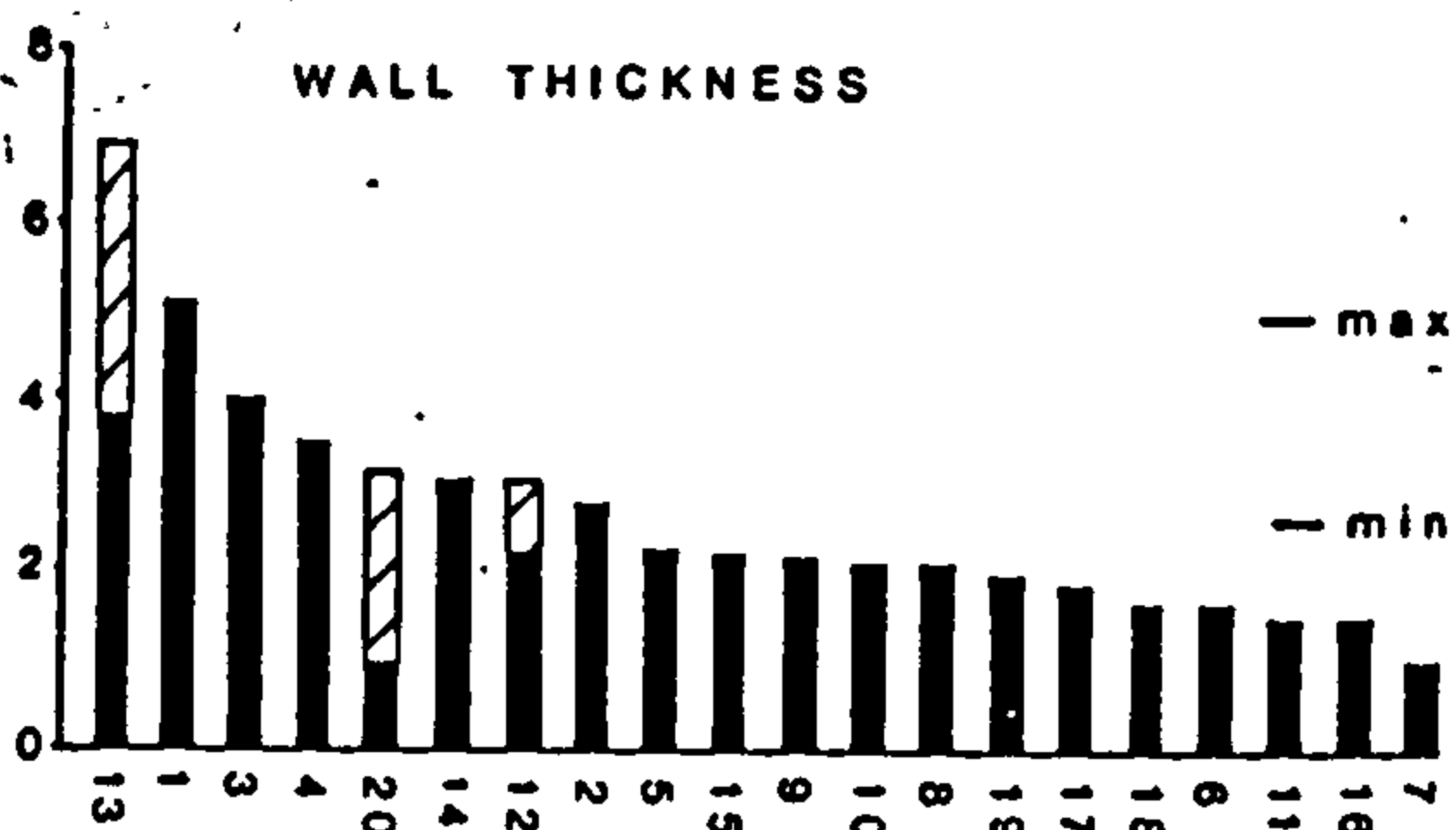
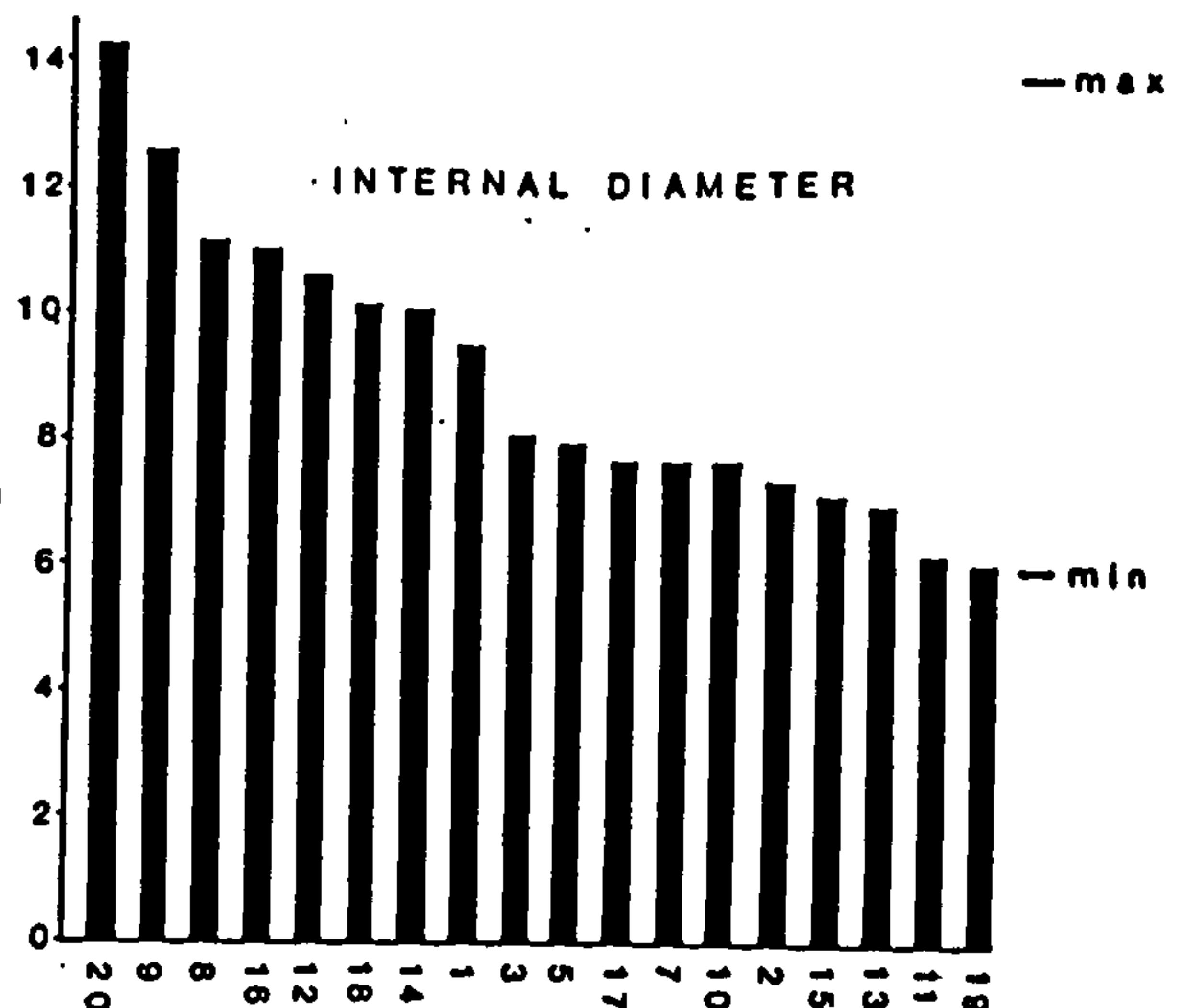
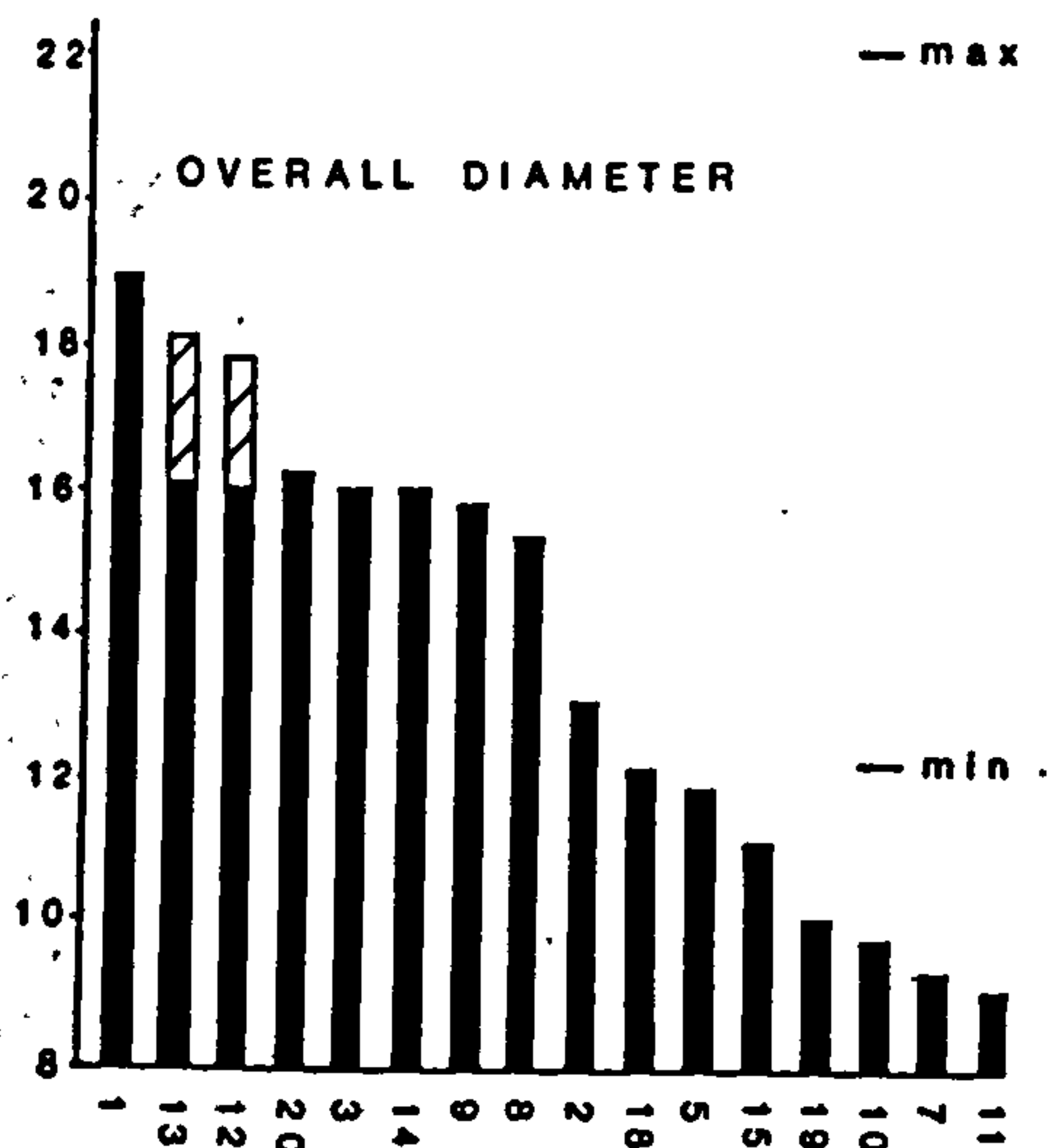


Figure 70. a Dun Cuier (after Young 1956); b the later phases at Cheardach Mhor (after Young and Richardson 1960).



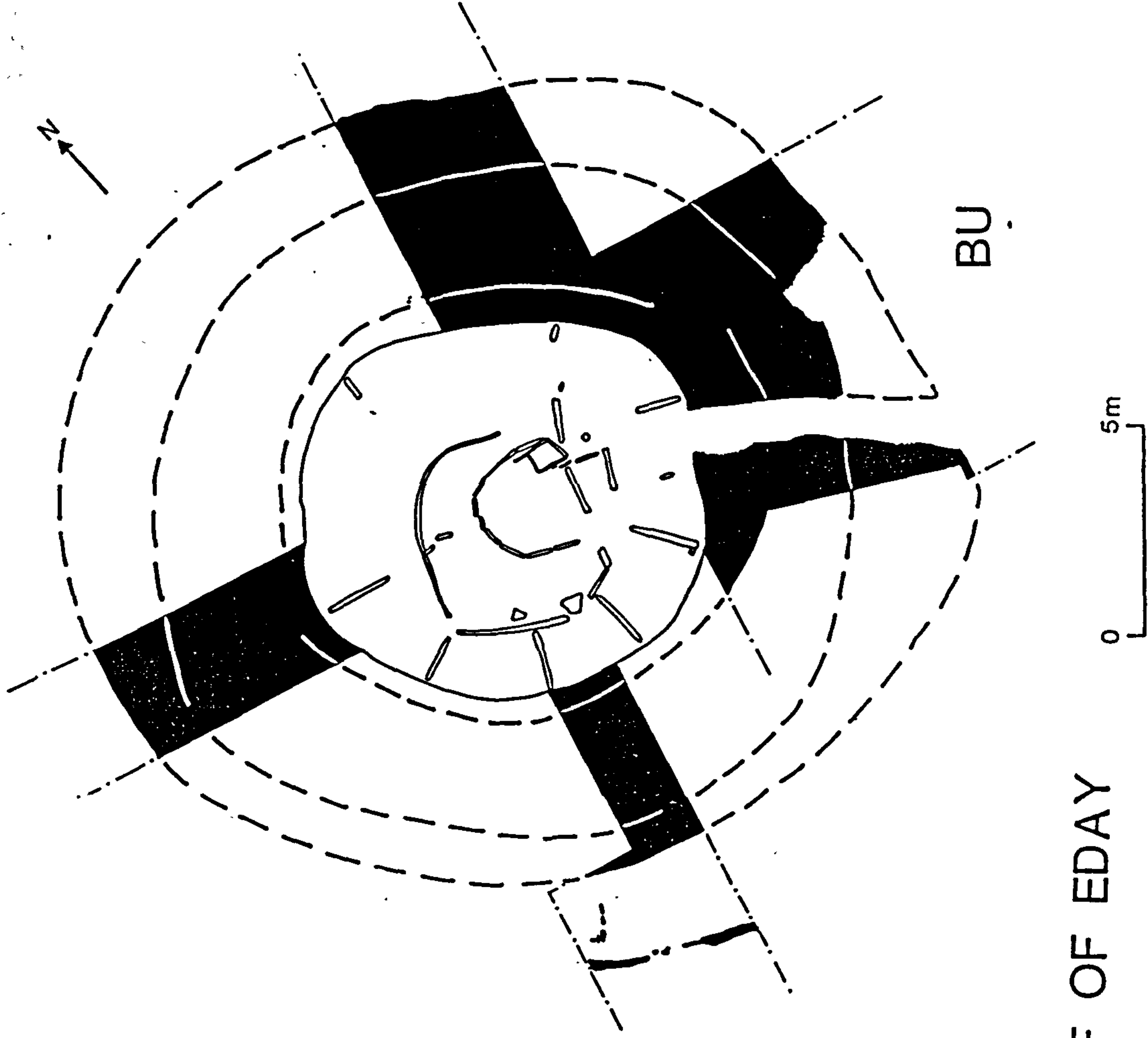
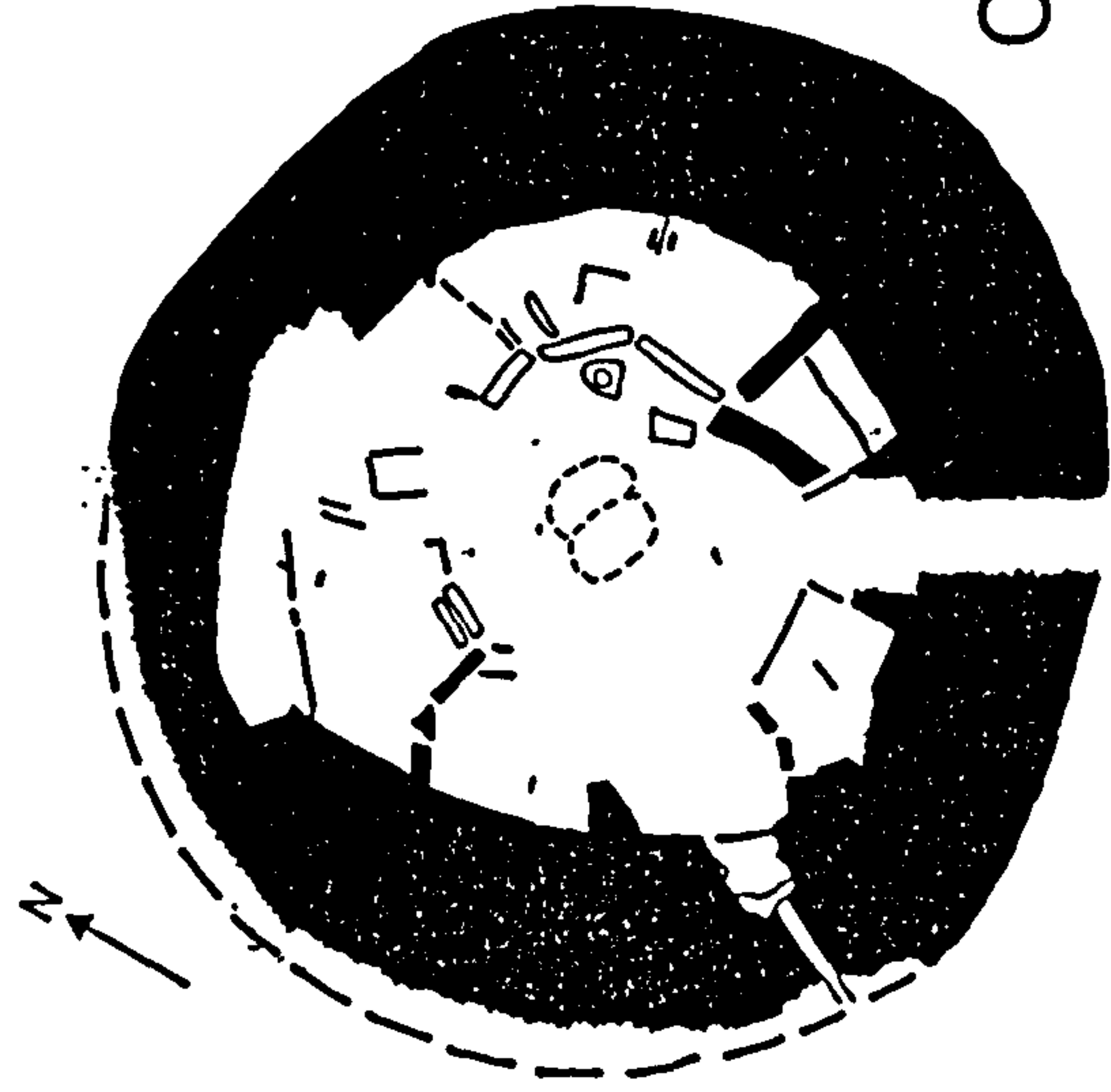
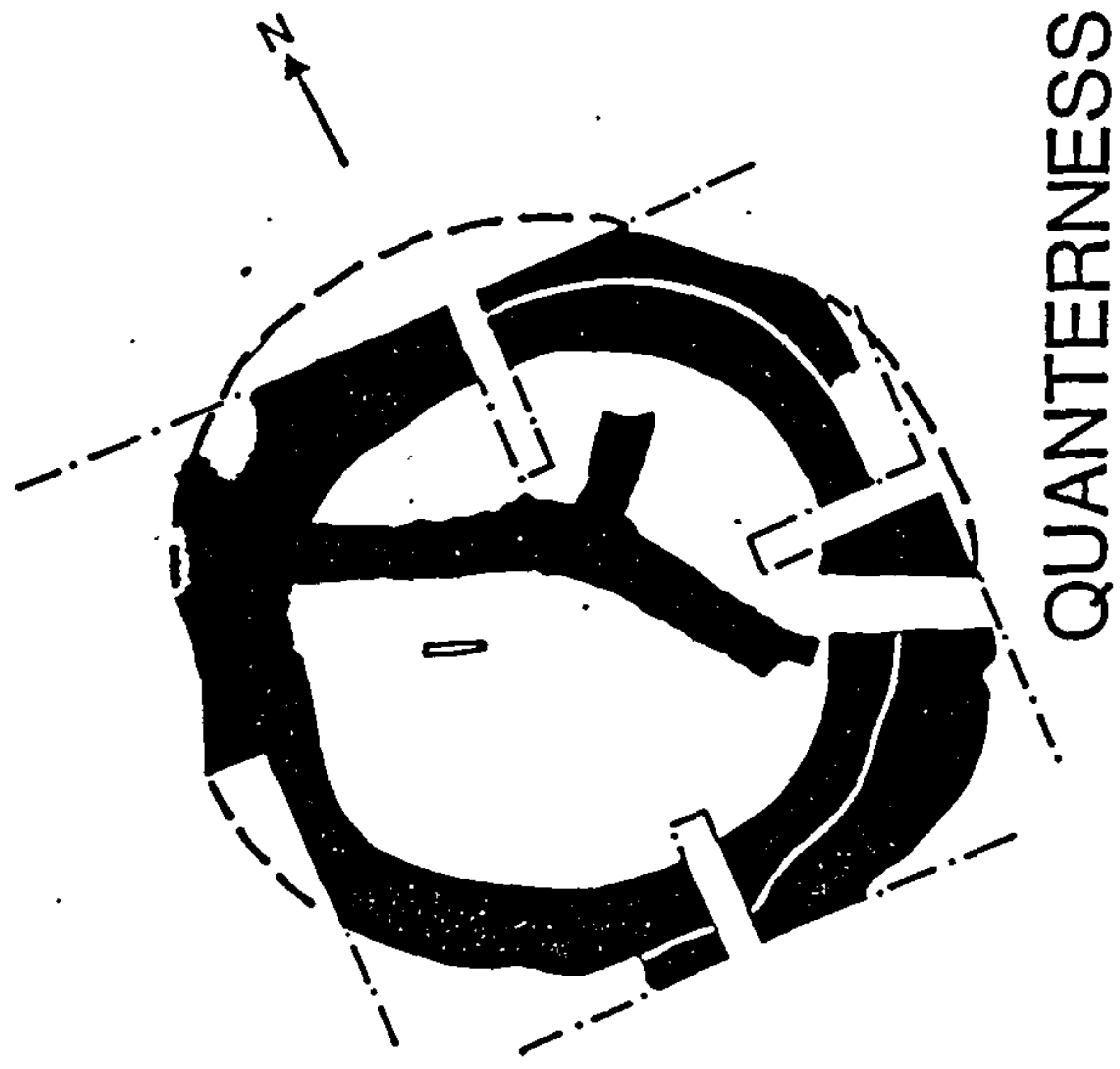


extended entrance

All dimensions in metres

Figure 71. The dimensions of EIA roundhouses. Minimum and maximum refer to values for the Orkney brochs (Hedges 1987 III). 1 Bu; 2 Calf of Eday; 3-4 Howe phases 5-6; 5-7 Jarlshof village 2, buildings IV-VI; 8-12 Kilphedir I-V; 13 Little Howe of Hoxa; 14 Pierowall; 15 Quanterness; 16-17 Skaill site 6, level 2, S structure; 18 Spurdagrove; 19 Tofts Ness; 20 Wag of Forse. NB Some dimensions are only approximate.





CALF OF EDAY

0 5m

Figure 72. Plans of EIA roundhouses at Quanterness, Calf of Eday and Bu (redrawn after Renfrew 1979; Calder 1939; Hedges 1987 I).

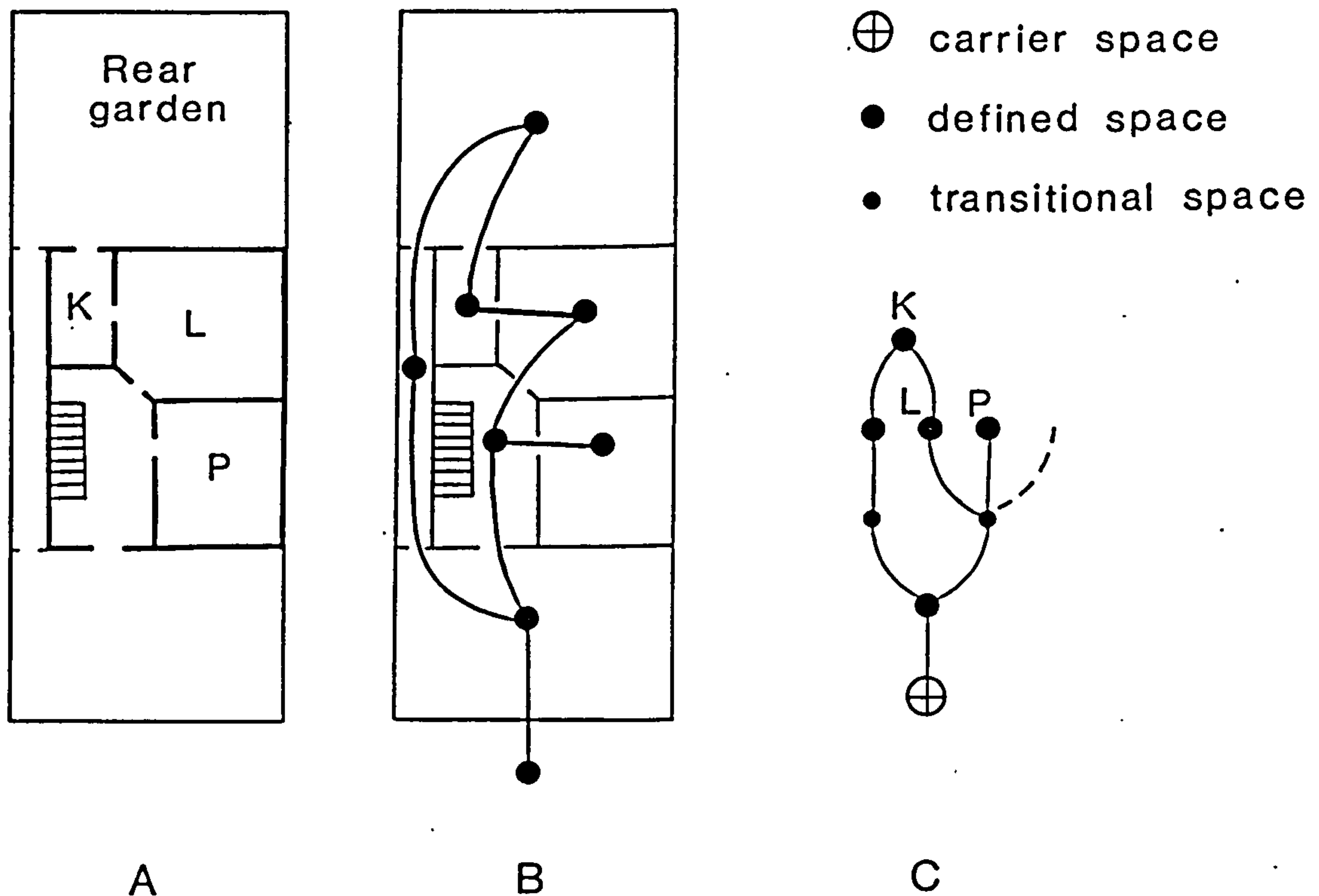


Figure 73. A Plan of a small modern house, ground floor only (P-best room, K-kitchen, L-main living space; redrawn after Hillier and Hanson 1984); B Unjustified access (gamma) map superimposed; C Justified access map with labelled spaces.



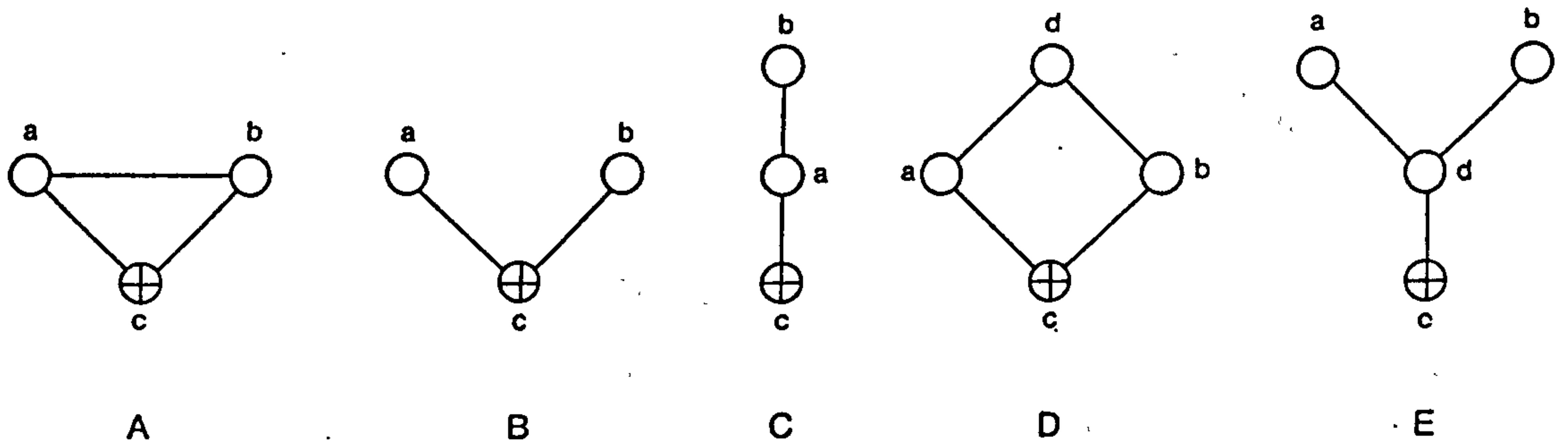


Figure 74. A: a and b are in a symmetric and distributed relationship with respect to c; B: a and b are in a symmetric and nondistributed relationship with respect to c; C: a and b are in a nondistributed and asymmetric relationship with respect to c; D: a and b are symmetric to each other with respect to c, but d is in an asymmetric relation to both with respect to c; E: d is in a nondistributed and symmetric relation to a and b, which still remain symmetric to each other with respect to d, or to c (redrawn after Hillier and Hanson 1984).

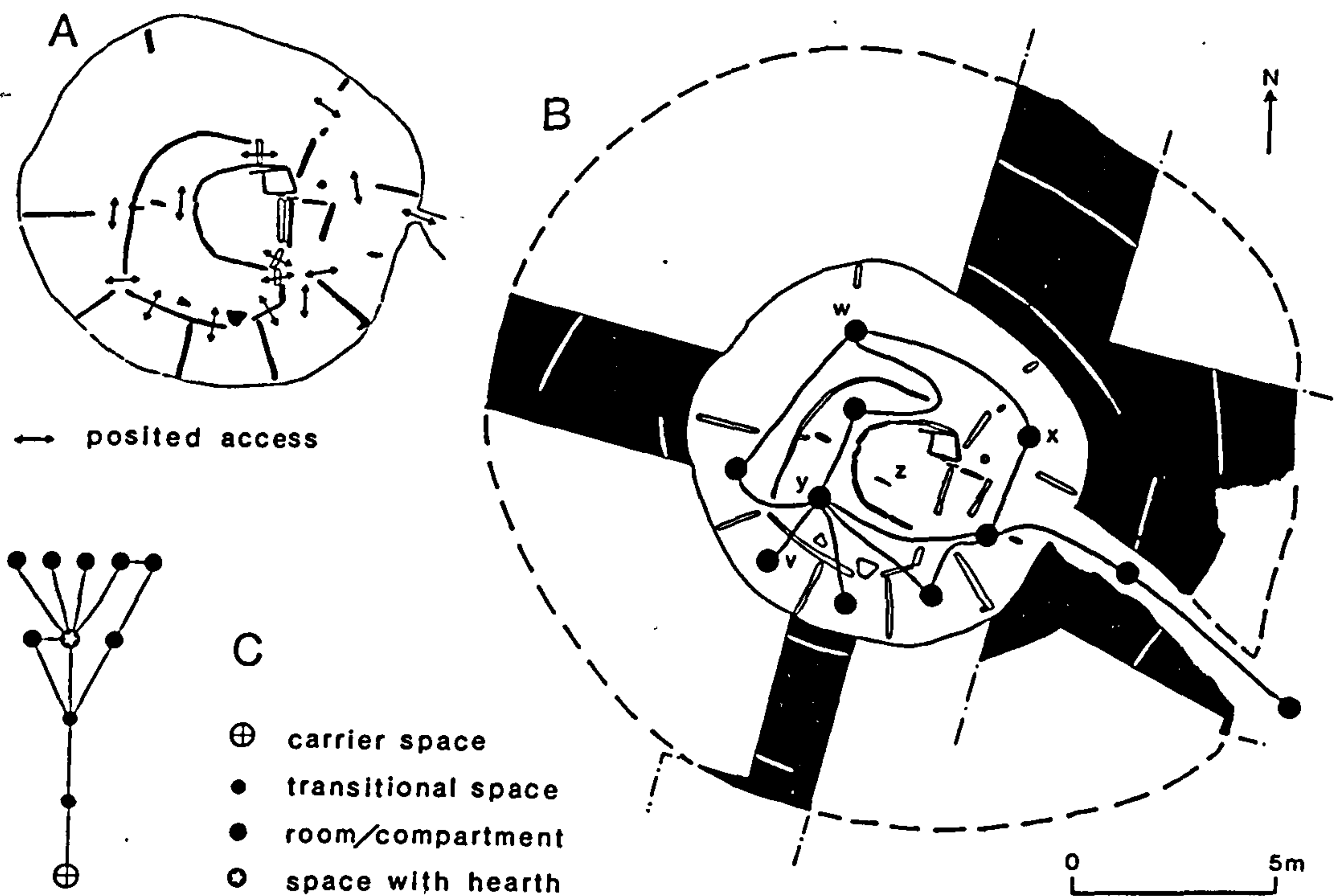
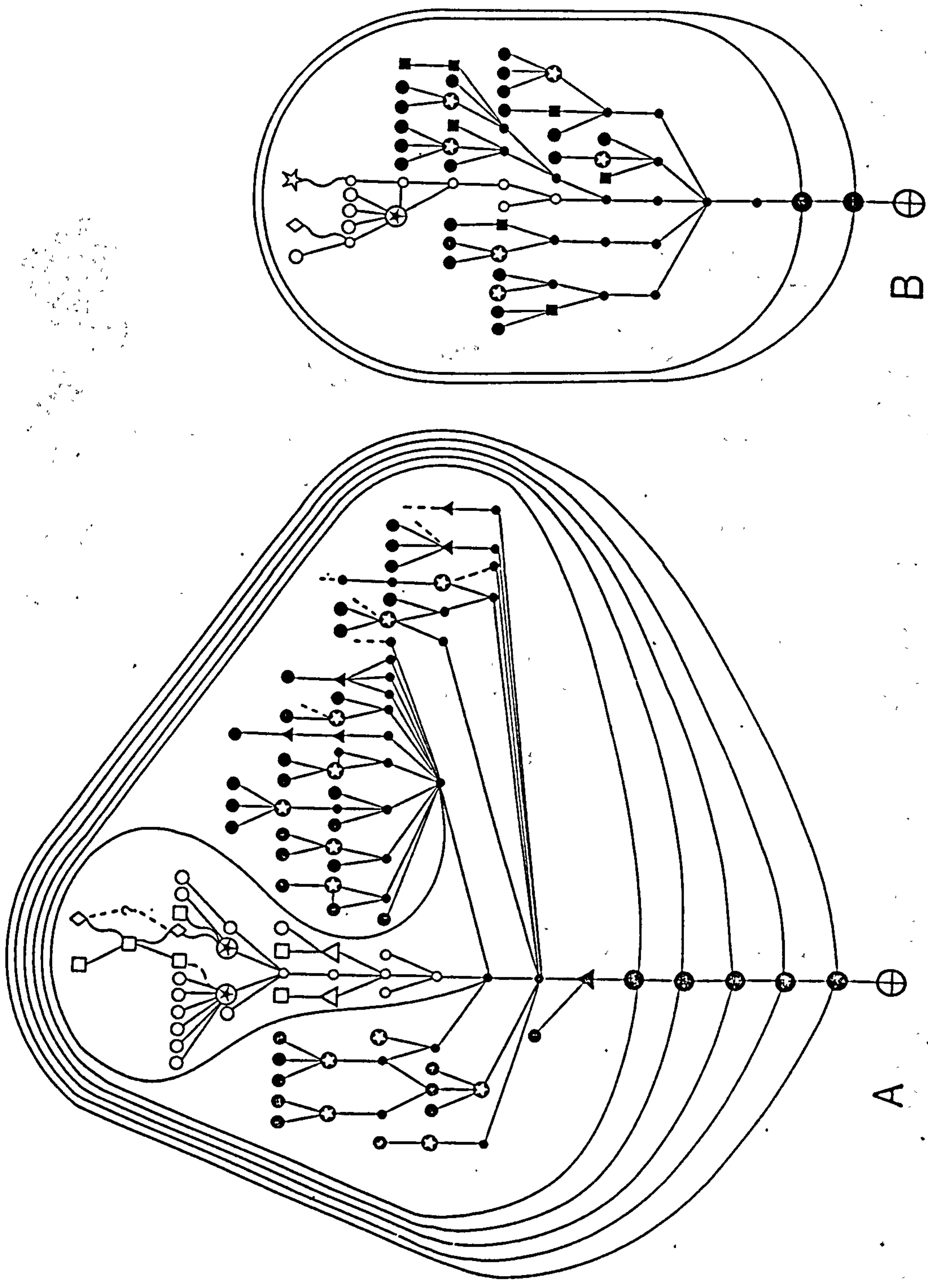


Figure 75: A Plan of Bu indicating points of access (redrawn after Hedges 1987 I); B Bu with unjustified access (gamma) map superimposed ; C Justified access map with labelled spaces.





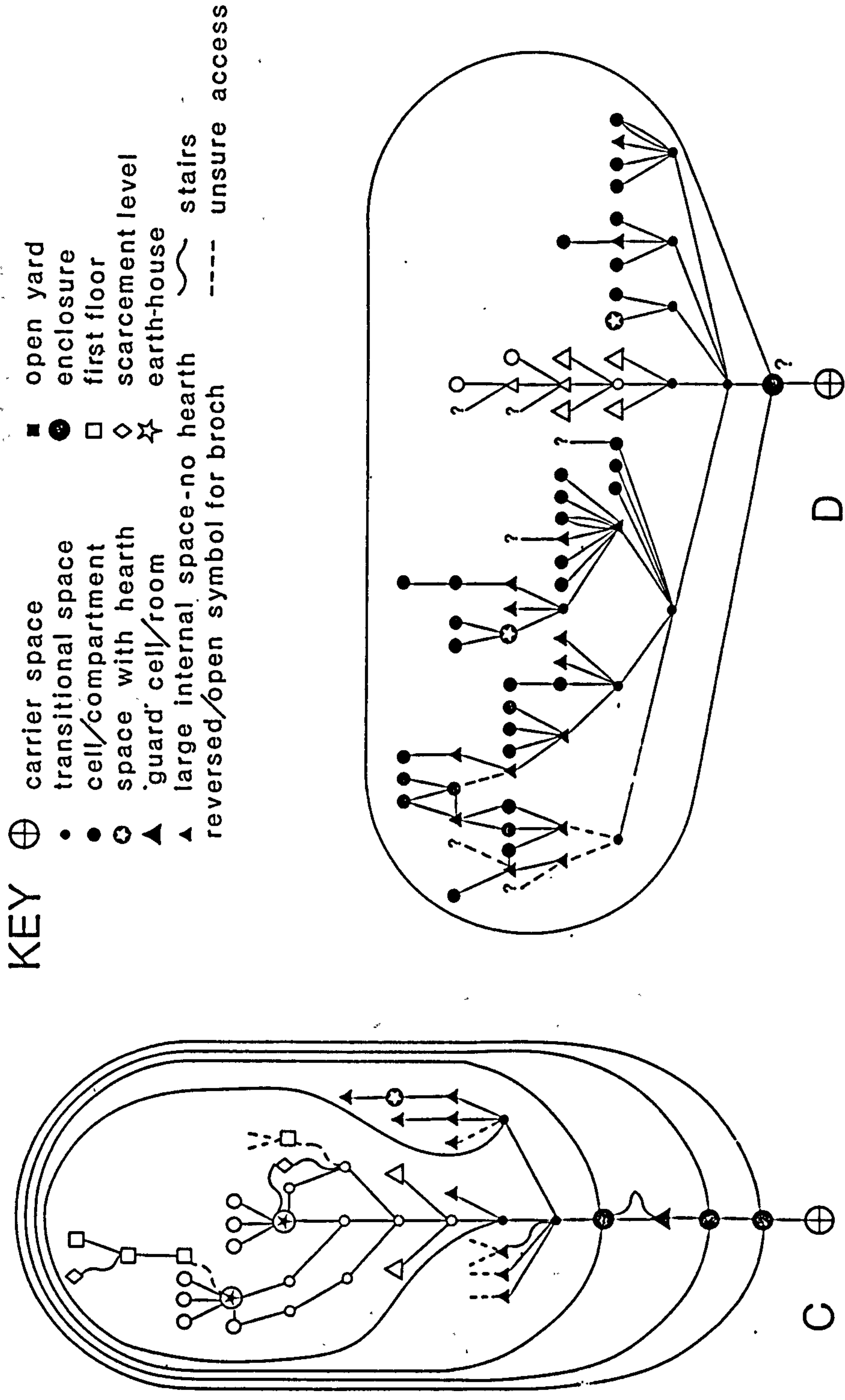


Figure 76: Justified access (gamma) maps for MIA nucleated settlements (reversed/open symbols distinguish the broch from other structures): A Gurness; B Howe; C Midhowe; D Lingro



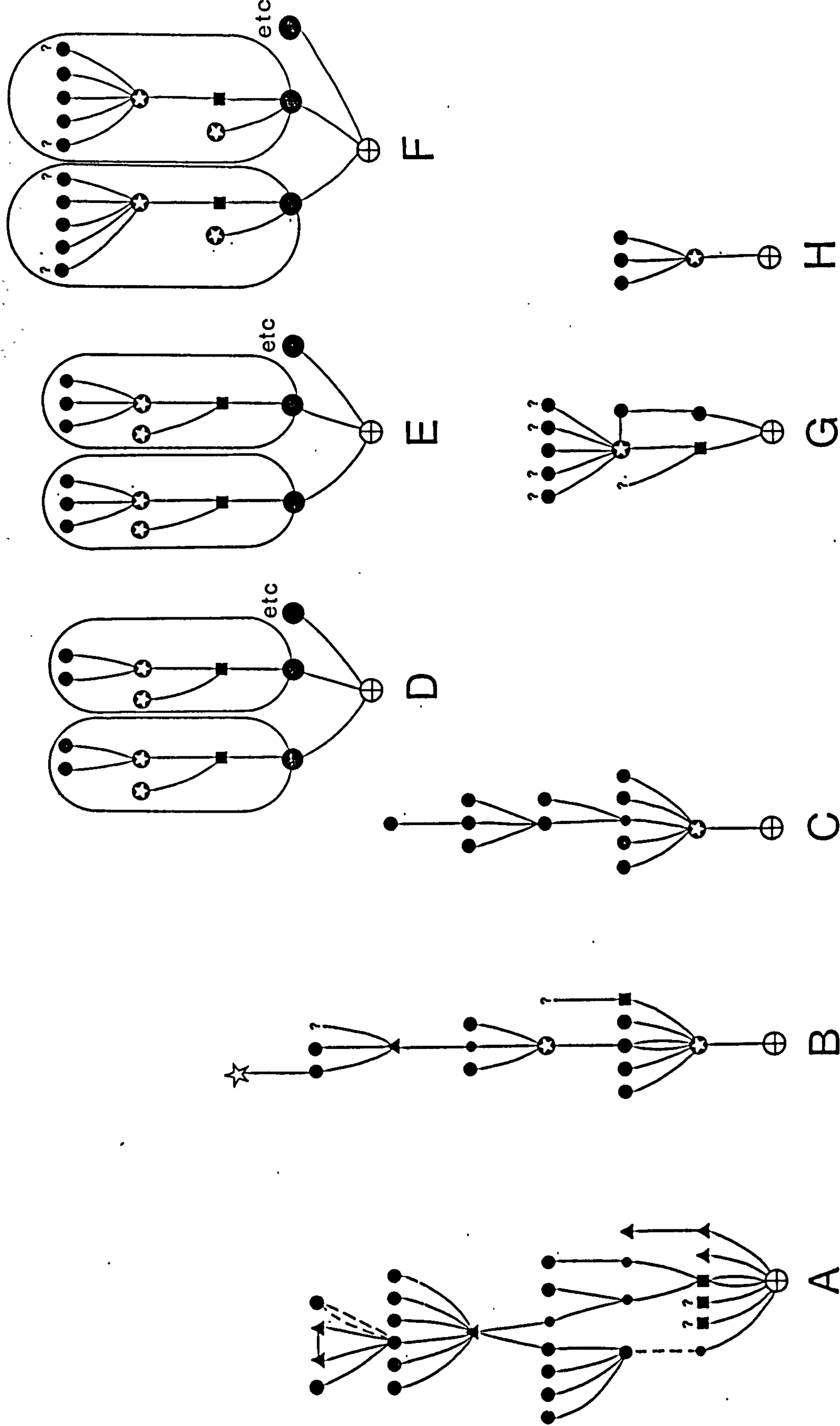


Figure 77: Justified access (gamma) maps for LIA structures: A Howmae; B Howe phase 8, stage 6; C Gurness 'Shamrock'; D Udal level XII; E Udal level XII; F Udal level XII; G Buckquoy phase II; H Buckquoy phase Ib. A-D are LIA I, E-H are LIA II. Key as for fig 76. D-F are only schematic.

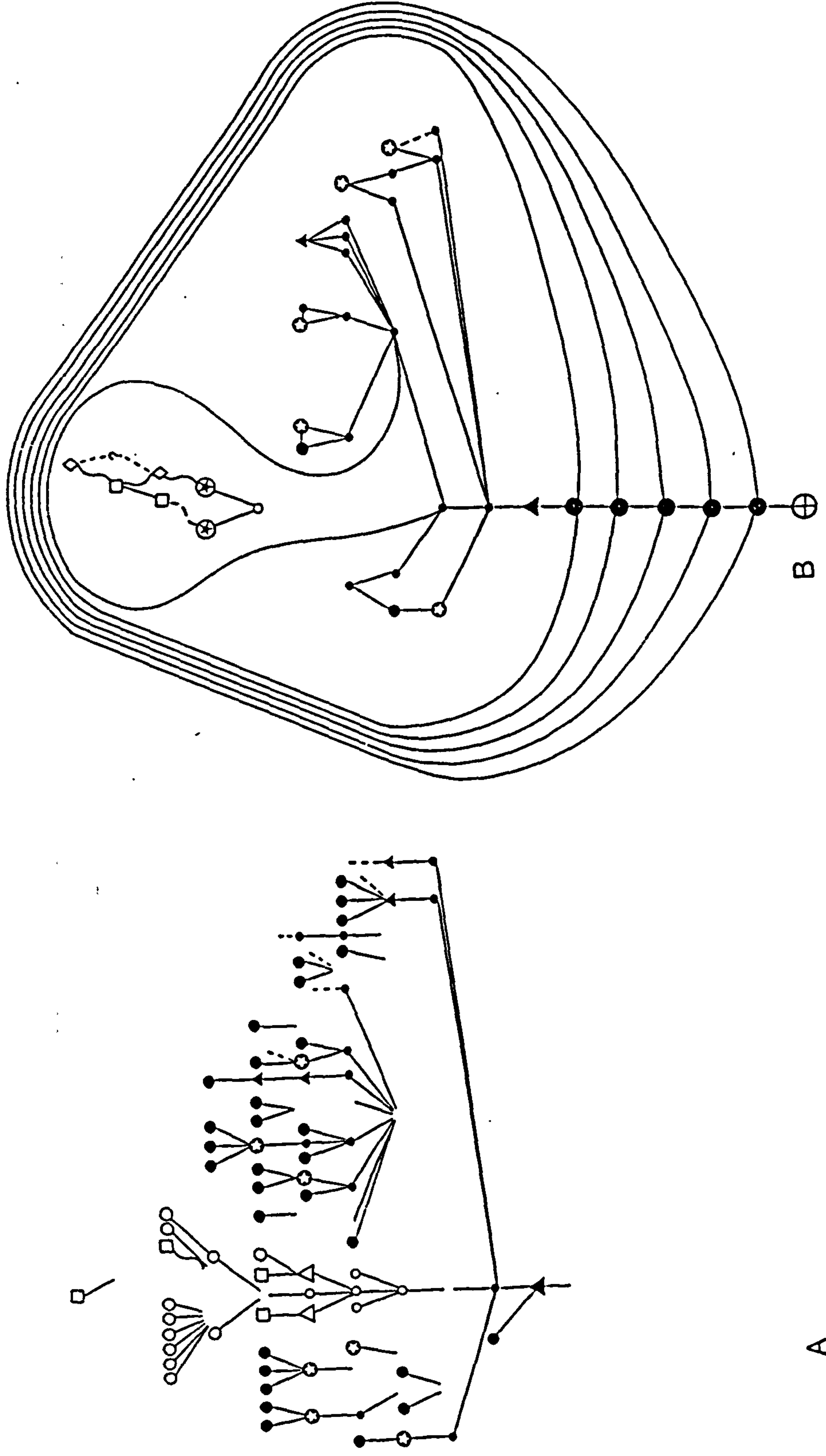


Figure 78. Justified access maps for Gurness: A the nondistributed sub-system; B the distributed system.



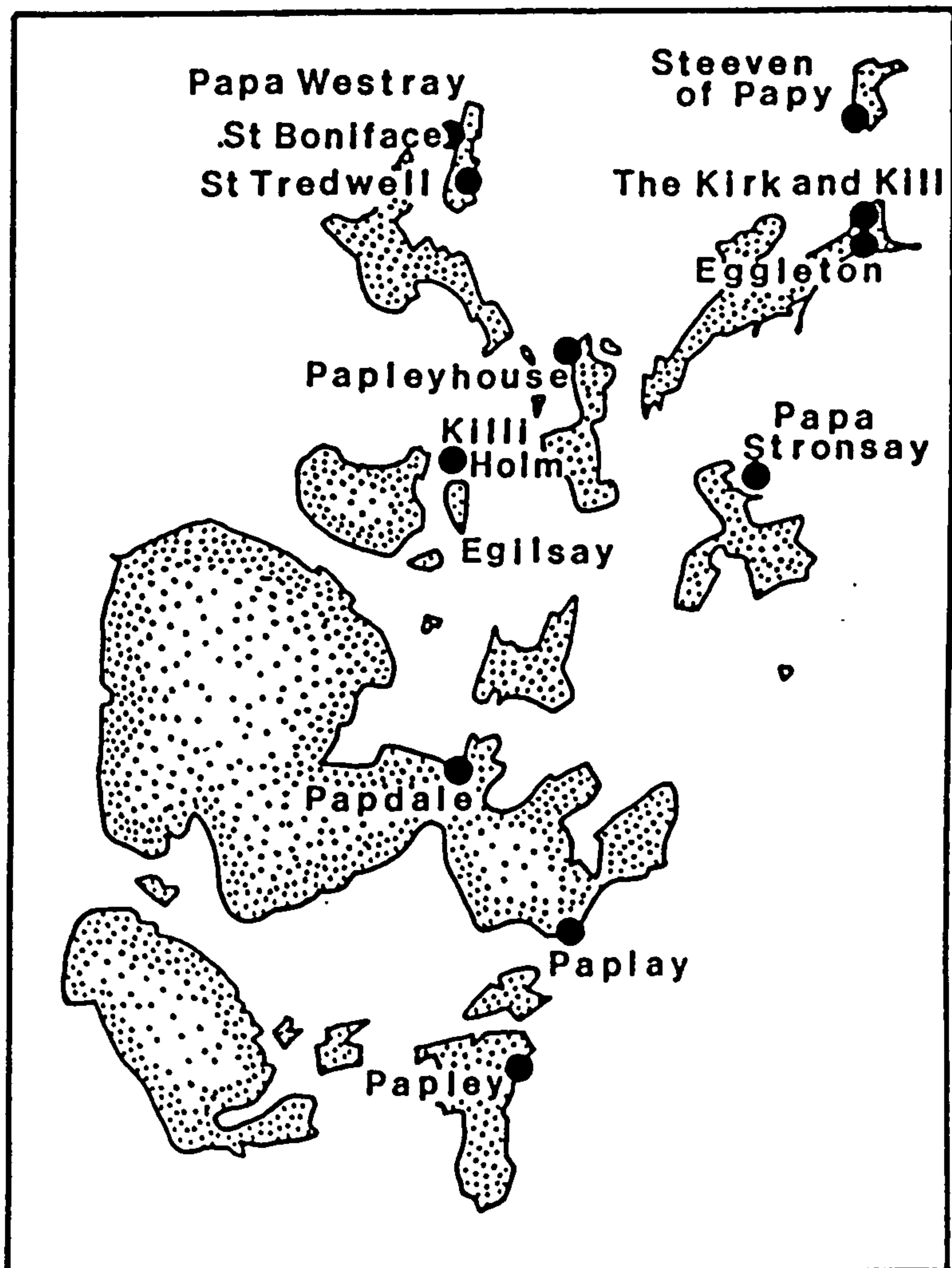


Figure 79. Place-name evidence for the early church in Orkney. *Cill* and *Eccles*-names are among the names most likely to be pre-Norse (after Thomson 1987).

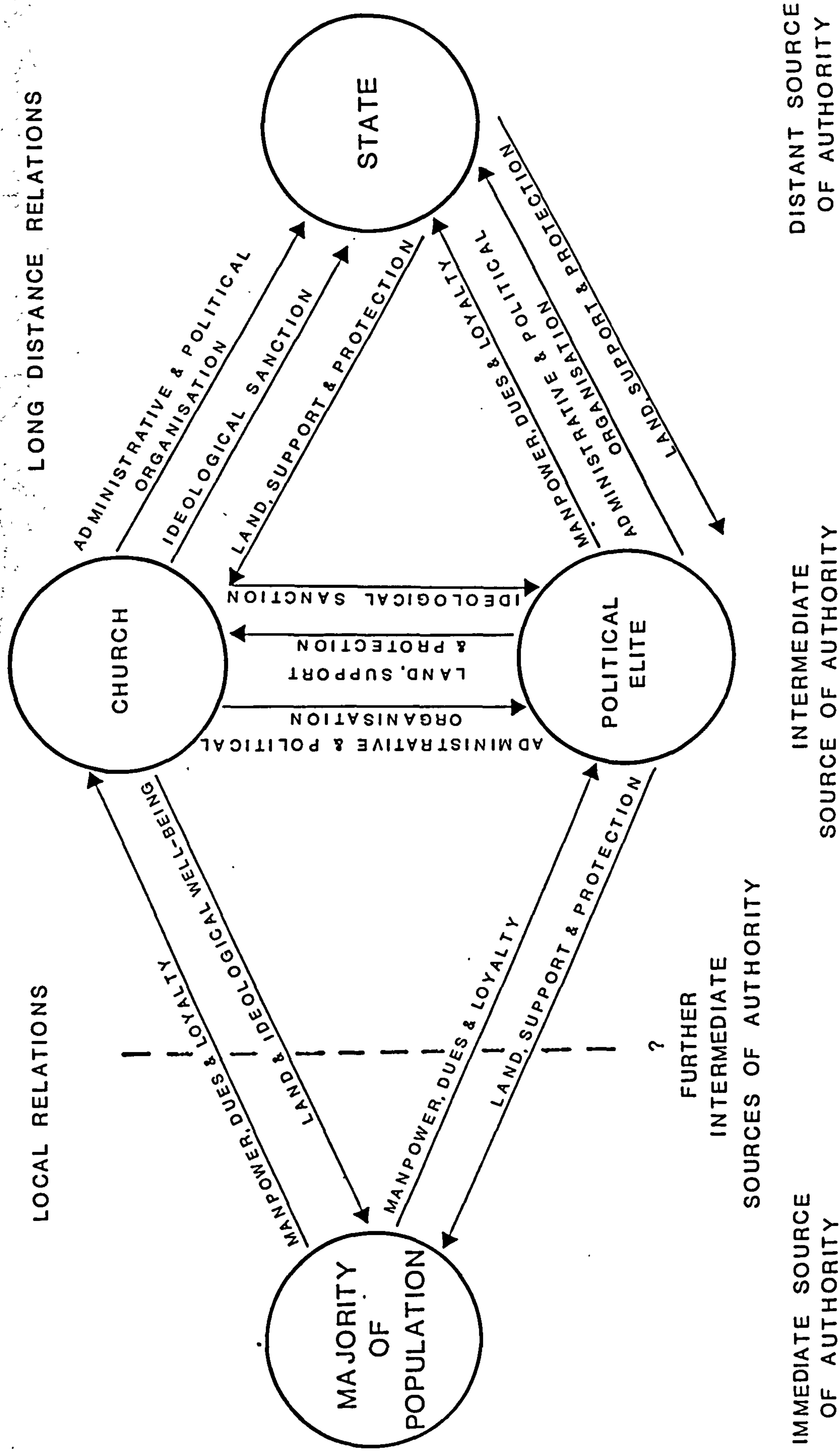


Figure 80. Scheme for the relationship between resources and the structuring of long distance social relations.



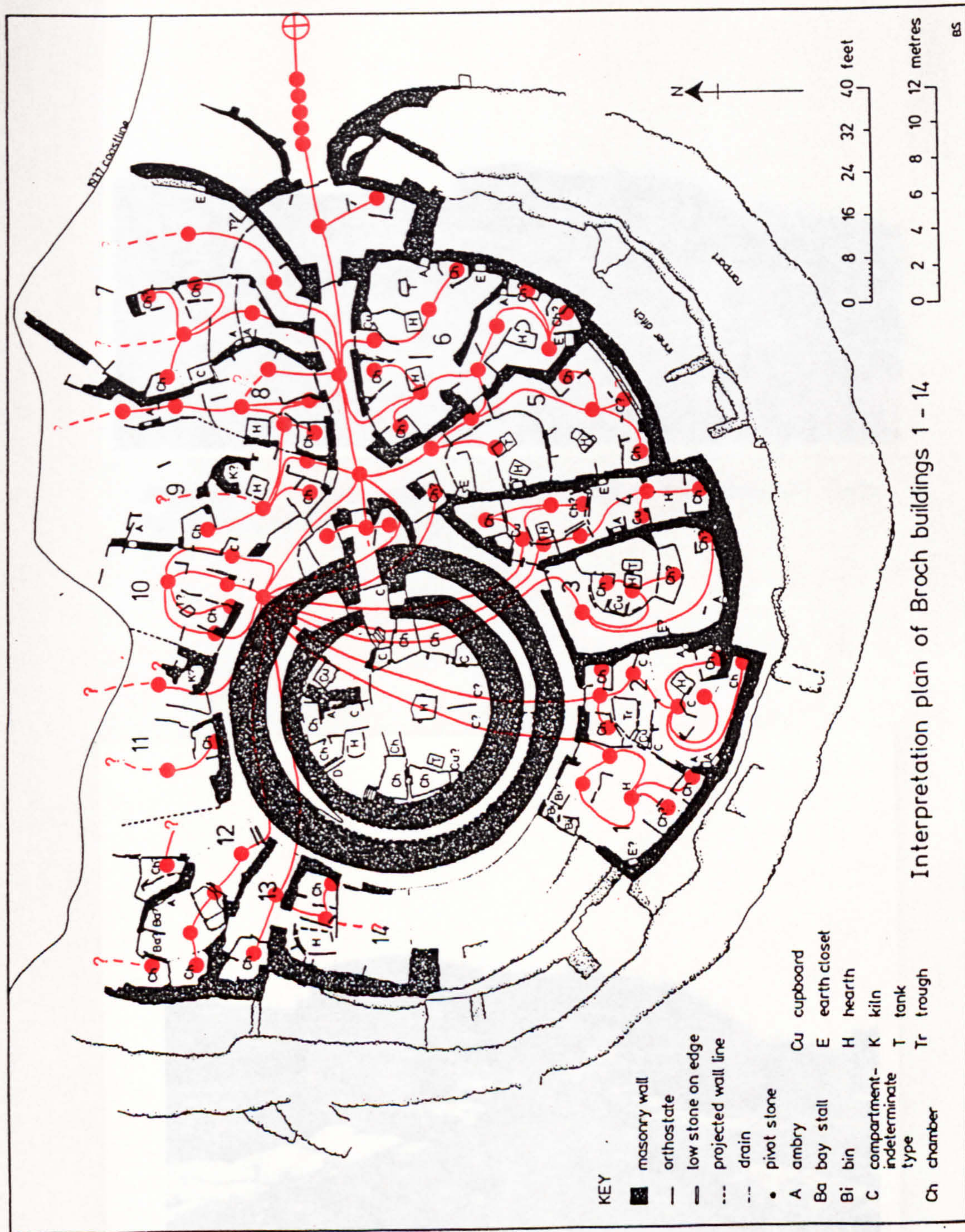


Figure 81. Unjustified access map for outbuildings and outworks at Gurness (base map after Hedges 1987 II).





Figure 82. The approach to Gurness from the E: the forecourt and gatehouse.



Figure 83. The approach to Gurness along the initial passageway through the outbuildings.





Figure 84. The S passage encircling the broch at Gurness as seen from outside the left guard cell.



Figure 85. The N passage encircling the broch at Gurness as seen from outside the right guard cell.





Figure 86. Gurness outbuildings 4-6 as viewed from the broch wallhead, looking SE.



Figure 87. Gurness outbuilding 3 as viewed from the current wallhead, looking SSE.





Figure 88. Entrance to Gurness broch viewed from outside the guard cells.



Figure 89. The W chambers of the S and N compartments of Gurness broch.





Figure 90. Overview of E half of Gurness broch interior from the W wallhead.



Figure 91. Gurness broch interior from the SW chamber in the S compartment.



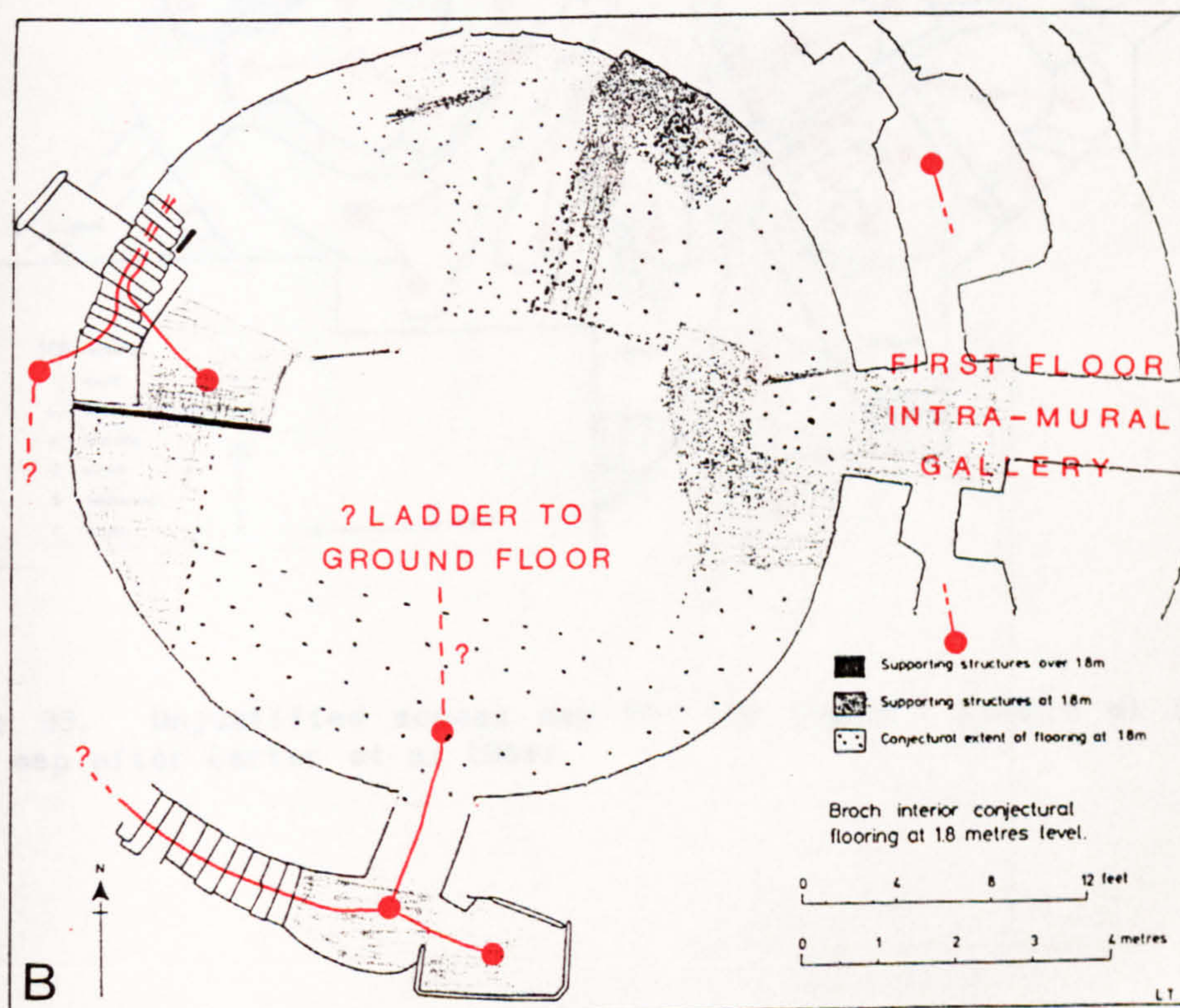
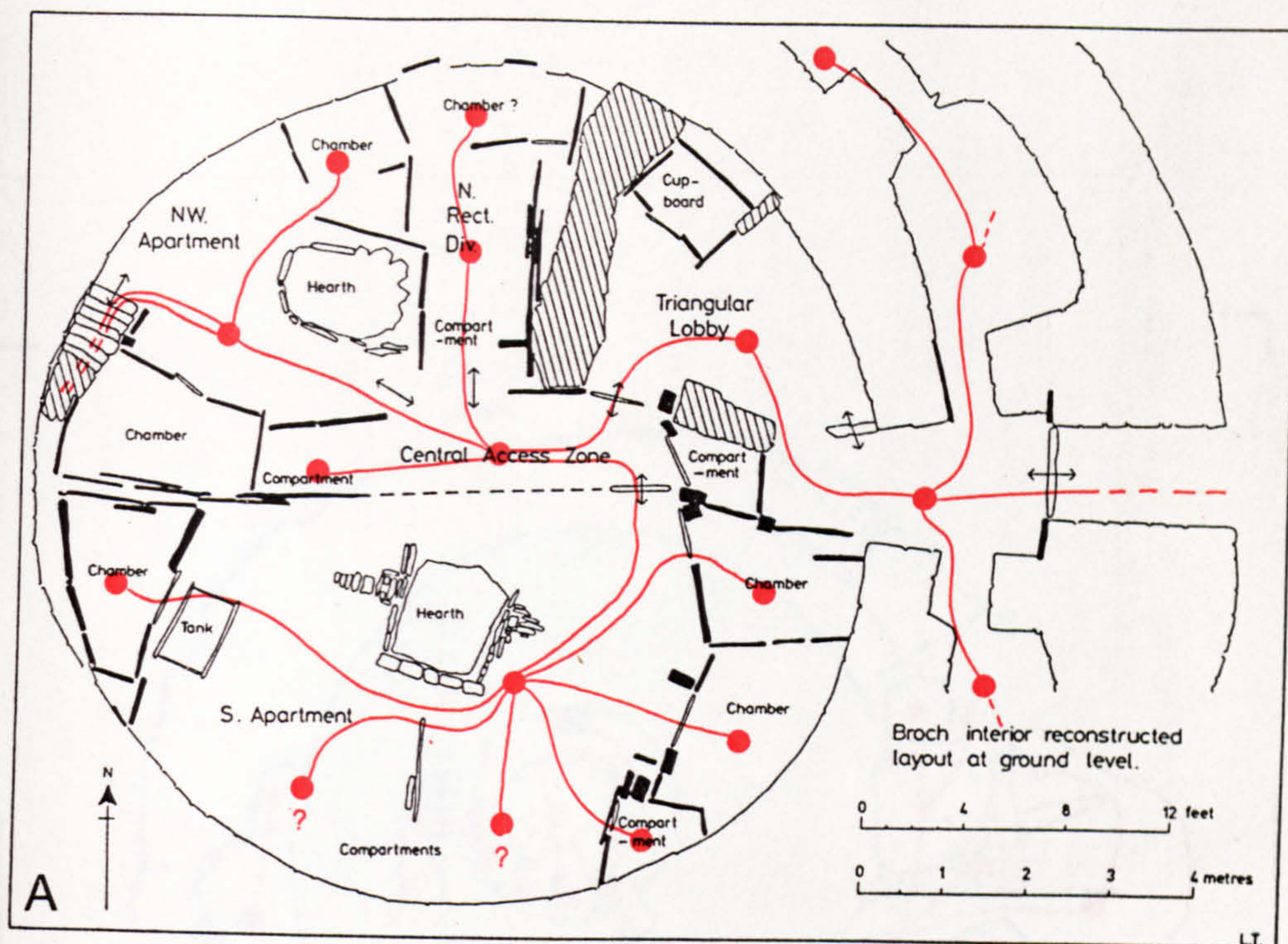


Figure 92. Unjustified access map for broch interior at Gurness: a on basis of reconstructed layout at ground level; b on basis of conjectural flooring at 1.8m level (base maps after Hedges 1987 II).



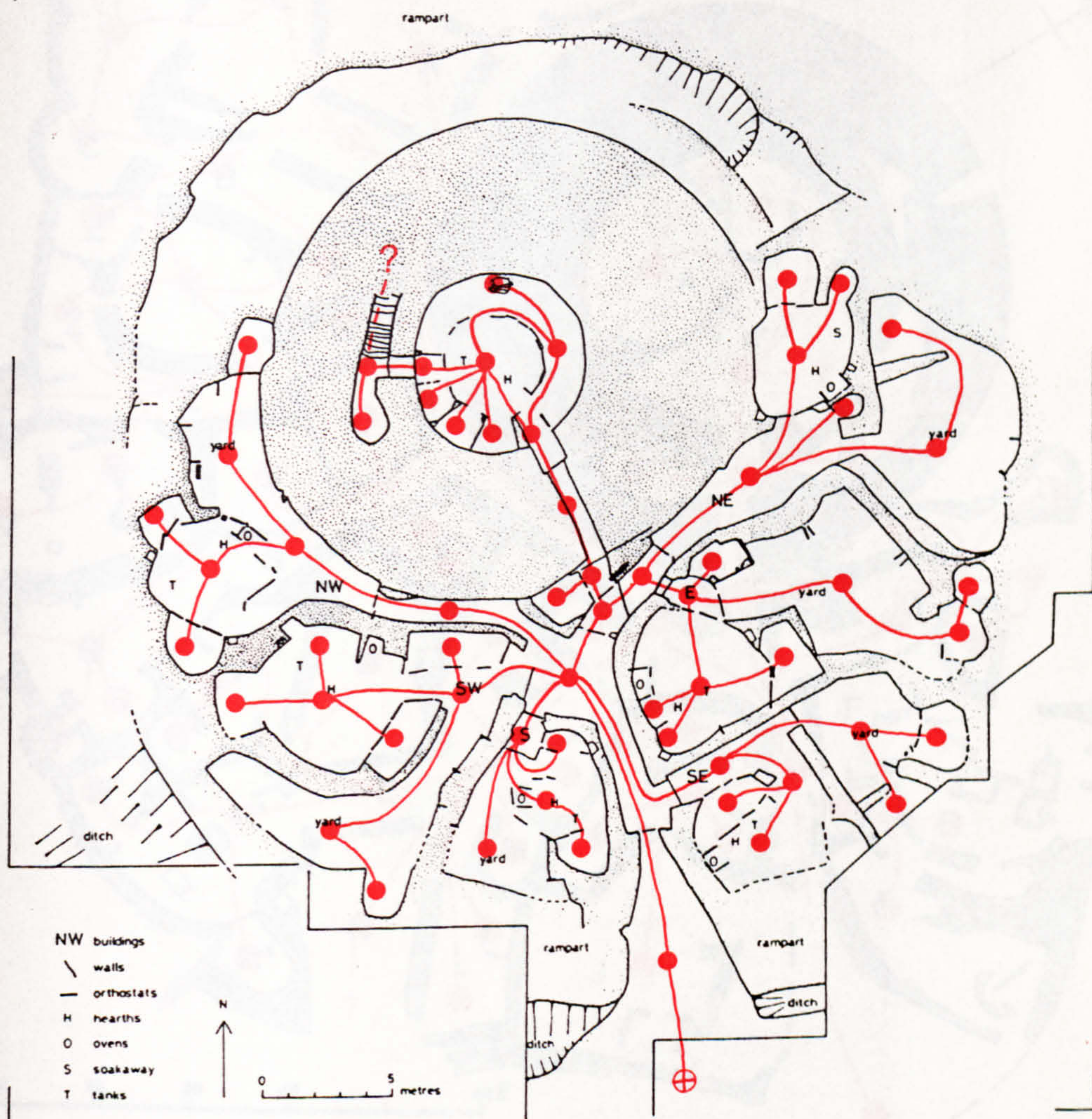


Figure 93. Unjustified access map for the phase 7 levels at Howe (base map after Carter et al 1984).



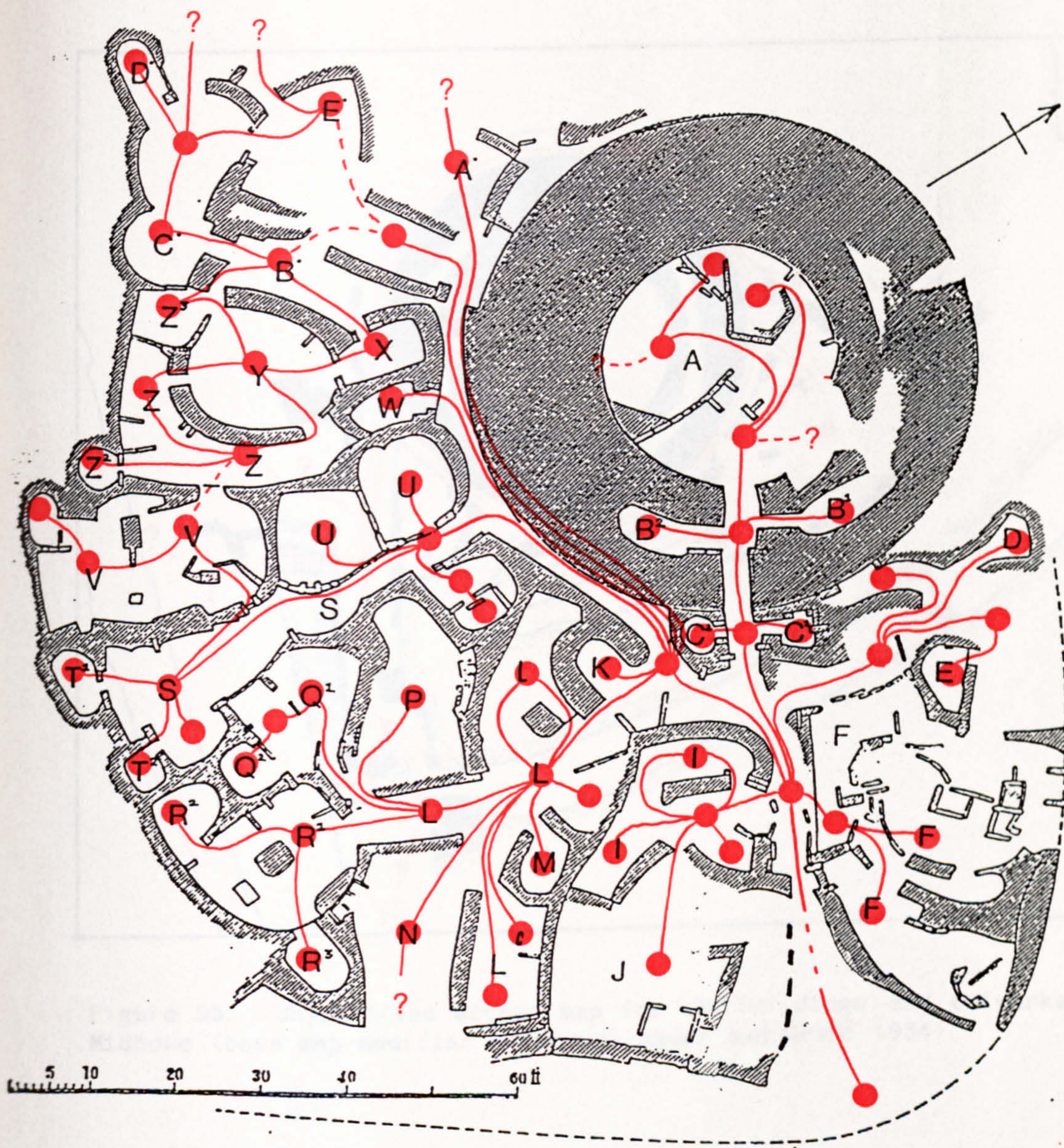


Figure 94. Unjustified access map for conjectured MIA levels at Lingro (base map after Anderson 1883).



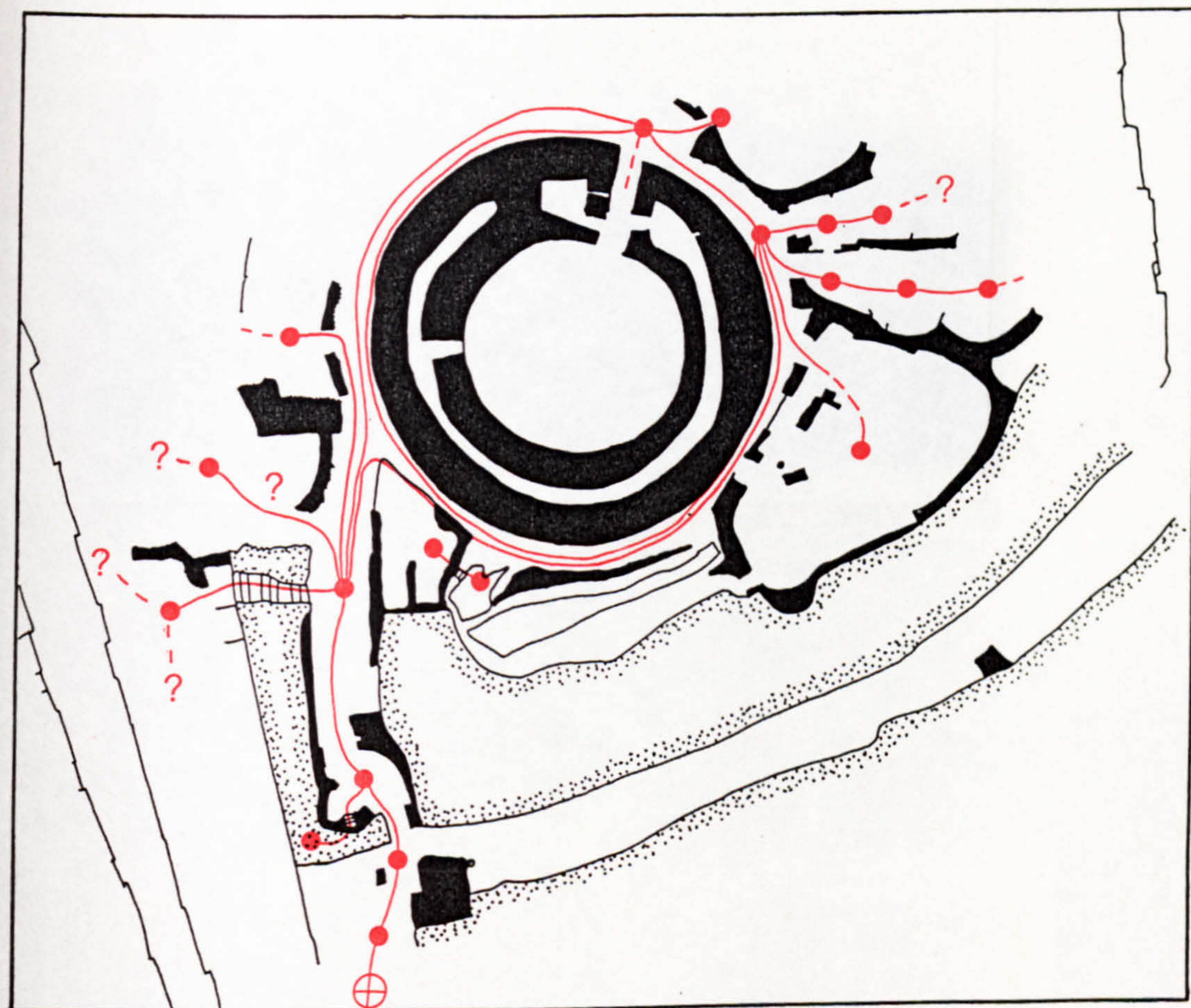


Figure 95. Unjustified access map for outbuildings and outworks at Midhowe (base map modified after Callander and Grant 1934).





Figure 96. The approach to Midhowe from the NE.



Figure 97. The approach to Midhowe at the entrance to the passage through the outworks.





Figure 98. The approach to Midhowe in the passage through the outworks.



Figure 99. The entrance to the broch at Midhowe from the W.





Figure 100. Midhowe outbuilding H from the outworks, looking SW.



Figure 101. Outbuilding H from the outworks, looking W.



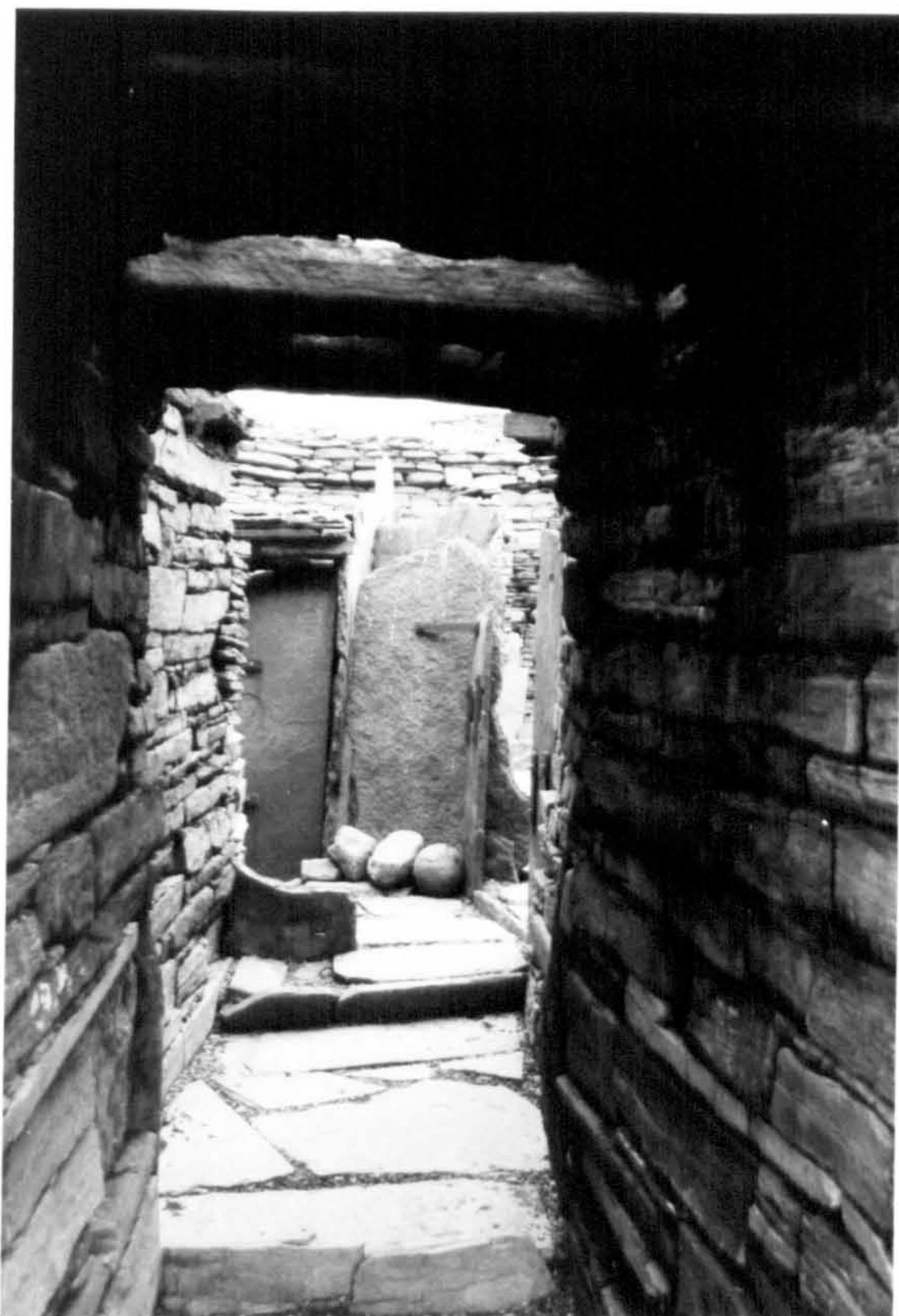


Figure 102. The long tunnel-like passage into Midhowe broch.



Figure 103. Midhowe broch interior from the wallhead, facing W.





Figure 104. Midhowe broch interior, the dividing wall of compartment C, looking S from the 1.8m level. Note projection from wall for chamber roof/gallery support.



Figure 105. Compartment C of Midhowe broch interior, looking NW from the wallhead. Note entrance to stairway at gallery level and roof of chamber to W of it.



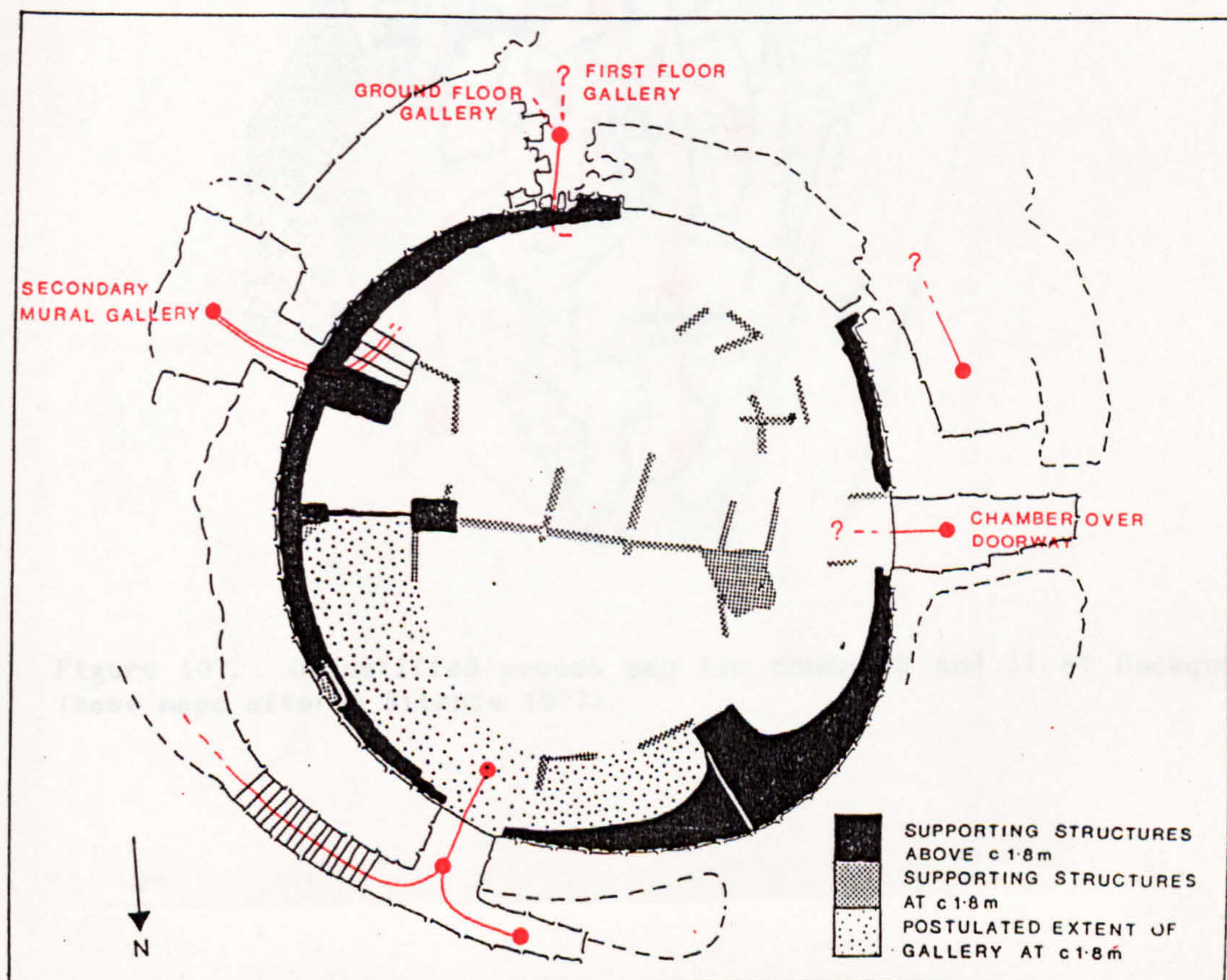
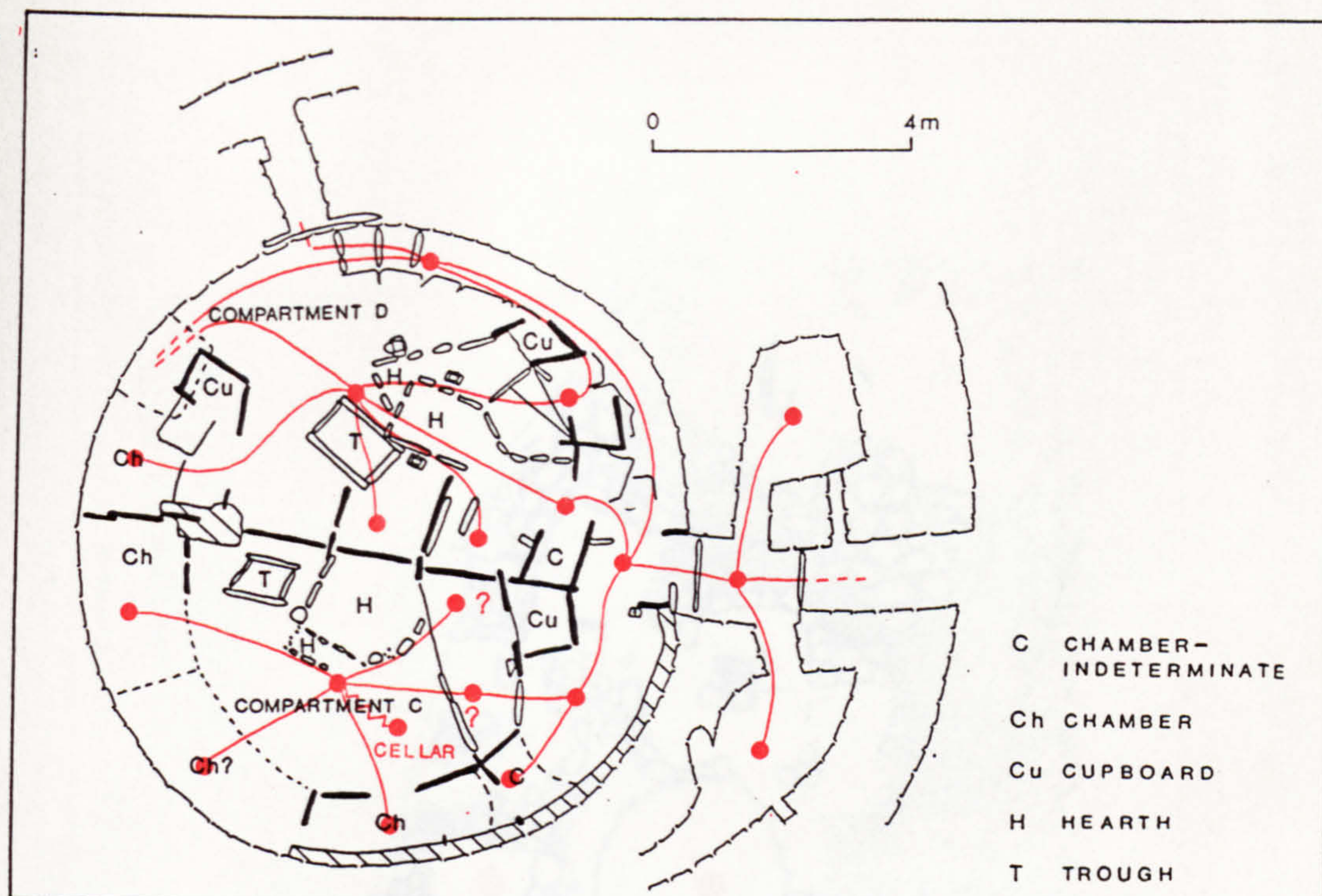


Figure 106. Unjustified access map for interior features at Midhowe. a reconstructed ground floor level; b conjectural gallery at approximately 1.8m level.



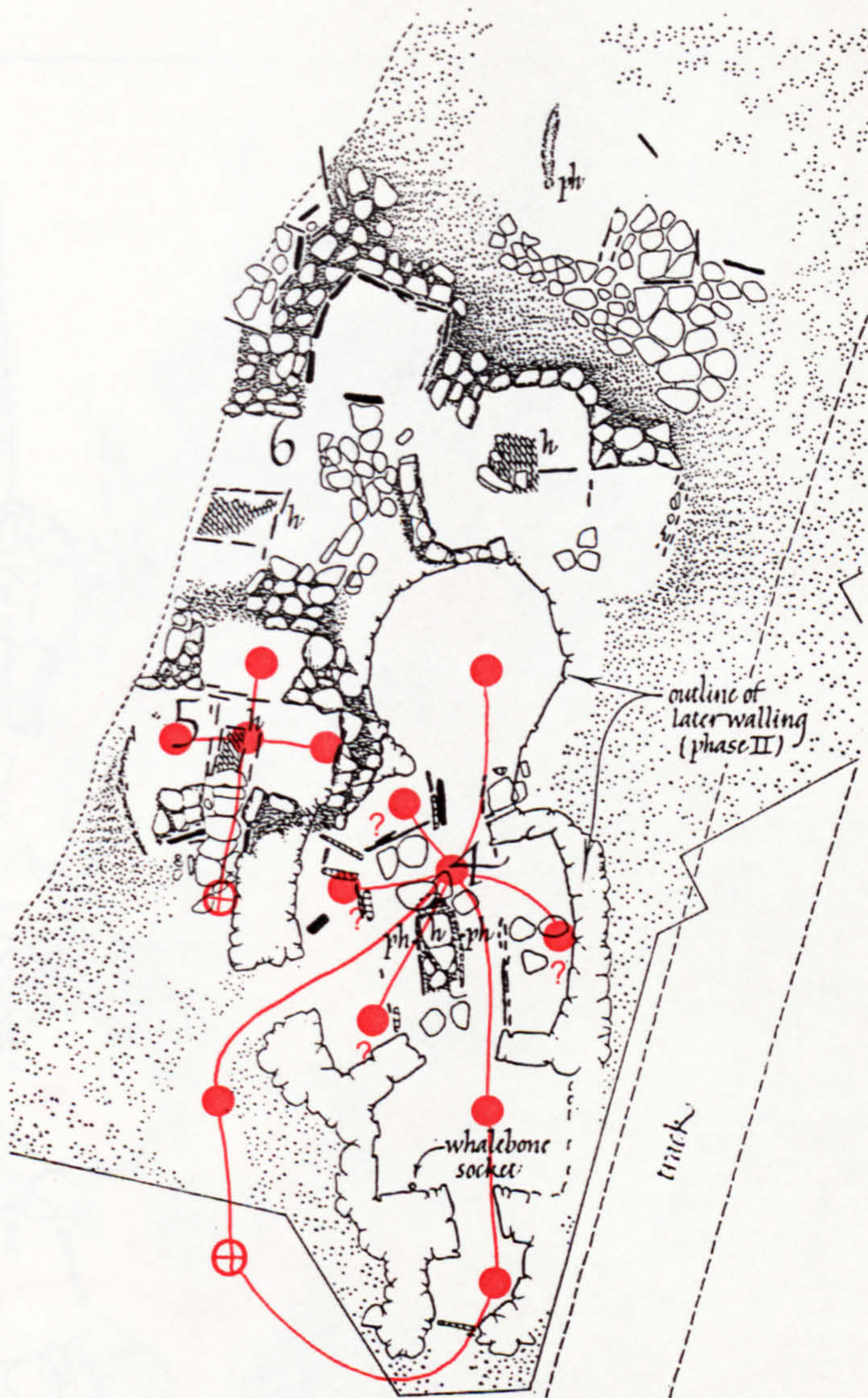


Figure 107. Unjustified access map for phase Ib and II at Buckquoy (base maps after A Ritchie 1977).



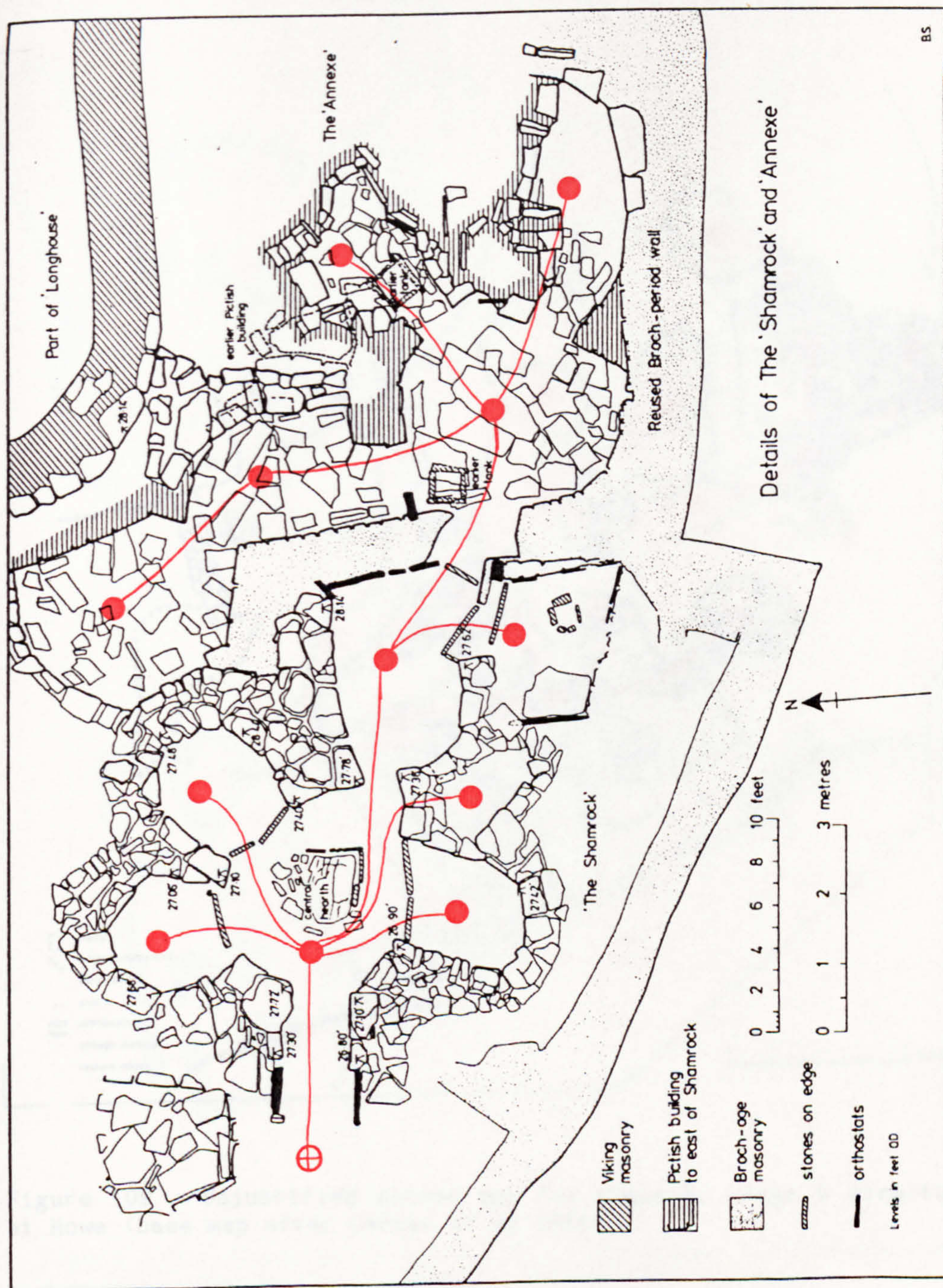


Figure 108. Unjustified access map for Shamrock and Annexe at Gurness (base maps after Hedges 1987 II).



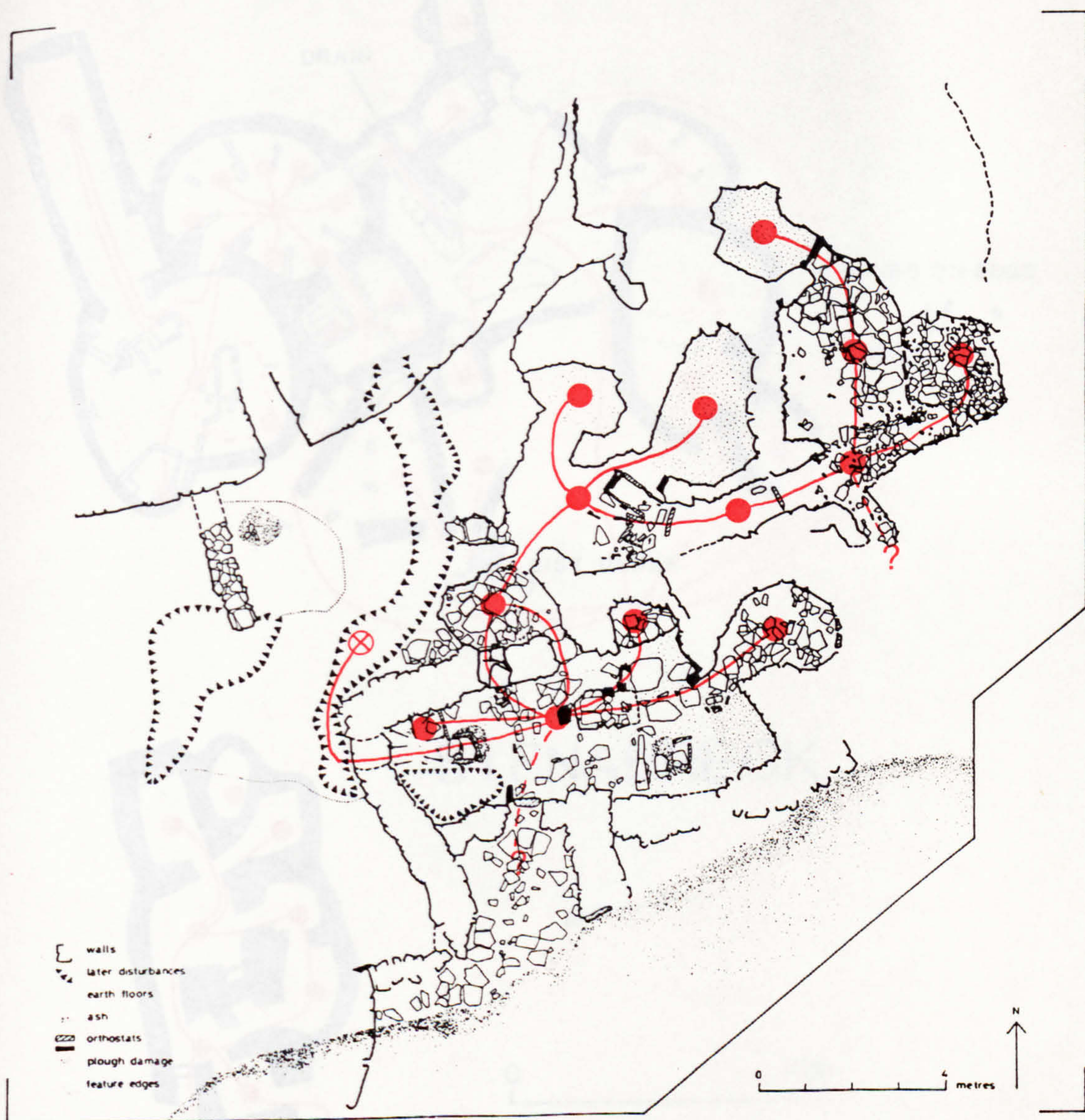
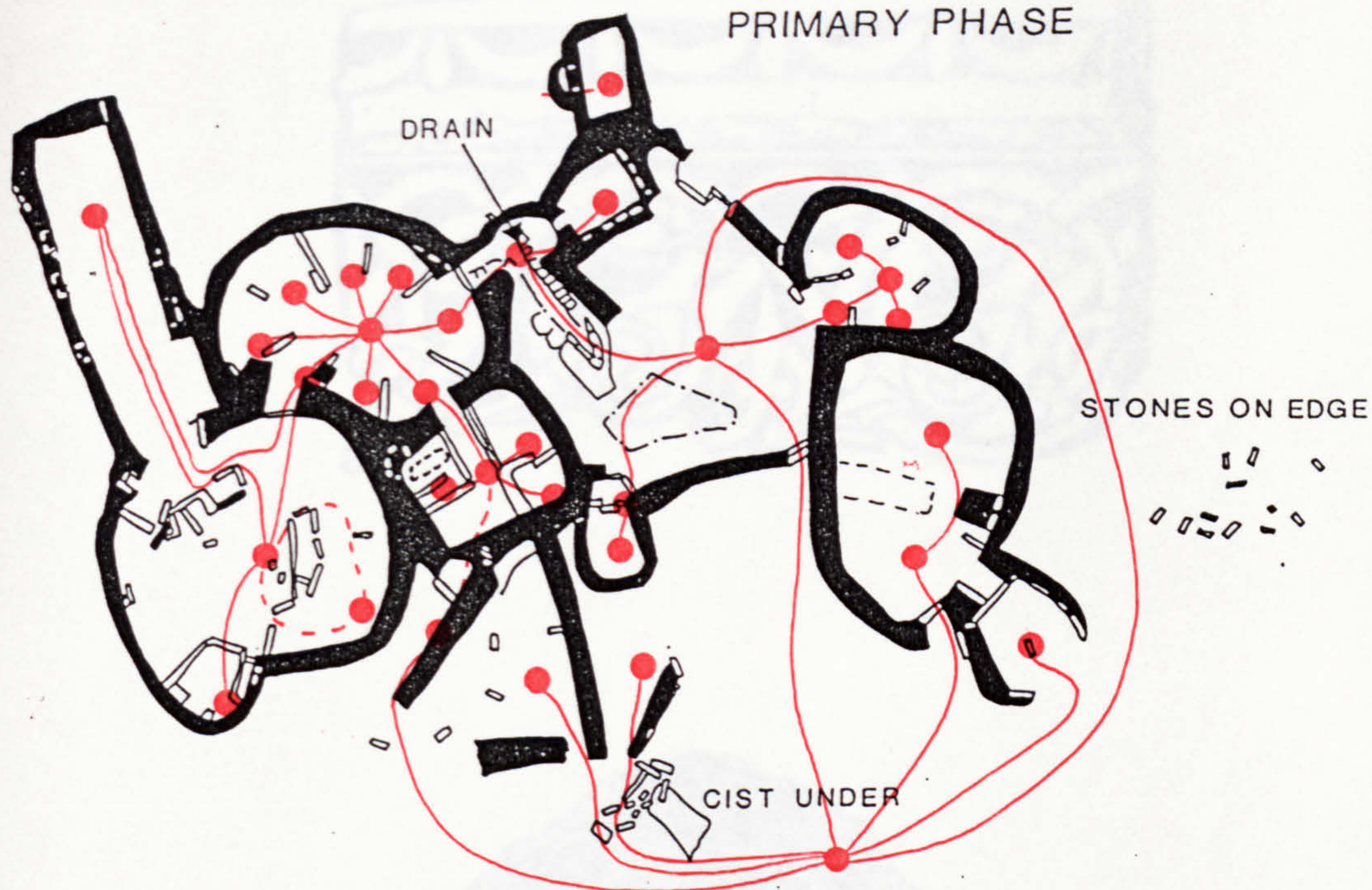


Figure 109. Unjustified access map for phase 8, stage 6 structures at Howe (base map after Carter et al 1984).

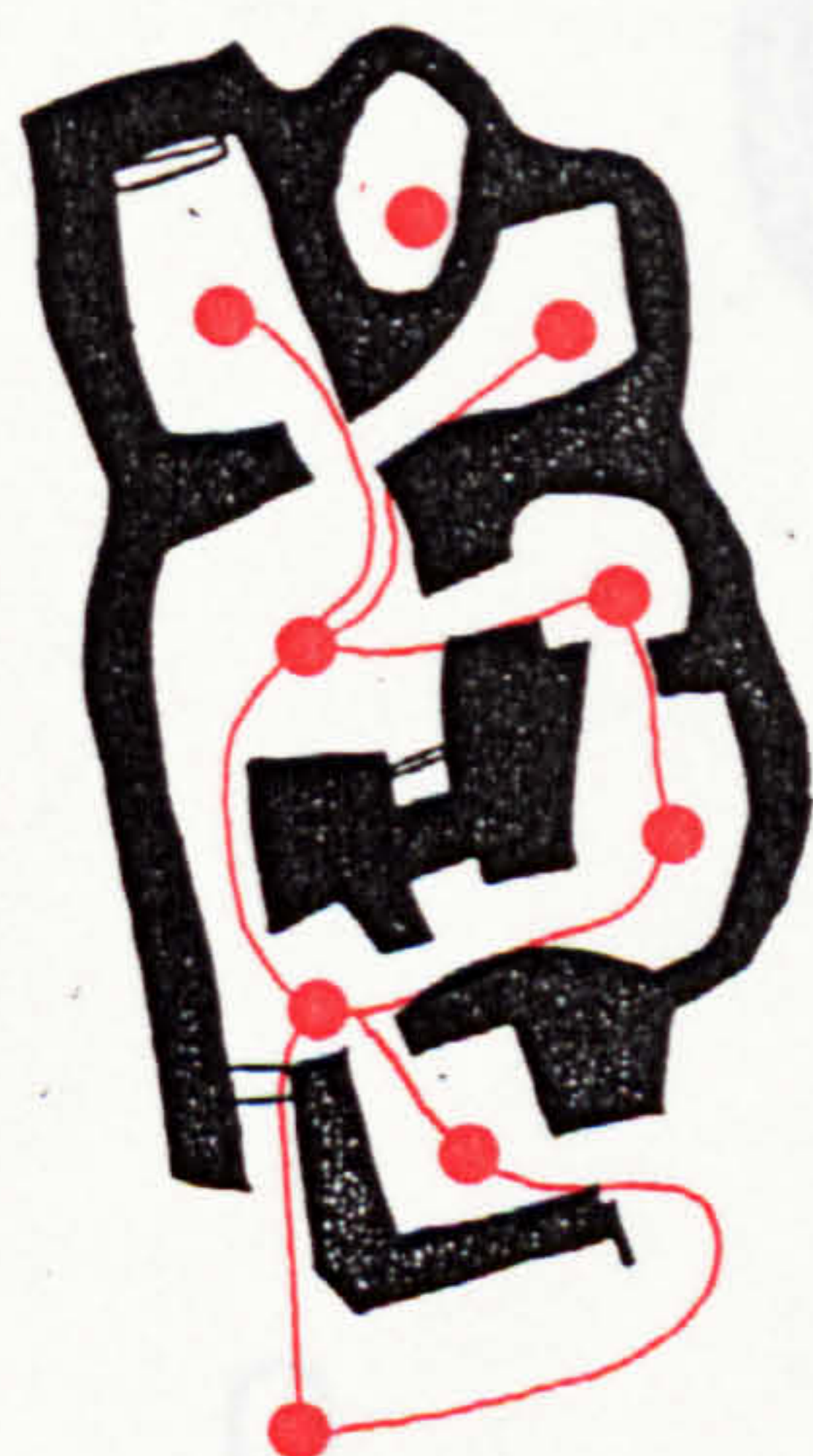
Figure 110. Unjustified access map for phase 8, stage 6 structures at Howe (base map after Traill 1989: 1983).



# HOWMAE PRIMARY PHASE



# STENABRECK



N

0 10m

Figure 110. Unjustified access maps for Howmae and Stenabreck (base maps after Traill 1885; 1890)

Figure 111. Two Inuit aerial maps from Harsholt (after Balke 1963 and Currier 1977).





a



b

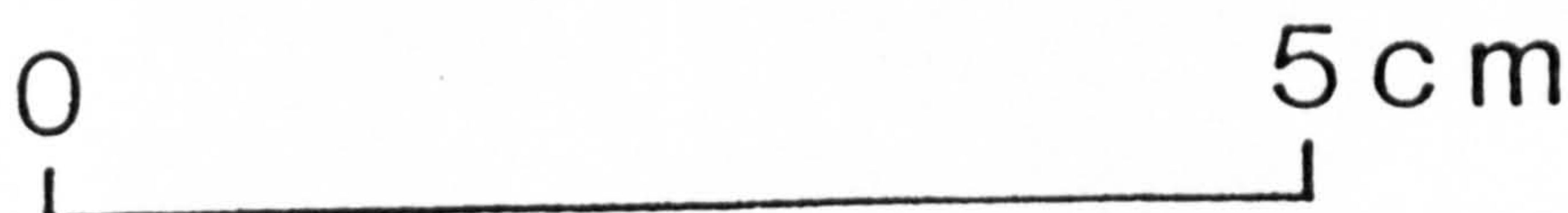


Figure 111. Two Insular metal mounts from Warebeth (after Bakka 1963 and Cursiter 1887).







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 1969 'Saxon Southampton; a review of the evidence, part II: Industry, trade and everyday life', *Proc Hampshire Field Club Archaeol Soc*, 26 (1969), 61-96.
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SCOTTISH ARCHAEOLOGICAL

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REVIEW

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Volume 6 (1989)

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## TRANSFORMATIONS IN SOCIAL SPACE THE IRON AGE OF ORKNEY AND CAITHNESS

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This paper will examine the way architecture acted to structure the reproduction of society in Orkney and Caithness from around the early centuries of the first millennium BC to the eighth or ninth century AD, that is from the period of the Early Iron Age to the arrival of the Norse. The period can be divided into four phases: the Early and Middle Iron Ages and Late Iron Ages I and II (henceforth EIA, MIA, LIA I and LIA II). These divisions avoid cultural ascriptions such as 'Pictish' or 'Dalriadic', or meaningless terms such as 'post-Roman'. They will now be more specifically defined below. A scheme is suggested in outline for structural developments witnessed over this period (a future complementary article will discuss this in full, along with associated dating problems: Foster in prep a). On the basis of the general trends observed, a social interpretation is put forward. At the same time the technique of access analysis is used to investigate how the use of space acted to structure and reproduce these changing social relations. All quoted C-14 dates are calibrated to the 2 $\sigma$  level on the 1986 Trondheim curve.

### Summary of Structural Development

#### The Early Iron Age

Definition of the Iron Age is rather blurred in North Britain both chronologically and culturally, probably more so than anywhere else in the British Isles. Its traditional range is from circa 600 BC-AD 400 (RCAMS 1984, 20), although it has been speculated that it might better be ascribed to the period up to the eleventh century AD (Clarke 1978, 76). Around the beginning of this period, with the changing metal technologies, the importance of local metalworking in defining regional traditions declines markedly. In the Atlantic Province pottery has been taken as some gauge of cultural and chronological changes, but on the whole, in view of the impoverished artefactual record, reliance has been on architectural studies.

*Lobate multi-cellular buildings*, otherwise *courtyard houses*, represent an architectural tradition whose origins lie in the Neolithic (such as Scord of Brouster, Shetland: Whittle 1986), but which still occurs in the late Bronze Age, such as village I at Jarlshof (Hamilton 1956, 18-31 Fig 10). These lobate multi-cellular structures may also have continued to be constructed into the period of the EIA, such as at Wilmthrow in Shetland (Curle 1936) where a smithy is associated with an example. But the EIA is generally characterised here by the introduction of a large *roundhouse* (sometimes oval) tradition, which has been recognised as taking two organisational forms: isolated houses with thick walls sited in visually dominant situations and smaller structures with thinner walls which tend to exist in clusters, of which Jarlshof II is the best example (Sharples 1984, 119-20). Abrupt changes in many aspects of the material culture at this time are sometimes attributed to a population migration (Hamilton 1956; Hedges 1987 III, 38). In Orkney thin-walled roundhouses have been recovered at Spurdagrove (Øvrevik 1985, 148, Fig 7.4) and Skaill (Gelling 1984; Buteux forth) where they are associated with further agricultural structures such as a byre. The late date of one of the Skaill roundhouses highlights how late this tradition of thinner walled roundhouses continued (sometime between 360 cal BC-AD 220), and demonstrated that the development from thinner to thicker walled roundhouses was not unilineal. A series of five roundhouses were excavated at Kilphedir in Sutherland (Fairhurst and Taylor 1971) and the same

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number at Cnoc Stanger in Caithness (Mercer 1981, 52-56). In neither case can it be proved that these represent anything other than a succession of structures on one site. The slender dating evidence from these sites may be used to suggest a horizon of very large roundhouse construction in north Scotland prior to 500 BC (Mercer 1985, 73). The impression is of relatively small domestic/agricultural units, whilst the evidence from both Skaill and Kilphedir may suggest the shifting of settlement within a small area.

Thicker walled roundhouses have recently been recognised in Orkney and Caithness. Examples have been excavated at Bu (Hedges 1987 I), Howe (Carter *et al* 1984), Calf of Eday (Calder 1937; 1939), Pierowall (Sharples 1984) and Quanterness (Rensfrew 1979), whilst the early broch at Crosskirk is sometimes also described as a roundhouse (Fairhurst 1984). It is clear from the evidence of Bu, Quanterness and Pierowall that these structures were established by about the seventh century BC, although a Bronze Age horizon for a large thick walled structure at Tofts Ness on Sanday, currently being excavated by Dockrill, suggests that this was not purely an EIA innovation (*Archaeol Extra*, 3-4). The particular importance of these roundhouses is that they now provide a native pedigree for the later brochs, both in their thick walling and interior features. At several sites it can be seen how both types of roundhouse acquired broch-like features.

Most roundhouses were isolated save perhaps for a few ephemeral outbuildings, probably of agricultural function. Many both thin and thicker walled structures possessed *souterrains* or *earth-houses* entered from their interiors. There is increasing evidence that examples of these which now appear as isolated monuments in the landscape were usually, if not always, ancillary to an above ground structure of a domestic nature (for example at Grain in Orkney: Haigh 1983). Most probably these northern examples were for storage of either dairy produce or grain.

The direct development from the roundhouse to the broch is chronicled at Howe. At Crosskirk the early broch resembled a roundhouse in many respects, and at Clickhimin in Shetland a roundhouse precedes the broch (Hamilton 1968). In Caithness it is becoming increasingly obvious that the brochs are but a later addition to an underlying palimpsest of earlier settlement (Mercer 1985, 98). Whilst the 'mound upon mound' profile is not one which is so common in Orkney, the same probably holds true here also.

#### The Middle Iron Age

*Brochs* represent a major monumental divergence out of an otherwise fairly continuous tradition of native architecture (cf MacKie 1987) and the MIA is defined as the period when the broch becomes prevalent. It has to be recognised that the broch class (for want of a better term) covers a whole series of structures differing perhaps in age and form; a structure is best considered in terms of the 'social practices its plan was designed to cover' (Scott 1947, 26).

The date of this architectural form is not well established, but dates from Crosskirk, Howe and Dun Mor Vaul (MacKie 1974) suggest a broad horizon of use between the fourth centuries BC and AD, but probably concentrated between the second centuries BC and AD.

Many brochs in Orkney and Caithness were enclosed by outworks, sometimes incorporating a *blockhouse*. When the respective entrances are aligned it may suggest that the broch and outwork were conceived of as a unity and may have been planned at the same time. At Clickhimin and Crosskirk, where there is some evidence for pre-broch activity, the outworks may pre-date the brochs. The majority of brochs in Orkney and Caithness are situated in positions where defence was apparently not the prime consideration (cf Fojut 1982 for similar conclusions on the Shetland brochs). A number are in totally defensive positions, what Mercer (1985, 100) calls *fortalice* brochs. *Promontory forts* sometimes enclose brochs. They occur in Orkney and Shetland when hillforts do not and in Caithness where there are a few hillforts.

The primary internal broch fittings at Crosskirk (Fairhurst 1984, III 28) and Howe (Carter *et al* 1984, Fig 4) suggest that in these cases the broch had primarily a domestic function, in common with the earlier roundhouses which had similar plans. Little is known of the earliest internal features at Gurness and Midhowe, the best known brochs in Orkney. Whilst there is some suggestion that they may have been similar in nature to much of the extant features, it is obvious in the case of Midhowe that there were differences. Internal and external casing walls, which appear on many brochs in Orkney and Caithness need not be late; at Crosskirk their early construction reflected a series of structural weaknesses and the inadequate experience of the builders in constructing high walling.

Any isolated broch probably did not stand isolated for long. Outbuildings can be divided roughly into two forms: radial and non-radial. The radial examples (Fig 1) encircle the broch in a regular fashion, a passage leading through them to the broch, which is usually surrounded by a narrow encircling passage; there is a very full use of all the available space between the broch and its surrounding outworks, where these exist. The non-radial form may have arisen very early in the development of brochs (as at Crosskirk where outbuildings were constructed prior to the period of Roman artefacts, and possibly as early as 200 BC). This is in contrast to the Orcadian sites with outbuildings, where Roman artefacts may be associated with their earliest levels. In some cases non-radial outbuildings *may* precede radial outbuildings (as possibly in phase 6 at Howe).

Whilst the non-radial arrangement may be early, it is virtually impossible to assess the date of many of the sub-circular and sub-rectangular buildings which surround the brochs, most particularly those in Caithness which were excavated in the nineteenth century, or whose presence is suggested by fieldwork alone. In Caithness there is little evidence for the radially disposed settlement seen in Orkney, despite the fact that outbuildings are equally common in each area. However, there is occasional evidence for an encircling passage, and extended entrances are common, but the complexes on either side of them are amorphous and tend to exhibit a wider range of building types than is seen in Orkney. It is not known if later Iron Age structures are chronologically distinctive in Caithness, and there is virtually nothing to compare the buildings around the broch with. Artefacts are no more helpful because the contexts of either Roman or suggestively MIA artefacts have never been ascribed specifically to any of the out structures.

Returning to the examples of radial outbuildings, the dating evidence for these rests almost exclusively on the evidence from Howe (Carter *et al* 1984), Gurness (Hedges 1987 II) and Midhowe (Callander and Grant 1934) (Foster in prep a). Hedges (1987 III, 14) estimates that 20 out of 52 of his Orkney broch population have evidence for well-ordered outbuildings. On the basis of present evidence, outbuildings elsewhere tend to be of the non-radial type, although it is not always possible to distinguish the two on the basis of fieldwork alone. Hedges' work suggests that some of the outbuildings associated with brochs in Orkney have been built in the same phase of construction as the broch, or are near contemporary afterthoughts, because the layout of some of the outbuildings and the broch is by and large systematic, and their floor areas, fittings and furnishings are comparable (1987 II-III).

Opinion on the date of the outbuildings has vacillated from LIA (see for example summary of antiquarian activity in Orkney: Hedges 1987 III, 130-51) to MIA (Childe 1946, 90) to LIA (Hamilton 1966, 111; Ritchie and Ritchie 1981), but in general more recent opinion again favours a MIA horizon (Ritchie 1988). Whilst many undated non-radial outbuildings may be LIA, the redating of radial structures now generates more of a gap in the LIA settlement record. Still, whatever one's stance in the debate about how



soon after the construction of the broch the outbuildings were erected, it cannot be disputed that the broch and outbuildings co-existed at some point, functioning as a unity.

Contemporary with the brochs are likely to have been some roundhouses and more fragile settlement types which are not so obvious on the ground, particularly the settlements associated with earth-houses. The extent to which the northern MIA population lived in or in the immediate vicinity of brochs cannot be gauged.

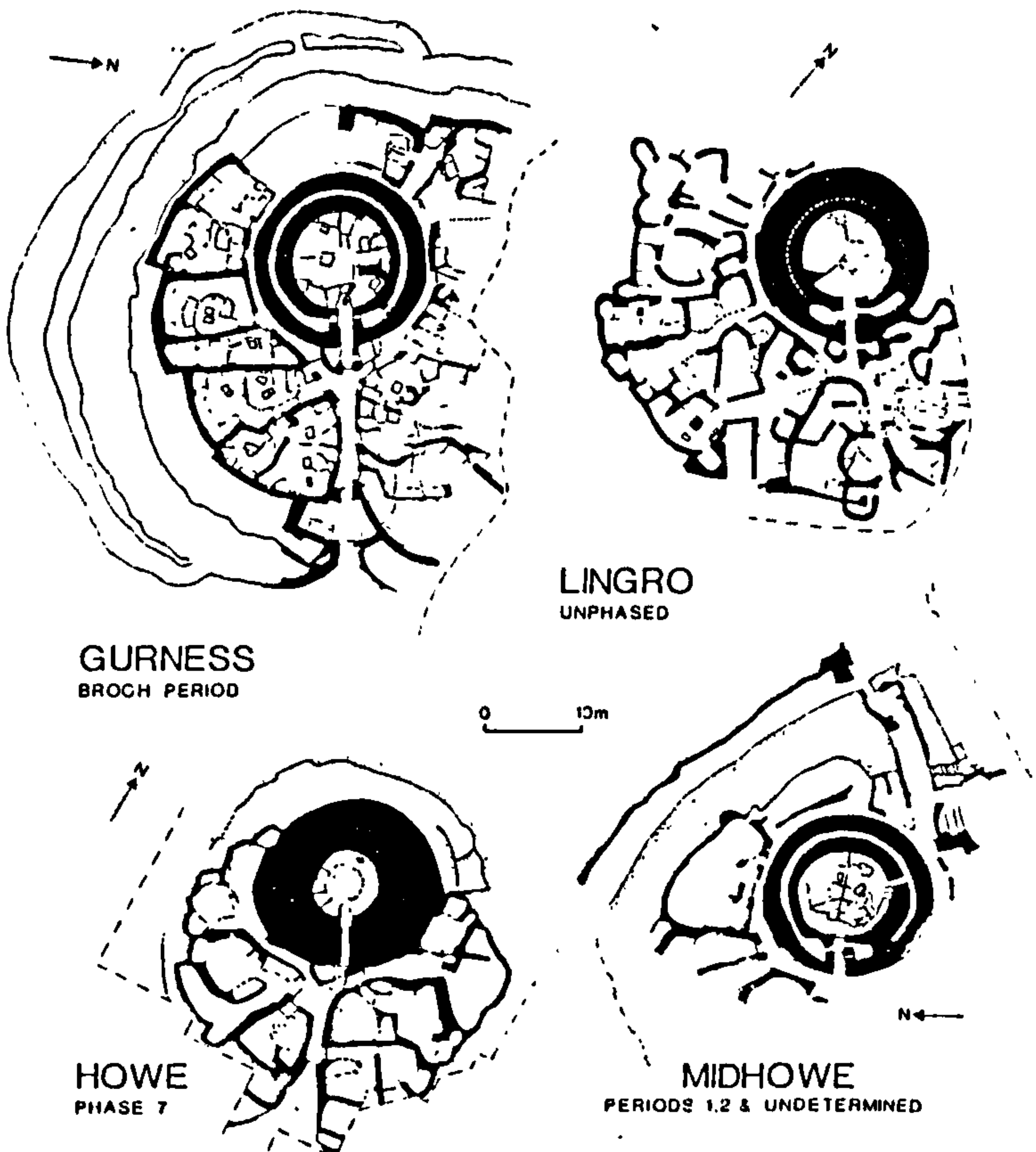


Fig. 1. Plans of brochs with nucleated settlements (after Hedges 1987 II, RCAMS 1946 II; Carter et al 1984; Callander and Grant 1934).

### The Late Iron Age I

The LIA I marks the time when the brochs ceased to be occupied as anything other than temporary workshops or for less monumental domestic structures. The function of the broch sites had probably been changing up to this time, although the broch might still be in use, for example outworks were not being maintained. Settlement either continued on the broch site in a modified manner, or was created *de novo* elsewhere. Often similar structural forms are found on both. The LIA I is taken to end in the early seventh century when more distinctive artefacts and buildings appear.

Some mention has already been made of the problems in assessing how long modified occupation continued on brochs. This is perhaps the period of which least is known because it is very difficult to recognise in both artefactual and structural terms. There are few artefact types which can be specifically assigned to the fourth, fifth and sixth centuries, and post-broch horizons were always the most summarily treated by earlier excavators. Throughout the Atlantic IA continuity is exhibited in much of the material culture (for example see Hedges 1987 III, 44-47). Some pins and combs (Stevenson 1955; Foster in prep b), brooches (Fowler 1963), class I stones and *art mobilier* decorated with Pictish symbols, parallel piped dice and painted pebbles may belong to this period, but unfortunately not exclusively. Where these artefacts occur on broch sites it is only rarely possible to associate them with specific building forms. Recent C-14 dates help clarify this period (Foster in prep a and b).

Following the MIA there is a marked absence of C-14 dates from Orkney, Caithness and Sutherland which covers the LIA I (*circa* cal AD 230-625). In Orkney this section comprises the post-broch levels at Howe (phase 8), which scarcely trespass into the post 600 (LIA II) period, and a date for the abandonment of a late roundhouse at Skail. The absence of dates in Caithness and Sutherland is easily explained because the sample is too small. A large number of dates fall in this time span elsewhere in Scotland. There is nothing abnormal about the stretch of the Trondheim curve covering this period and it must be concluded that this low point in the C-14 date spans for Orkney, Caithness and Sutherland can best be explained by the history of previous excavation, namely a lack of samples from broch or post-broch levels. A considerable element of LIA I settlement is probably on broch sites, as a fourth century sherd from Crosskirk may suggest (Fairhurst 1984). At present there is no dating evidence that non-broch sites, such as Pool, extend back any further than about the fourth or fifth centuries AD. As yet the sample of sites is too small, and both post-broch and non-broch settlements may be expected to fill this gap one day. Nor need it surprise us if some broch outbuildings are found to have had an extremely extended life span – at Pool a small (probably multi-celled) unit has been demonstrated to have been occupied over a number of centuries (pers comm Hunter). It is not always possible to recognise changes in structural form on broch sites because of the tendency to reuse earlier structures, but the general impression at Howe is of a series of interconnecting sub-circular and sub-rectangular rooms with yards. There is no evidence for any more than a couple of domestic units.

A new type of settlement was developed *de novo* on some non-broch sites. At Pool excavation of a settlement mound has revealed substantial prehistoric settlement underlying Norse halls and byres of the ninth to thirteenth centuries (*Archaeol Extra*; Hunter pers comm). Here, in about the fourth or fifth centuries AD a roundhouse and associated buildings preceded by a probable souterrain and associated structure, were built into Neolithic middens underlying the site. This then developed into a *cellular settlement* of adjoining and interconnecting roundhouses and smaller circular cells. Perhaps most of the site had eroded into the sea, but there is certainly no reason to suggest any broch settlement in the immediate vicinity. Indeed it seems that this cellular type of complex may be paralleled at Howmae, North Ronaldsay (Traill W 1885; Traill J



1890). This site (Fig 2) was excavated in the 1880s and consists of an unphased complex of roundhouses, one possibly a *wheelhouse* (unique so far in Orkney and Caithness), courtyards, and a long rectangular form which can also be paralleled at Pool (see below). Howmae is undated, but there is nothing in its artefactual assemblage to contradict a date of about 300-600 AD. The absence of any distinctive LIA II artefacts perhaps weighs in favour of this date. It thus seems that settlement mounds are characteristic of LIA settlement. The number of domestic units which might have been extant in any one settlement at a single time is unknown, but the presence of interconnecting courtyards hints at a degree of complexity not immediately apparent in their amorphous plans.

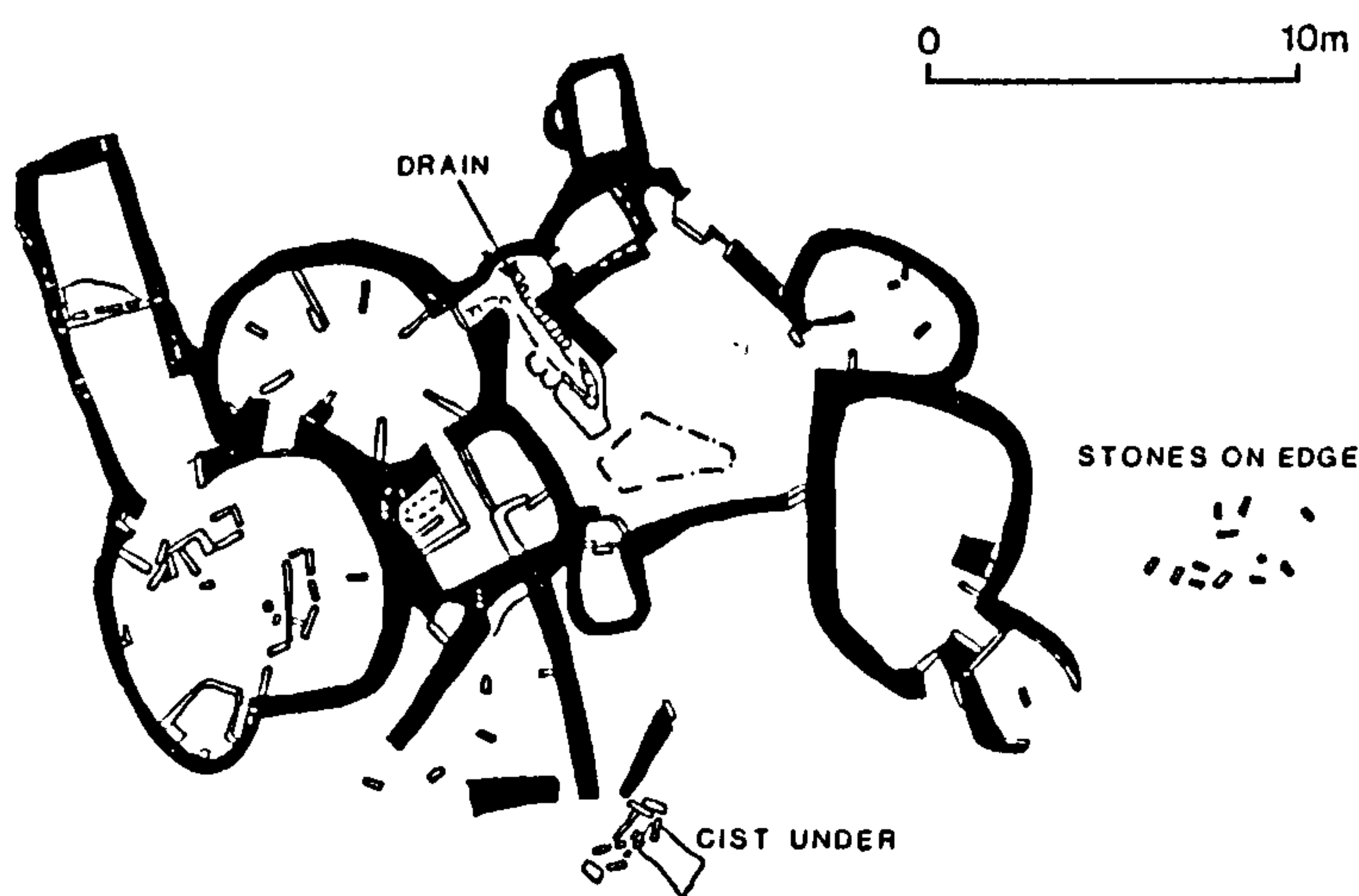


Fig. 2. Plan of Howmae (after Traill 1890, pl XVI).

It has recently been recognised that certain oblong or rectangular buildings may be pre-Norse, most notably the oblong *wags* of Caithness, of which Langwell and Forse are the only excavated examples (Curle 1912; 1941; 1946; 1948), but recent survey on the Dunbeath estate suggests further examples (Morrison 1986). Wags have long been held to be unique to Caithness, more particularly the parishes of Latheron and Dunbeath, but an increasing number of vaguely similar structures are now being discovered in Orkney where there is a growing body of evidence for their LIA pedigree: from sixth to seventh

century levels at Pool; early phase 8 at Howe; and possibly at the Brough of Birsay (for example structure 15, Hunter 1986, 56). The structure at Howe with its stalls is probably domestic rather than a byre (pers comm B Smith; *contra* Carter *et al* 1984, 68-69) and such an interpretation is not implausible for many of the other Orcadian sub-rectangular forms.

If for a moment we turn our attentions to the Udal in the Western Isles it will be seen that here there is evidence for different non-broch settlement forms which may date to cal AD 140-660 (Q-1131; Crawford and Switsur 1977; Crawford 1986). At this time the settlement shifts and the structure and artefact types change so abruptly that Crawford is compelled to think in terms of an invasion. In levels XIV-XIII (the levels are numbered beginning from the most recent), the levels pre-dating the seventh century, the buildings take the form of simple, oval bellied buildings with small satellite cells, slab-lined hearths lying along the long axis, and a single internal revetted platform. Until the site is published it is impossible to assess if these buildings bear any relationship to those around brochs in the north, or if they are indeed the by-product of an immigrant population (in addition, as the concept of the unitary broch culture province dissolves, the validity of such comparisons can be queried).

### The Late Iron Age II

A lengthy steep section in the C-14 calibration curve begins at around cal AD 625, as a result of which a disproportionately large number of C-14 dates are calibrated to within a range of a few calendrical years (Foster in prep a). Effectively the LIA is broken up into two periods on either side of around AD 625. The later bracket is henceforth described as LIA II, although, in Orkney at least, Early Medieval might be equally appropriate. Thus of all the chronological divisions imposed upon these data, this is the one most designed to suit the archaeologist. None the less, from the seventh century the Atlantic Province is starting to acquire an Early Historic mantle and much of the evidence points to a rapidly developing Pictish church and state.

To date the most distinctive LIA II structural forms are the polyventral cells (Fig 3) discovered throughout the Atlantic Province, primarily on *de novo* settlements. The main exponent of these forms occur in levels XII and XI at the Udal. In level XII the buildings take a more symmetric, 'ladybird-like' plan which Crawford (1986) describes as a *ventral house* (cf Loch na Berie; Topping 1986). In phase XI these forms were embellished with minor satellites, hence the *polyventral house*. Many of these houses were enclosed by timber palisades, which were obviously very significant, one example going through at least ten replacements. A sequence of adjacent enclosures is strung out along the machair ridge, but no details are available at present of their chronological inter-relationships. At all periods since phase XIV these buildings were accompanied by minor buildings, *four posters*. The latter have not been recognised elsewhere.

Buildings similar to the ventral buildings at the Udal have also been recovered in Orkney, as at Buckquoy (Ritchie 1977, Fig 2) and Red Craig (Morris 1983, Fig 6). At Buckquoy there is a greater axiality in the arrangement of the rooms, although this is not seen in the example which was found in the upper levels at Gurness (Hedges 1987 II, Fig 2.11). The Udal dates for these particular buildings are interesting, as they suggest that this form may have a pre-seventh century pedigree, although most other evidence points to their later date (note also a dendrochronologically derived *terminus post quem* of 648 AD from a timber version of this form in Northern Ireland: Lynn 1989). Curved gullies at Birsay are best interpreted as the thoroughly robbed foundation trenches of major cellular structures which had internal orthostatic facings and thick turf walls (Hunter 1986, 37-45, Ill 10-14), but are otherwise fairly similar in form to the polyventral form. There is no evidence for the settlement at the Brough of Birsay pre-dating the mid-



seventh century at the earliest (*ibid*, 61). It will now be obvious why non-broch settlement and non-settlement mound activity of this date is difficult to detect, because of the relative slightness of the structures, and because building techniques are such that robbing would leave the former totally unevidenced.

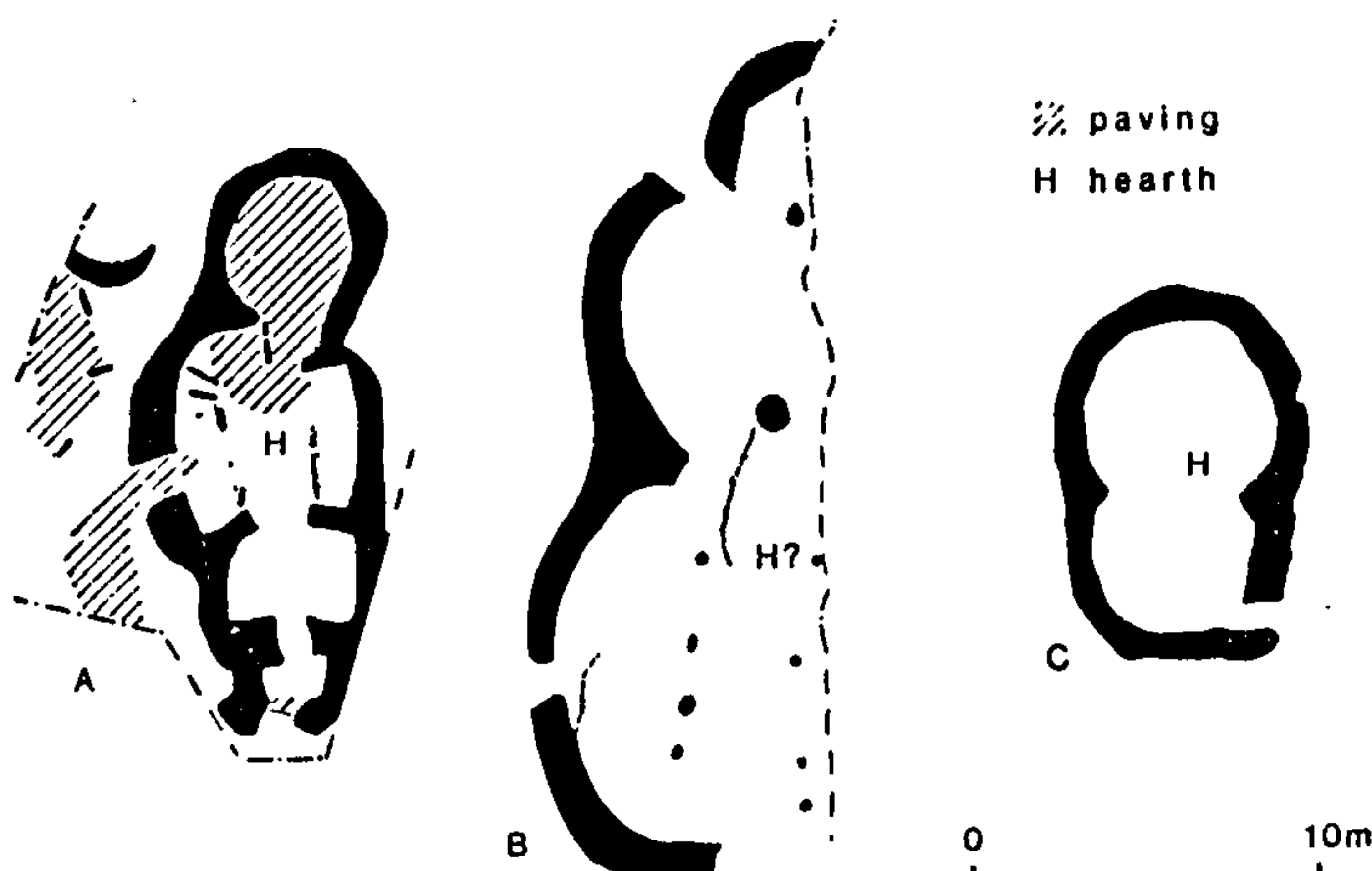


Fig. 3. Plans of polyventral structures: A Buckquoy house 4 (after Ritchie 1977, Fig 3); B Brough of Birsay structure 19 (after Hunter 1986, ill 11); C Red Craig (after Morris 1983 Fig 6; Hunter 1986, ill 3).

A roundhouse-type form has been recognised on site VIII at the Brough of Birsay (*ibid*, structure 21, Ill 17) which is assumed to be LIA II. On site VII at Birsay it is interesting to note that a drain divided two buildings from each other (*ibid*, Ill 11), and is perhaps suggestive of further divisions between buildings.

On the basis of certain pins and combs (Stevenson 1955; Foster in prep a and b) there was evidently some activity on broch sites in the LIA II. In Orkney we are perhaps seeing the preference for selective reuse of sites which have both massive outworks and surrounding settlements, sites which may by implication have been of especial importance in the MIA. At present no such pattern emerges from the Caithness evidence. However, it remains to be emphasised that there has been little excavation on late occupied brochs. There is little evidence that a site was used both for burial and a domestic purpose, nor is there any evidence for any LIA I activity on these sites used for burial. The implication is therefore that a large number of these brochs sites were grassy mounds by the time they came to be reused as burial sites, although the former presence of LIA settlement in the immediate vicinity of the broch mound can unfortunately not as yet be verified. The collapse of broch and surrounding structures might have created so much debris that it was more convenient to build adjacent to the mound, which is not

where archaeologists tend to investigate, but is where most subsequent degradation is likely to take place (as at Howe where there are suggestions of features running off into the ploughed out area which surrounded the mound: pers comm B Smith).

### **Analysis of Spatial Patterns in Buildings**

The gamma (henceforth access) analysis of Hillier and Hanson (1984) is a means of investigating the relationship between spatial order and society. It looks at the patterns of relations between inhabitants and between inhabitants and strangers as they are reflected in the use of interior space, in terms of the patterns created by boundaries and entrances. Whilst one can find faults in the tenets behind the technique, the formal approach is one which can be adapted and modified for archaeological purposes. Social inferences can be derived from the spatial order by circumspect consideration of the assumptions behind every step of the technique, and a clear understanding of the relationship between material culture and social reproduction. All discourse has a spatial element (Barrett 1988) and therefore access analysis is a useful tool for articulating an understanding of the part space plays in structuring social relations, and the part social relations have in structuring space (Foster 1989). The aim of the next section is to demonstrate how this technique can be used to further an understanding of our period, and to develop in tandem a social interpretation.

The prehistoric structures of Orkney and Caithness provide one of the best databases with which to do this because we often have information about the form and function of the constituent spaces. Here, despite subsequent robbing and other vagaries of time, the wide availability of natural building blocks has resulted in the unprecedented survival of prehistoric structures, a prehistoric resource unrivalled in the British Isles.

### **The Theory and Technique**

A building is made up of walls which define a series of enclosed spaces, the boundaries between which may be broken by doorways allowing access from one area to another. The importance of doors is not only that they open, but more importantly that they can close, effectively segregating spaces and controlling the means of access to any particular point. Access analysis is based on syntactic relations, and considers the arrangement of different spaces as a pattern of permeabilities, that is in terms of the interconnections between spaces. This technique is important because of its descriptive autonomy, unambiguous rules of application, and its clear exposition of how these relate at the very lowest level to relations between inhabitants, and between inhabitants and strangers. Societies which might vary in their type of physical configuration and degree to which the ordering of space appears as a conspicuous dimension of culture, can all be compared on a similar basis. This is particularly useful if we are trying to compare the social practices a building was designed to cover rather than its architectural traits.

The technique is explained with the use of the example of the EIA roundhouse at Bu (Fig 4). Each unit of space, including transitional spaces, has been represented as a dot with lines between them where there is *permeability*, giving access between spaces (Fig 4A). Each space is usually an area which is enclosed by orthostats, with access either through doorways (as in the case of Fig 4B x), or over low kerbs (v) where the access lines may therefore appear to be jumping walls. The central 'service area' (y) is defined by a low kerb and gives access to the hearth (z); it is divided into two areas because the smaller north section is partly paved and the distribution of artefacts (Hedges 1987 I, Fig 1.57) may suggest that the southern half had a different function to the northern half. Area w is treated as a single space because the central orthostat was not designed to break the space into two distinct components, and because of the extent of floor deposits which are more or less specific to this area (*ibid*). The network of dots and connecting



lines forms an unjustified access map. This map can be *justified*, in this case from an outside perspective (the *carrier*), the stance of the stranger (Fig 4C), although it could have been from any point in the building. By justification it is meant that all points of a certain *depth*, that is the minimum number of steps taken to reach them from the carrier, have been positioned on the same horizontal line, subsequent depth values on lines parallel to the first. Given the rules of construction any line will either connect with points on the same level of depth, or two levels separated by only one level of depth. The resultant map is both an aid to visual decipherment of the pattern, and could in theory be combined with quantification procedures (an aspect which is not pursued here).

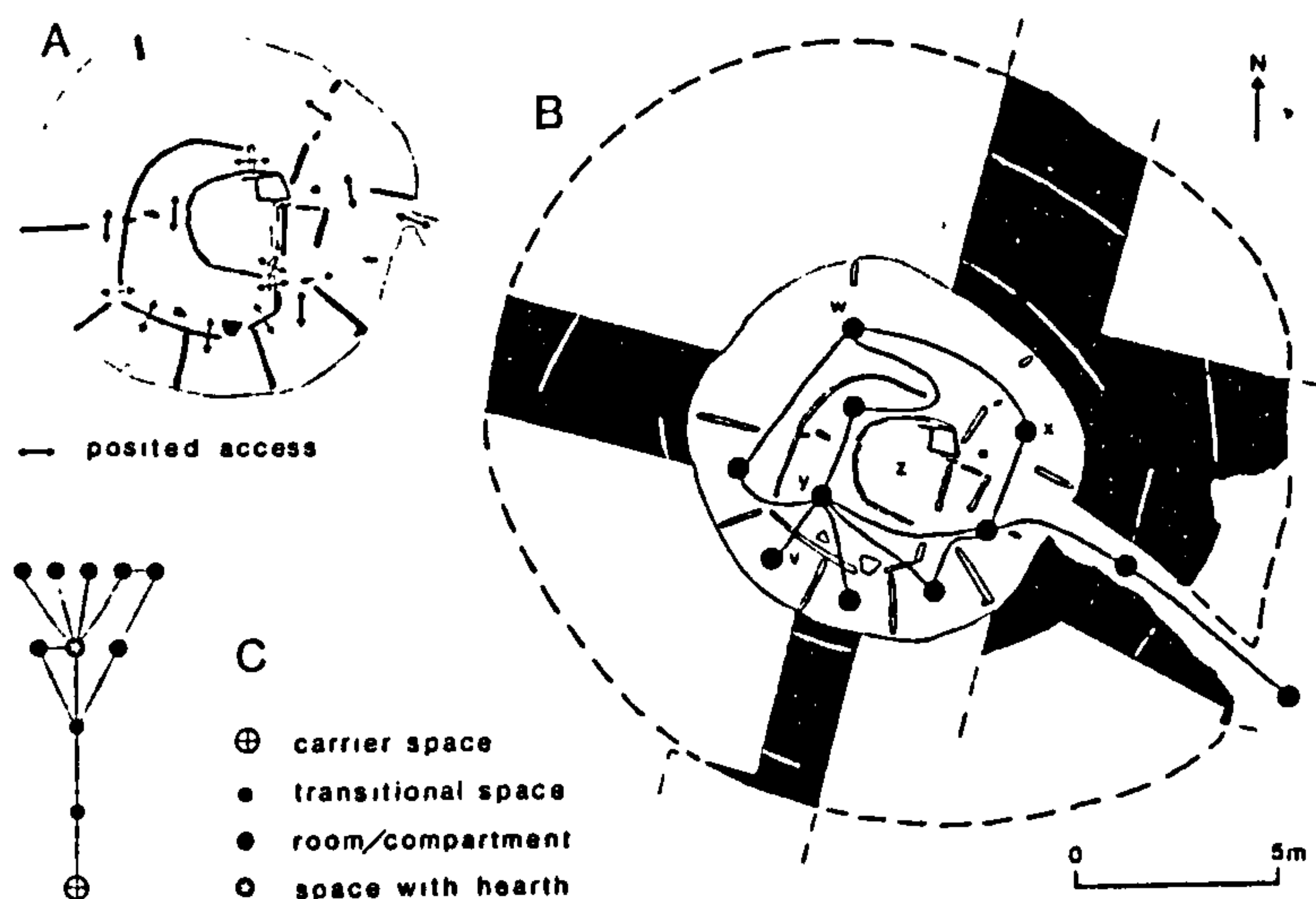


Fig. 4. A Plan of Bu indicating points of access (after Hedges 1987 1: Fig 1.10); B Bu with unjustified access (gamma) map superimposed (access to hearth omitted); C Justified access map with labelled spaces.

Buildings are easier to study than settlements because open spaces cannot be so readily separated into analytical elements (Hillier and Hanson 1984, 16), and the richness in differentiation of interior structures means that they carry more social information than exterior relations (*ibid*, 154). So, once spaces are defined, the spatial order of a structure can be represented in part by a diagram showing the interconnections of the enclosed spaces. A prerequisite for analysis is therefore an accurate map with all access points marked. Form (the formal properties of space and the boundaries which define it – its style) and function (the purpose of buildings) must also be embraced. In practice it is

virtually impossible to make a distinction between these attributes (Markus 1982, 4-6; cf Johnson 1988, 117). Hillier and Hanson (1984) minimise the interactive nature of these because of their apparent belief in the analytical autonomy of the spatial dimension. However, these other architectural dimensions have to be brought into consideration if the full archaeological value of access analysis is to be appreciated.

#### **Social Inference From Access Analysis**

It has been argued elsewhere (Foster 1989) that the application of these techniques, in combination with evidence for architectural form and function, can impart two levels of spatial understanding. Firstly it allows us to consider the reality of living in, or visiting, that particular building. Interior spaces constitute commonly inhabited *locales* of social interaction. Access analysis allows us to consider how frequently and under what architectural circumstances physical encounter might occur and thus illuminate the way that particular architecture structures social discourse. Secondly we may compare a number of spatial patterns to reveal the possible existence of underlying generic rules which govern the generation of these patterns.

In this study the designation of a space depends on the physical presence of a doorway, or crossing a low kerb or ramparts. It also depends, to a large measure, on the ascribed function of an area; it is obviously important to distinguish an enclosed area where sleeping rather than storage might have taken place. Areas with hearths are especially relevant. The recognition of functional zones, even if only defined by what in another period might have been described as furniture, is an obvious archaeological progression on a technique evolved for upstanding 'historic' structures.

#### **Orkney and Caithness c 600 BC-AD 800**

In Figs 4-6 various types of settlement have been drawn as justified gamma maps with an extended vocabulary of symbols to represent the different types of space and means of access. These access maps therefore incorporate information about the spatial properties of the settlements and the potential functions of some areas. Moreover by the use of open and closed symbols differing architectural types, where relevant, have also been indicated. The result is an all-embracing consideration of the architecture presented in convenient diagrammatic form.

In the early first millennium BC the population either lived in thick-walled roundhouses, which tended to be sited in isolation or in small clusters of thinner walled roundhouses or lobate multi-cellular structures. Gradually the thicker-walled roundhouses developed into increasingly elaborate architectural forms, ultimately the broch, as competition in society led to the local pre-eminence of certain residential groups (Hedges 1987 II). Both types of roundhouse were clearly domestic buildings, the only difference being in scale and the amount of effort put into their construction, signifying which inhabitants were more powerful. This distinction is almost undoubtedly the result of the ability to manipulate primary agricultural resources, indeed the appearance of earth-houses emphasises the importance of food storage at this time (Sharpley 1984, 121). Thus the potential for social diversification and development would always have been greater in Orkney and Caithness than other areas of the Atlantic Province because the land was fertile enough to maintain large populations and the competitive demands of production and consumption. Elsewhere the piecemeal distribution of natural resources tended to produce discrete social units with less potential for development.

The authority of this new dominating social elite 'would be explicitly stated in the ritual of legitimisation and in the symbols of power displayed, but that authority would also be implicit in, amongst other things, the payment of tribute'. Thus as Barrett (1981,



215) goes on to say, the acceptance of new authority might be mobilised in the labour of building the brochs and its enclosing ramparts. Prior to this the distinction in scale between the roundhouses and the adding of extra claddings to the walls may have been equally significant. These buildings were not simply constructed for extra warmth and/or defence and/or status, but in the process of their construction actors were brought together who demonstrated their acceptance of authority whilst at the same time ramifying or creating the basis on which this power was established.

Ultimately the result was the broch, the residence of the social elite which may in some cases have formed from the amalgamation of certain social groupings, for certainly not all roundhouses/early brochs developed into fully fledged brochs, and it may have been necessary to muster resources in order to gain superiority over rival social units. The secondary double domestic units at Gurness and Midhowe suggest that a couple of domestic units, perhaps kin groups, might have amalgamated. The infilling of the roundhouses at Pierowall and Quanterness may be the result of conflict between competing lineages (Sharples 1984, 121). Factors such as raiding or land hunger (cf Scott 1947) are not directly responsible for these changes, but could be catalysts for changes in the rules by which discourse was enacted, and society continued to '*become*' (cf Pred 1985). In Caithness a large number of roundhouse sites existing on the ground do not exhibit later development, and there are relatively few brochs in Caithness which appear on the surface to be new foundations. Again this suggests that only certain earlier sites maintained the economic and social impetus to allow settlement to continue uninterrupted (Mercer 1985, 10). A similar pattern may exist in Orkney, notably when several broch or roundhouse and/or burnt mound sites occur in close proximity to each other. The general picture is thus of the increasing convergence of land and societal control under powerful groupings who symbolised and accumulated their power within the broch. The fact that there was continuity of development on particular sites may suggest maintenance of social networks, land organisation and territorial patterns, and proprietorial rights with antecedent communities (*ibid*, 10).

Turning to the spatial aspects, some general trends can be observed. At the immediate visual level, the development from Early Iron Age single, agricultural and domestic units (such as Bu, Fig 4) to Middle Iron Age nucleated settlements (Fig 5) reveals the introduction of a staggering hierarchical use of space. The maps become considerably deeper (more asymmetric), and the deepest, most segregated area is always the set of spaces which constitute the broch. Upper galleries and upper storeys, features not found in the outbuildings, are the very deepest, least accessible spaces. Their usage may have included storage, extra sleeping facilities and wallheads from which surveillance might be made. Unfortunately these are the parts of the structure about which least is known as they were always the first to collapse or be dismantled, and the total number of original floors is not known. If the majority of activities and functions was in the upper storeys then obviously their exact nature can never be assessed and the ground plans tell us less (although it seems most probable that the ground floor was the main domestic forum).

The larger the access maps, then the more abstract and complicated they become to analyse, and it is helpful to break them down, for instance by dividing them into distributed ('ringy') and nondistributed ('tree-like') sub-systems (as Gurness: Foster 1989, Fig 6). On the very outside, globally governing the interior, are earthworks which extend the depth between the inside and outside worlds, even if in some cases they only create abstract rather than real rings, that is their circuit is 'completed' by natural features. Access to the interior proper has to be via the 'guardhouse' or forecourt, a relatively convex space; this is where the transition from the outside world to an inner environment is sanctioned. From here ingress is made into a long thin passage from which access to both outbuildings and broch can be made. In the cases of Gurness, Howe

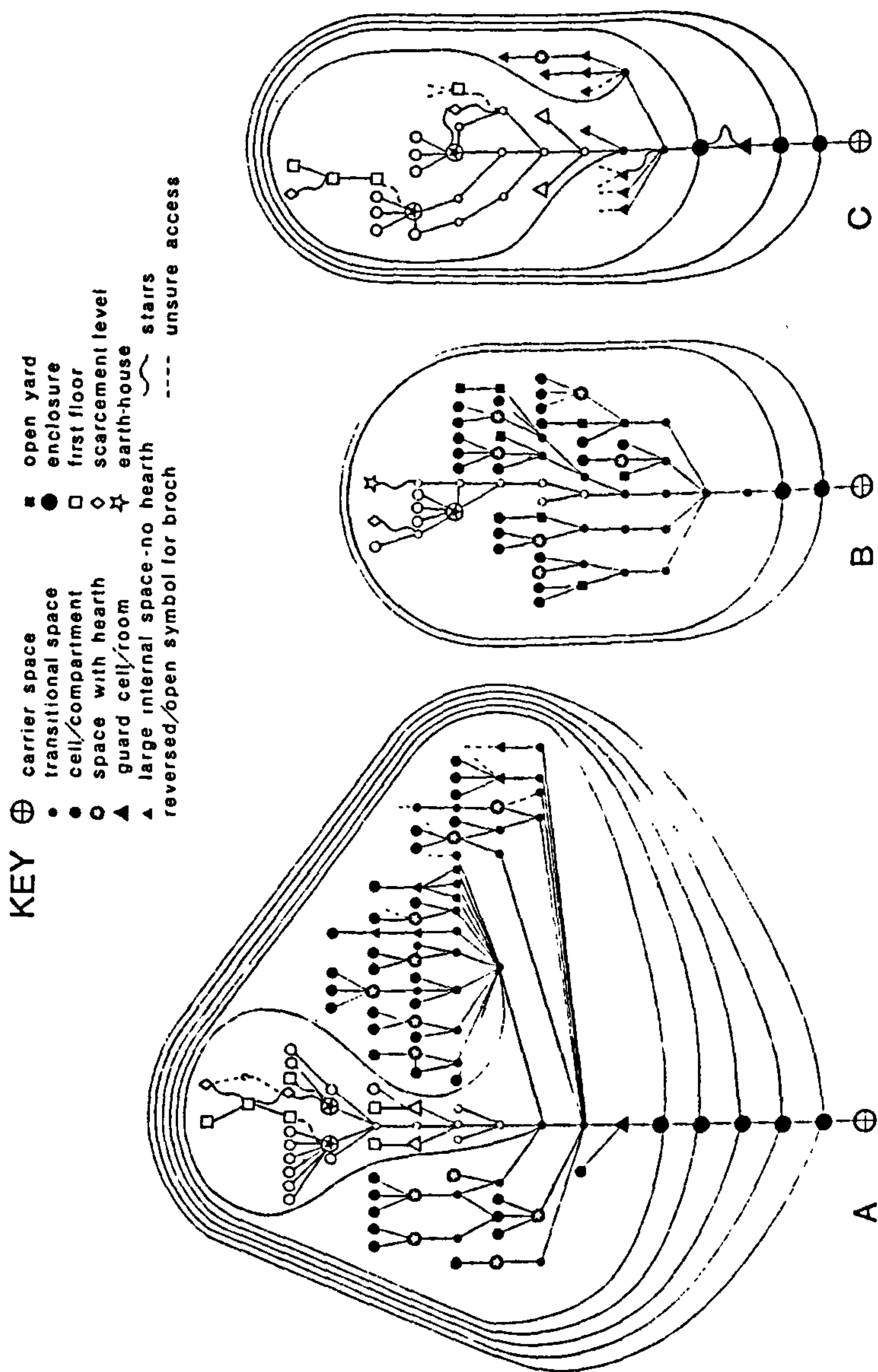


Fig. 5. Justified access (gamma) maps for Middle Iron Age nucleated settlements (reversed/open symbols distinguish the broch from other structures): A Gurness; B Howe; C Midhowe.



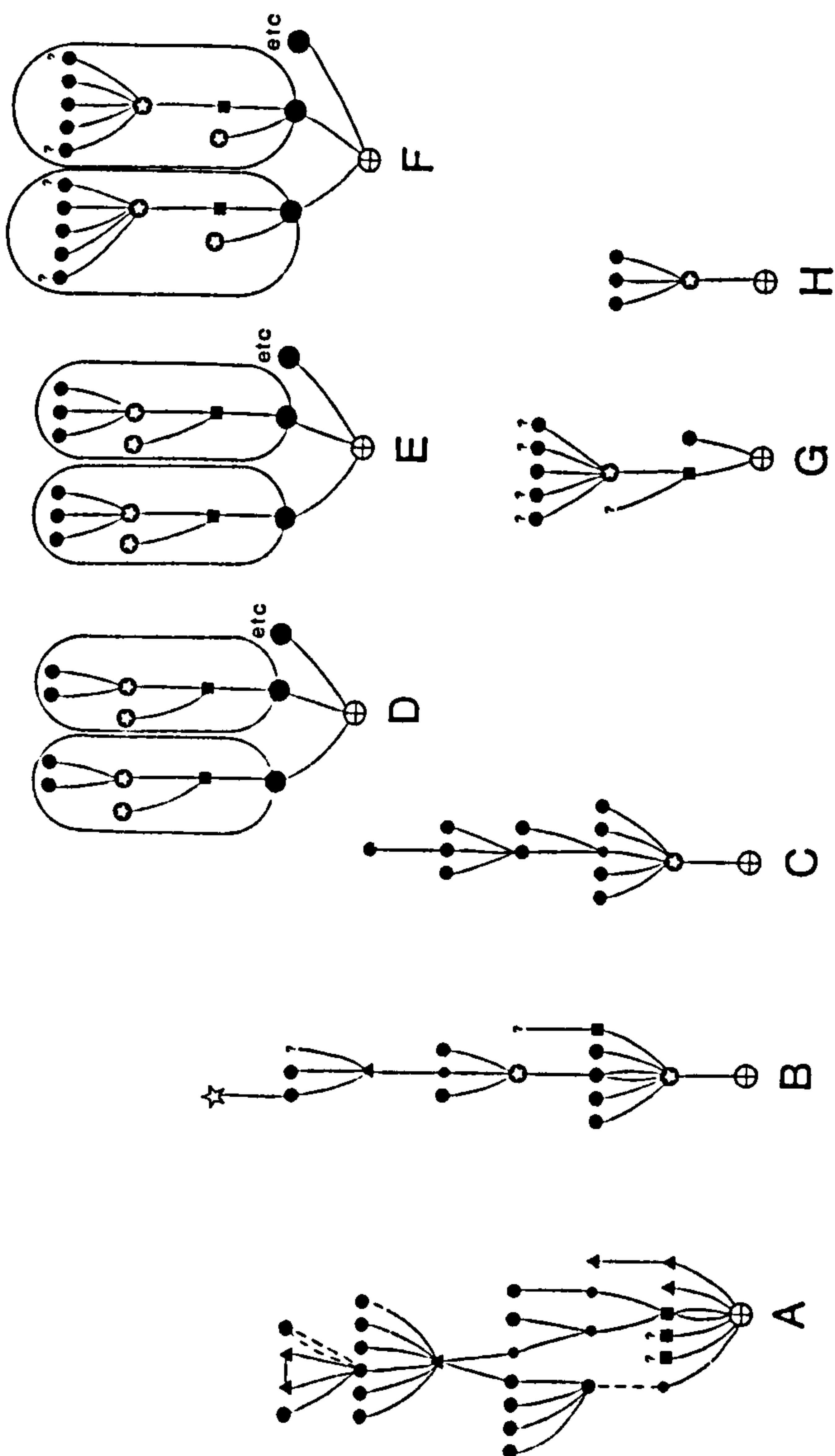


Fig. 6. Justified access (gamma) maps for LIA structures: A Howmae; B Howe phase 8, stage 6; C Gurness 'Shamrock'; D Udal level XIV-XIII; E Udal level XII; F Udal level XII; G Buckquoy phase II; H Buckquoy phase Ib. A-D are LIA I, E-H are LIA II. Key as for Fig 5.

and Lingro (as suggested by an early section of walling: RCAMS 1946 II, Fig 230) the entrance into the settlement and the broch entrance are aligned, which must have enhanced the processional like qualities of these passages. From here the outbuildings constitute a local, large and almost totally nondistributed area of settlement, spaces in which strangers cannot freely circulate and into which they must be invited. Such branching off thus creates the maximum segregation of spaces with the least expenditure of depth, both between and within domestic units. Entrance to and between the outbuildings is mainly by means of this passage, therefore most movement can be monitored by control of its various sections.

From this first narrow passage access is gained to the next ring, a passageway which encircles the broch (except at Howe). This ring is at the point where ingress can be gained to further nondistributed spaces at a slightly deeper level. Ringy structures interconnect some apartments and outbuildings. Access to the broch interior is from the initial passage, at about the same level as some of the outbuildings, but is deepened by guard cells, an elaborate doorway into a long tunnel, and a series of vestibules. The form of the architecture is particularly relevant; the monumentality of the broch tower and its elaborate entrance contrast starkly with the less substantial outbuildings, all of which appear very similar in form, serving to heighten the discrepancy between these spaces. Once inside the broch the final ringy structure is encountered, which is separated from all the others by several depth levels. This is quite complex in the case of the double domestic units at Midhowe and the later levels at Gurness. The rings connect the main domestic foci (the hearth areas) and the upper levels. Cells and compartments are arranged in non-distributed fashion from these rings, in similar fashion to the outbuildings.

From the point of view of strangers, the overall hierarchical layout and the differences in architectural form have done nothing to encourage their admission to the broch. Therefore, its interior ringy system, is unlikely to have had a major role in articulating immediate stranger-inhabitant relations, but was probably a means of articulating the relationships between the different domestic units, where they existed. The ringy sub-systems in the outbuildings would have played a similar role, but here there is a greater emphasis on the non-distributed component.

From the point of view of social structure a number of observations can be made on the basis of this information. Despite some similarities with the outbuildings, the broch obviously stands out as the most important area in the settlement complex because of its spatial importance, its prime location and its monumentality. If it were not for the double domestic units, and the spaces associated with the upper levels of the broch, then they would differ little from the earlier roundhouses. This, in combination with the degree of controlled access to the outbuildings and their apartments, which are almost exclusively segregated, may suggest that the social structure on which these new relations were founded required strict control in order to be both established and maintained.

Taking an overview, the observed systems serve to emphasise the social inequalities existing between the broch and outbuilding occupants, and the settlement and the outside, the latter distinction being the strongest. Local relations between the internal cells are basically the same except for the broch; the factor of *non interchangeability* has been introduced between the broch and all its surrounding units. Thus this is more of a *transpatial* than *spatial* system. In other words the emphasis is on spatial relations which have been determined by genotypic rules and produce the required restrictions of encounter, even though each physical manifestation of these rules is different. What is more, the genotypic-model is global, because it recurs, and as a result transpatial relations and integration can exist between *arrangements* (settlement complexes) because similarities in layout and comparable positioning may foster a conceptual form of identification (Hillier and Hanson 1984, 238).



In addition the inhabitants of a single settlement may feel a strong sense of identity with each other because they share a structured whole with others. Furthermore, the repetitive nature of these patterns may be representing the acknowledgement of a code of symbols, in this case spatially determined, by which those in the broch sustained their authority over the inhabitants of the outbuildings. The ordered layout of the outbuildings and the comprehensive use of space further suggests that these were laid out as a unity under the authority of the broch inhabitants, rather than being the result of the cumulative construction of outbuildings to a basic structuring principle. Their construction is thus a part of the symbol by which the authority of the broch inhabitants was both accepted and created. The emphasis is on the articulation of these relations at the intra-site level, but as a part of a wider society with similar values.

Fojut (1982) estimates a carrying capacity of about 100-200 people for the land surrounding a broch in Shetland. Unfortunately it is not possible to measure the size of the populations and the extent to which the carrying capacity of the land was being realised at any stage, but increasingly, and from early days in the history of the brochs, a large number of dependents came to live around the brochs. The greater the authority and wealth of the broch inhabitants the larger the number of dependents they could both attract and support. The most powerful leaders could muster the resources to lay out and build planned, integrated, nucleated villages. Under less formal circumstances, and on a lesser scale, non-radial outbuildings were built. Early brochs are seen as being contemporary with various roundhouse settlements, and not all broch sites were of equal standing. The pace of this development may have varied considerably from area to area, and was not necessarily unilinear. In a time of great change social tensions must have been strong between different groups, and it was in the interests of the social elite to attract more dependents to their fold, and preferably to accommodate them where they could be easily accounted and provided for.

Most brochs were sited with access to cultivable land as the main consideration (Scott 1947, 1948; Fojut 1982; Mercer 1985). It is presumed that all inhabitants, even craftsmen, would probably have been involved in the production of food.

Ultimately there was a change in the broch system, the result of a renegotiation of relations, which was achieved by extending the authority of certain cultural resources, or by rejecting once current authoritative symbols (cf Barrett *forth*). Certainly the broch was no longer occupied, although settlement of some form seems to have continued on many sites. The LIA I is the period for which least is known of the settlement record, but there is certainly no indication of structures which can be differentiated on social grounds in Orkney and Caithness. The exact date of this change is not known, but it would be too easy to attempt to relate this to the withdrawal of Roman interests in Scotland. Yet as the prime recorded source of authority in this period, this cannot be ignored. Although the Romans never exercised any control in the area, the classical literature suggests that there was a power base in the north which was considered worth conquering (Thomson 1987, 2-3), and the archaeology supports this. If the broch aristocracy had become clients of the Romans, the withdrawal of their patronage might have been sufficient to topple this social system, as is suggested was the case for the Lowland brochs (Macinnes 1984). When local leaders were thus no longer able to satisfy the needs and demands of their dependents, the result was the renegotiation of relations from the local power bases to more distant ones. The only broch sites which continued were those where the social elite managed to continue to derive power in this new system; presumably certain broch sites were still the major centres.

Fifth century Britain in general was experiencing a time of settlement shift as the result of the withdrawal of the Romans and migrations from both the continent and Ireland. Yet as in post-Roman Wales and north England, there is no reason to believe that the

earlier social structure did not survive, albeit in modified form. Certainly the aggression of the Picts against south Britain, recorded from the late third century onwards, suggests that the individual components of their society were able to produce between then a naval force to be reckoned with. The appearance of forts, notably Burghead, with a coastal distribution from the fifth century onwards, (Alcock 1980, 80-81), suggests not only a concentration of resources into fort construction, but is a part of the discontinuity witnessed in the settlement record throughout Pictland.

Very little is known of social stratification, but the term *regulus* was used to describe a sub-king or minor king of Orkney who was visiting the *rex potentissimus* near Inverness in AD 565. The picture presented is thus of a system of local kings with one, or possibly two overkings. Certainly the uniformity of symbol stones throughout Pictland (the majority of which probably date to the LIA II) emphasises that there was a certain cultural cohesion throughout the area (Ritchie 1985, 189).

By the seventh century there is an increasing body of evidence for settlement at this time having been made up of individual, discrete units, such as around the Birsay Bay area (Morris 1983, 132). Only one site, at the Brough of Birsay can be put forward as a particularly important centre, but then on the basis of its finds, location and subsequent importance in the Norse period, rather than any distinguishing structures (Curle 1982; Hunter 1986). The lack of farmland on the island renders interpretation as a simple farmstead unsatisfactory (Hunter 1986, 169), and the inhabitants must have been dependent on a hinterland. The settlements around the Birsay Bay may therefore perhaps be interpreted as a series of home farms or dependent settlements providing for the needs of this establishment. They may therefore not be totally typical of the settlements we may expect to find elsewhere in Orkney and Caithness. There was some selective re-use of broch sites, but on present evidence this only occurred on a few sites. In Orkney the selective reuse of sites for secular and ecclesiastical purposes which were probably particularly important in the MIA (see above) may be a means of legitimising and enforcing a new social structure (cf Bradley 1987).

In the post-broch period (Fig 6) the access maps revert to forms which are very similar to the shallow EIA examples, except that in the LIA II some of the domestic units are enclosed by fences, creating a series of discrete units which are sometimes clustered in space. In other words the basic domestic units remain very similar throughout our period, despite different architectural shells; even in the MIA they do not change, except that they are bound together spatially with strongly prescribed lines of access. In spatial terms the only difference between the thin and thick walled EIA roundhouses is in their degree of association with other structures and their monumentality.

In the LIA the emphasis thus changes from internal to external space, and there is a trend towards more egalitarian, less spatially prescribed, on-site relations. However, these changes were undoubtedly accompanied by a stricter control of the spaces between sites as a result of new forms of land organisation. In terms of social evolution this change corresponds to the shift from a ranked society to the emergent state, from local power bases to more distant sources of authority. By the eighth century there are hints that Pictish kings were developing some of the organisational capacity to manage a widespread kingdom, which was gradually acquiring some of the appearance of a state, with a degree of central administration and perhaps more closely-defined boundaries, which could at times be backed by physical violence (cf Mann 1986, 37). In AD 727 there is a reference interpreted as meaning that Nechtan had officers called *exatores*, persons collecting tax or tribute (*Annals of Ulster*, sub anno 728; Anderson 1973, 178), and it is probable that such officers worked as the king's representatives throughout Pictland. Such people lived in isolation from those from whom they were exacting tribute, benefiting considerably from the enhanced powers which they derived from their



position as agents of authority (there is thus a dialectic between centralising powers, such as the state, and the decentralising forces of its agents: Mann 1986). Agents such as these might have levied the fleets which carried out several recorded sea-borne attacks in the sixth and seventh centuries (*Tigernach Annals* c 682; *Annals of Ulster* c 580-81), and which was wrecked in the eighth (*Tigernach Annals* c 729).

Thus whilst the construction of monumental architecture, in this case hillforts, is still a material symbol of the acceptance of authority, this power is now more physically remote. Whilst there are still regionally based sources of authority, these are seemingly few in number, and their power is structured and reproduced in a different manner. There is no longer the need for tightly regulated social encounter, the existence and acceptance of physically determined social rules, or indeed the ability to maintain such a network. The relationship of dependency is no longer expressed in such overtly spatial terms and enhanced personal encounter contributes to the working of this extensive social network. That the maintenance of these long-distance relations was difficult is suggested by the fact that king Brude was reputed to have destroyed the Orkneys in AD 682 (*Tigernach Annals: Orcadies delete sunt la Bruidhe*, Skene 1867, 72), which may have resulted from Orcadian dissatisfaction with the choice of overlords, or attempts to exact tributes. The secular reuse of important MIA sites may in part be an attempt to legitimise and therefore enforce this far-flung network. Similarly the introduction of the Roman church with its pastoral organisation to Orkney by the southern Pictish king in the eighth century (Lamb 1988; Thomson 1987, 10) might be construed as a conscious effort to consolidate secular power through the church. Christianity was a form of ideological power whose authority resided in the correspondence between its doctrine and the motivations and needs of the converted (Mann 1986, 302). Whilst the appeal and influence of Christianity was universal, yet at the same time it reinforced the standing of the extant secular authority: literacy provided a stable means of communication beyond face-to-face relations, and its law and morality represented long distance regulation (*ibid* 337, 377). The extension of the church to Orkney within a few years of AD 715 may effectively date the extension of Pictish royal power, in real terms, to this area (Lamb 1988). The distribution of symbol stones and evidence for the ecclesiastical reuse of sites points to those sites where the interests of the social elite were closely tied up with the developing Pictish state and church (cf Driscoll 1988).

In a later eighth century or ninth century version of Bede's *Ecclesiastical History* Orkney was considered to be a part of the Pictish kingdom (Dumville 1976), which by the end of the century may have been consolidated under a single king (Davies 1984, 70). The general absence of mention of Caithness in the documentary sources is probably a reflection of the lesser importance of this area in comparison to the Orkney Isles which were both more accessible and strategically placed in the Atlantic seaways.

By the time the Norse arrived Orkney and Caithness were both thoroughly Pictish, but far removed from the prime sources of authority. The regional infra-structure, was thus not adequate enough to make a stand against a Norse takeover, particularly at a period when the powers of the Pictish state were diminishing. It was however a well-oiled system of administration, both secular and ecclesiastical, onto which the Norse grafted themselves (as in Ireland, England and Normandy: Crawford 1987, 168). For example, in Orkney there is evidence that the Norse land-divisions might even have been related to a pre-Norse administrative system (Marwick 1952, 208). Lamb suggests (*pers comm*) that it only became necessary to set up the Jarldom in the ninth century after the ecclesiastical structure ceased to function due to the dismantling of the Roman Church by the Scottish kings.

### Conclusions

All human action is located in both time and space. It is thus appropriate that a large proportion of the effort of archaeologists is spent in measuring, describing and recording these attributes, particularly those pertaining to humanly-made-space – architecture. Space provides the setting for all social discourse, whether it is the open landscape or an artificial environment. It is a resource with an infinite number of permutations, a cultural resource which when studied in terms of its development through time can be understood not only as the context, but also the structuring agent and product of acts of social reproduction. This paper has attempted to demonstrate this and introduced access analysis, as described above, as a useful tool for furthering an understanding of the relationship between a specific material culture and social reproduction. The shift from a ranked society where the ultimate authorities were locally based to more remote sources of central authority characterises the development of Orkney and Caithness from the MIA to the arrival of the Norse. In his account of the sources of social power, Mann (1986) distinguishes six different forms of organisational power. Here we are seeing the change from *intensive power*, where there was the ability to organize tightly and command a high level of mobilisation or commitment from the participants, to *extensive power*, where there was the ability to organise large numbers of people over far-flung territories in order to engage in minimally stable co-operation. In order to amplify our expanding picture of IA Orkney and Caithness, it now remains to examine how other aspects of social reproduction fitted within this framework, and to identify the resources through which this power was exercised. In particular we must examine the means by which the change from local to distant power bases was achieved and maintained, the answer to which undoubtedly lies in changing agricultural practice and land tenure and the introduction of Christianity (Mann 1986; cf Biddick 1984).

### Acknowledgements

This paper expands upon the case made in my note in *Antiquity* 1989, so I must repeat my thanks to those who helped with this, and the editor for permission to reproduce the relevant sections. In addition I would like to gratefully acknowledge those who have generously divulged of their unpublished data and ideas, let me use these, and kindly commented on various aspects of this present paper, namely Simon Buteux; Steve Dockrill; Dr John Hunter; Dr Raymond Lamb; Dr Euan MacKie; Roger Mercer; Ross Samson; Dr Liz Slater; Beverley Smith; and other colleagues in Glasgow. Professor Leslie Alcock and the Editor, John Barrett, worked hard to comprehensively criticise my text, make suggestions, and ameliorate the worst of my crimes to the English language. Ultimately the final opinions and faults, such as remain, are my own responsibility.

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## COMMUNITY AND SELF: PERCEPTIONS AND USE OF SPACE IN MEDIEVAL MONASTERIES

*Roberta Gilchrist\**

This paper examines the use of architectural space in expressing social differences within monastic settlements. The subject of the analysis is the evolving perception of the concept of community in medieval English monasticism. In its desert origins, the monasticism of fourth century Egypt and Syria found both eremitic and coenobitic expressions. Between the fifth and seventh centuries, western monasticism developed a coenobitic form which tempered individual isolation with group living.

From the extant rules followed by medieval monastics, in particular the Rule of St Benedict, the letters of Jerome and Augustine, and the Scriptures themselves, it is possible to glimpse the ideal internal structure of coenobitic communities. The real observances of a particular house over the period of its occupation may be gleaned from historical documentation (account rolls, references in wills to a house, bishop's visitations), archaeological excavation and formal methods for quantifying spatial patterning. Access and movement within a monastic context can be approached through the study of modern contemplative monasticism. This last approach draws on direct historic analogy, a method of interpreting archaeological material by seeking analogues with contemporary cultures to which the past culture is historically linked. The ethnoarchaeological approach to monasticism attempted here refers to the study of a modern contemplative community living in a restored medieval monastery and following the Rule to which the house was originally committed.

Monastic perceptions of space are created by the use of boundaries, which may be of both real and ideal nature. Hence, while the boundary of a medieval precinct demarcated legal ownership of land, it also symbolised the divide between secular and religious domains. Space was (and is) used to regulate encounters between groups. Inside the precinct, the relationship between secular and religious was distinguished by an outer secular court and an inner religious cloister. Within the cloister, a more subtle segregation relied on both the physical manipulation of space and the conceptual spatial divisions informed by coenobitic ideals. Attitudes towards space were created through shared knowledge, transmitted through sermons and written traditions. This codified ritual behaviour informed attitudes toward space, which in turn reproduced the social order of the monastic community.

In the formulation of his Rule, Benedict was striving for a well-organised ascetic life which achieved sanctity through the elevation of community by the renunciation of the individual. Equality within a group of monks was assured through self-denial and spiritual humility. Renunciation of self was achieved through a rejection of private property upon induction to the community 'thenceforward he will not have disposition

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# ANTIQUITY

VOLUME 63 NUMBER 238 MARCH 1989



# Analysis of spatial patterns in buildings (access analysis) as an insight into social structure: examples from the Scottish Atlantic Iron Age

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*Clearly the pattern of space in buildings can be expected to relate to the way that buildings are used to structure and reproduce social relations. As an archaeologist, wishing to infer social structure by its reflection in the building pattern, one may hope the relation may be reasonably direct. Here the formal geometrical method of access analysis is used to elucidate the pattern in a distinctive kind of prehistoric settlement form, and thence to elucidate the social structure which both produced it and was structured by it.*

The aim of this paper is to describe an archaeological application of access analysis, a means of investigating the relationship between spatial order and society. As presented below this is a technique based on the gamma analysis of Hillier & Hanson (1984), which looks at the patterns of relations between inhabitants and between inhabitants and strangers as they are reflected in the use of interior space, in terms of the patterns created by boundaries and entrances. This approach has received much criticism (see particularly Leach 1978) because of its extreme belief that spatial organization is a function of the form of social structure. The present writer believes that without taking the full Hillier & Hanson line, but by adopting more modest horizons, this formal and vigorous technique can be demonstrated to be of some value to others who believe that spatial order does carry some social information.

There continues to be an increasing trend towards the interpretation of the archaeological remains of buildings, erstwhile architecture, in a social context, by analysis of their interior space (such as Smith 1978; Boast & Yiannouli 1986; Gilchrist 1988). To a certain extent this

follows movements in architectural circles (e.g. Glassie 1975; Markus 1982: 4 for brief summary), and the work of geographers and social theorists (e.g. Gregory & Urry 1985). Two common themes, ultimately derived from Structuration Theory (Giddens 1984), seem to lie behind much of this work:

- 1 The belief that space is both produced by, and in turn produces and reproduces social relations. Thus architecture is seen as culturally meaningful, and not just as a response to certain environmental needs. However, wide differences of opinion exist as to if, how, or to what degree social relations might be gauged from archaeological remains. Leach (1978: 400) has argued that the chasm between basic space syntax and real life sociology is wider than Hillier and his colleagues suppose. Yet others using the techniques of Hillier & Hanson have demonstrated that observed spatial patterns are not coincidental, and can be explained in social terms on the basis of historic and ethnographic evidence (Yiannouli & Mithen 1986). A similar relationship has been noted on the basis of observed similarities between the

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plans of 'villas' in Britain and Gaul (Smith 1978). Total sceptics about the social relevance of spatial organization are not so vociferous.

- 2 It is recognized that all social interaction is situated within both time and space, thus time is emphasized as an essential component in all social analysis. Barrett (1988) has recently suggested an archaeological means of applying Structuration Theory, and taking into account the factors of time and space, which he calls *Fields of Discourse*.

This note will discuss the theory and technique of access analysis, and the relevance, if any, of this technique to the elucidation of social structure through a medium of analysis such as *Fields of Discourse*. The archaeological application of this technique, with appropriate modifications, is described using examples from the Iron Age of Orkney.

### The theory and technique

A building is made up of walls which define a series of enclosed spaces, the boundaries between which may be broken by doorways allowing access from one area to another. The importance of doors is not only that they open, but more importantly that they can close, effectively segregating spaces and controlling the means of access to any particular point.

Access analysis is based on syntactic relations, and considers the arrangement of different spaces as a pattern of permeabilities, that is in terms of the interconnections between spaces. There will never be agreement between disciplines as to what constitutes social space (e.g. compare Fletcher 1977; Piaget & Inhelder 1956; Gregory 1978; Norberg-Schulz 1971), but this technique is important because of its descriptive autonomy, unambiguous rules of application, and its clear exposition of how these relate at the very lowest level to relations between inhabitants, and between inhabitants and strangers. Societies which might vary in their type of physical configuration and degree to which the ordering of space appears as a conspicuous dimension of culture can all be compared on a similar basis.

The technique is best explained with the use of the example of a small modern house, where only the ground floor has been taken into consideration (FIGURE 1A). Each unit of space, including transitional spaces such as a hallway, has been represented as a dot with lines between them where there is permeability, giving access between spaces (FIGURE 1B). The network of dots and connecting lines forms an unjustified access map. This map can be justified, in this case from an outside perspective (the carrier), the stance of the stranger (FIGURE 1C), although it could have been from any point

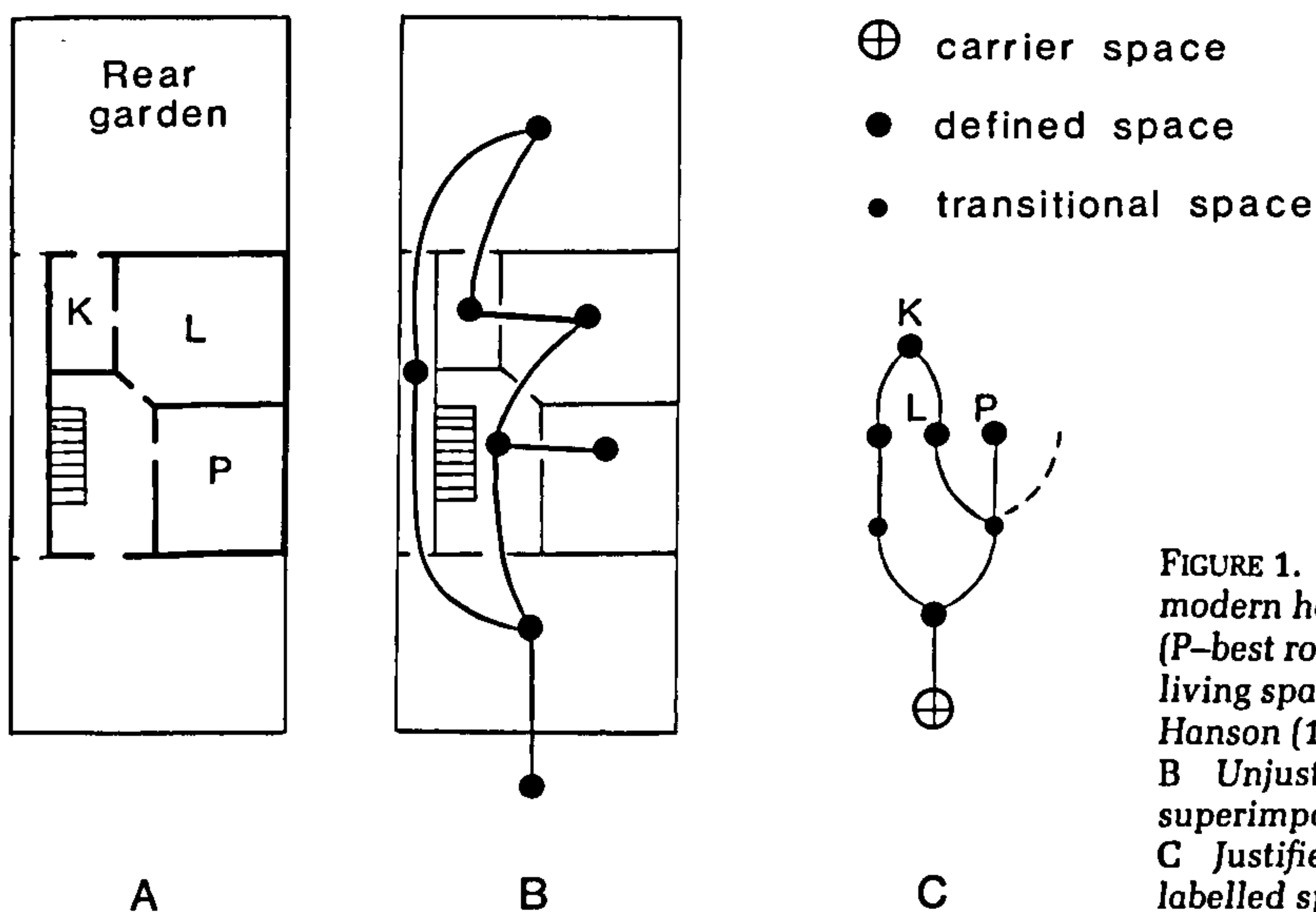


FIGURE 1. A Plan of a small modern house, ground floor only (P—best room, K—kitchen, L—main living space). (After Hillier & Hanson (1984): figure 99.)

B Unjustified access (gamma) map superimposed.

C Justified access map with labelled spaces.



in the building. By justification it is meant that all points of a certain depth, that is the minimum number of steps taken to reach them from the carrier, have been positioned on the same horizontal line, subsequent depth values on lines parallel to the first. Given the rules of construction any line will either connect with points on the same level of depth, or two levels separated by only one level of depth. The resultant map is both an aid to visual decipherment of the pattern, and could in theory be combined with quantification procedures (an aspect which is not pursued here).

Buildings are easier to study than settlements because open spaces cannot be so readily separated into analytical elements (Hillier & Hanson 1984: 16), and the richness in differentiation of interior structures means that they carry more social information than exterior relations (Hillier & Hanson 1984: 154). So, once spaces are defined, the spatial order of a structure can be represented in part by a diagram showing the interconnections of the enclosed spaces. A prerequisite for analysis is therefore an accurate map with all access points marked. Form (the formal properties of space and the boundaries which define it – its style) and function (the purpose of buildings) must also be embraced. In practice it is virtually impossible to make a distinction between these attributes (Markus 1982: 4–6). Hillier & Hanson (1984) minimize the interactive nature of these because of their apparent belief in the analytical autonomy of the spatial dimension. However, these other architectural dimensions have to be brought into consideration if the full archaeological value of access analysis is to be appreciated.

The primary data demands of access analysis create some problems for most archaeologists. The success of illuminating and stimulating studies such as those edited by Markus (1982) on the period of the Scottish Enlightenment, or by Graves (forthcoming) on the English medieval church, is in no small measure due to the fact that the buildings which they are studying either still stand (albeit possibly with alterations), or full architectural plans exist for those which have been demolished or whose construction was planned but never realized. In addition these are periods for which some of the ideas of society, and the nature of values and relationships are known because of documentary sources. One of the main criticisms

levelled at Hillier & Hanson is that their technique cannot work fully unless something is already known of the relevant social structure, when it can be seen in retrospect how the observed patterns in the spatial arrangement relate to the known social structure (Leach 1978). Prehistorians do not have historical accounts, nor can they make ethnographic studies of the populations they are studying, but they do possess a body of primary archaeological data which may provide non-spatial evidence for other aspects of social structure. It will never be possible to 'test' prehistoric social inference derived from the spatial; one can only explore its promptings from within a clearly defined understanding of the way material culture and social structure are related.

### Social inference from access analysis

It is suggested that examination of access maps and the application of the techniques of Hillier & Hanson (1984), in combination with other evidence for architectural form and social function, may impart social information at three general scales, the first two of which are considered appropriate here.

#### 1

The variations in spatial arrangements impart social information about the realities of living in, or visiting, that particular building: where and how frequently physical encounters might be made between occupants and/or between occupants and strangers, and how these encounters might be controlled. The inhabitant-inhabitant and stranger-inhabitant interfaces can be observed in terms of relations of symmetry/asymmetry and patterns of distributedness/nondistributedness (FIGURE 2) because distribution articulates relations of boundary (the means of access to a space) whilst asymmetry reflects the importance of a space in terms of its degree of segregation or integration (Hillier & Hanson 1984: 148):

In gamma two spaces *a* and *b* will be: symmetric if *a* is to *b* as *b* is to *a* with respect to *c*, meaning that neither *a* nor *b* controls permeability to each other; asymmetric if *a* is not to *b* as *b* is to *a*, in the sense that one controls permeability to the other from some third space *c*; distributed if there is more than one independent route from *a* to *b* including passing through a third space *c* (i.e



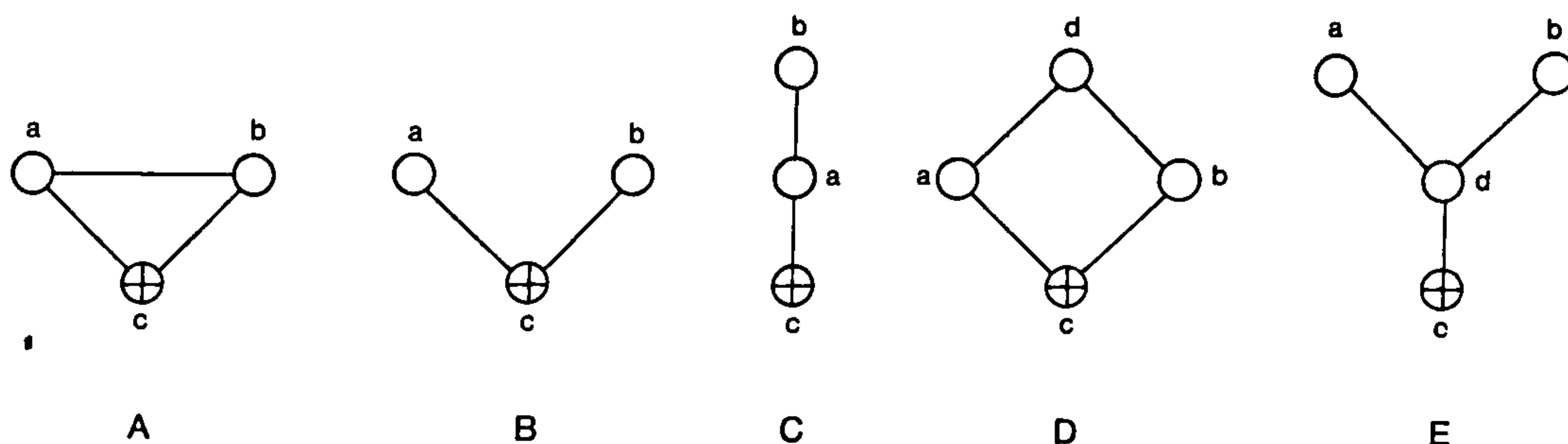


FIGURE 2. A a and b are in a symmetric and distributed relationship with respect to c.  
 B a and b are in a symmetric and nondistributed relationship with respect to c.  
 C a and b are in a nondistributed and asymmetric relationship with respect to c.  
 D a and b are symmetric to each other with respect to c, but d is in an asymmetric relation to both with respect to c.  
 E d is in a nondistributed and symmetric relation to a and b, which still remain symmetric to each other with respect to d, or to c.  
 (After Hillier & Hanson 1984: figures 88–92.).

if a space has more than one locus of control with respect to another); and nondistributed if there is some space c, through which any route from a to b must pass.

This spatial network suggests patterns which need investigating. As a result of labelling space in terms of use or form it is possible to observe whether particular labels correspond to particular syntactic positions and to investigate these patterns further.

Interior spaces constitute one of the the most common *locales* for activity and social interaction, the places where discourse can be sustained. Social analysis should therefore consider the way architecture, and the spatial organization of a settlement, intervene to structure some part of the cycle of social reproduction (Barrett forthcoming). Access analysis articulates an understanding of this, as knowledge of where, how frequently, and under what architectural circumstances, physical encounters occur. The information on access maps may be static, and cannot take the temporal frequency of discourse into account in its construction, but yet is of value in the consideration of potential time-space paths occupied by human beings.

2

The study of the spatial configuration of a number of patterns may reveal variant proper-

ties, a set of which may be thought to constitute the generic rule underlying the space in question, and which can be referred to as the *genotype* (each example will undoubtedly have a different *phenotype*, or actual physical realization of these rules). Some of the invariant properties which constitute the generic rule are observable and/or measurable in terms of relations of symmetry/asymmetry and patterns of *distributedness/nondistributedness* (see above).

The challenge is to explain how these observed topological patterns may relate to social factors as there is unlikely to be a one-to-one relationship between spatial organization and society. For example, might these expressions of boundary and control of space be reflecting the relations of physical autonomy and dependence between different sectors of a community? What type of social relations (gender, age or social status) might induce this spatial order and are these the social relations on which society is organized? Might the repetitive occurrence of patterns represent the acknowledgement of a code whereby authority was sustained? If an increased investment of formality into the ordering of the landscape (cf. Boast & Evans 1986) has been detected, this must be explained.

3

Finally, Hillier & Hanson believe that by recog-



nizing the basic syntactic generator, or organizing principle, behind a human spatial complex then different forms of social organization can be recognized (Hillier & Hanson 1984: 82). This is because they argue that although there are many different manifestations of spatial relations, there are only a finite number of organizing principles (Hillier & Hanson 1984: 54; summary in figure 23). Their rules reflect the notion of social order as suggested by Durkheim (1984), who envisaged two types of social solidarity and located their cause in different spatial variables: an *organic solidarity* which works best when the system is large and integrated; and a *mechanical solidarity* which works best when segments are small and isolated.

This is the aspect of Hillier & Hanson's work which has received most criticism (Leach 1978; Batty 1985), and is of no relevance to a social interpretation involving the use of Structuration, because it treats space as a totally independent discourse. It is not considered in further discussion.

#### **Archaeological application of access analysis**

Examples from the Iron Age of Orkney can be used to give an example of the application of access analysis and to discuss its feasibility for archaeological remains. Here, despite subsequent robbing and other vagaries of time, the wide availability of natural building blocks has resulted in the unprecedented survival of structures, often to several storeys. In a few cases it is possible to walk through doors and up stairs, lie down in bed-neuks, and collect water from the wells. Remains are always only partial, and each site is the product of centuries of site-formation, most recently selective destruction and presentation by archaeologists. Any analysis has therefore to evaluate carefully the state of the site at any one period. It is not possible to measure symbolic divisions of space (although artefactual distribution may sometimes be suggestive). Nor is it possible to recognize when major features, such as earthworks, which may have acted as a frame for later activity (see e.g. Boast and Evans 1986), ceased to be maintained conceptually (Haselgrove 1984). Nevertheless this quality of data, and the fact that in several cases the sites can be examined on the ground, is particularly significant because the definition of relevant units of

space may vary from area to area, period to period, in prehistoric structures where the concept of an entrance or division between functional spaces may need to be liberally interpreted. Thus the constitution of an archaeological space is not necessarily defined by the theory, but is dependent on the nature of the available evidence. Provided rules are carefully formulated and consistently applied to the data in question, then analysis may proceed.

In this study the designation of a space depends on the physical presence of a doorway, a low kerb or ramparts (or being aware of their existence). It also depends, to a large measure, on the ascribed function of an area; it is obviously important to distinguish an enclosed area where sleeping rather than storage might have taken place. The recognition of functional zones, even if only defined by what in another period might have been described as furniture, is an obvious archaeological progression on a technique evolved for upstanding 'historic' structures. For example, areas with hearths are especially important. All of these criteria are subjective, which is why the method can best be applied to upstanding structures, preferably with a 'full' archaeological data-set, and which have been fully recorded to modern standards.

If we take as an example the recently excavated Early Iron Age house at Bu (Hedges 1987(1)) then some of the archaeological peculiarities of this technique can be seen more clearly. In FIGURE 3A we see the permeabilities suggested by the excavator; in FIGURES 3B-C exactly the same process as adopted for the modern building in FIGURE 1, and described above, is run through. Each space is usually an area which is enclosed by orthostats, with access either through doorways (as in the case of FIGURE 3B x), or over low kerbs (v) where the access lines may therefore appear to be jumping walls. The central 'service area' (y) is defined by a low kerb and gives access to the hearth (z); it is divided into two areas because the smaller north section is partly paved and the distribution of artefacts (Hedges 1987(1): figure 1.57) may suggest that the southern half had a different function to the northern half. Area w is treated as a single space because the central orthostat was not designed to break the space into two distinct components, and because of the extent of floor deposits which are more or less specific to this area (Hedges 1987(1)).

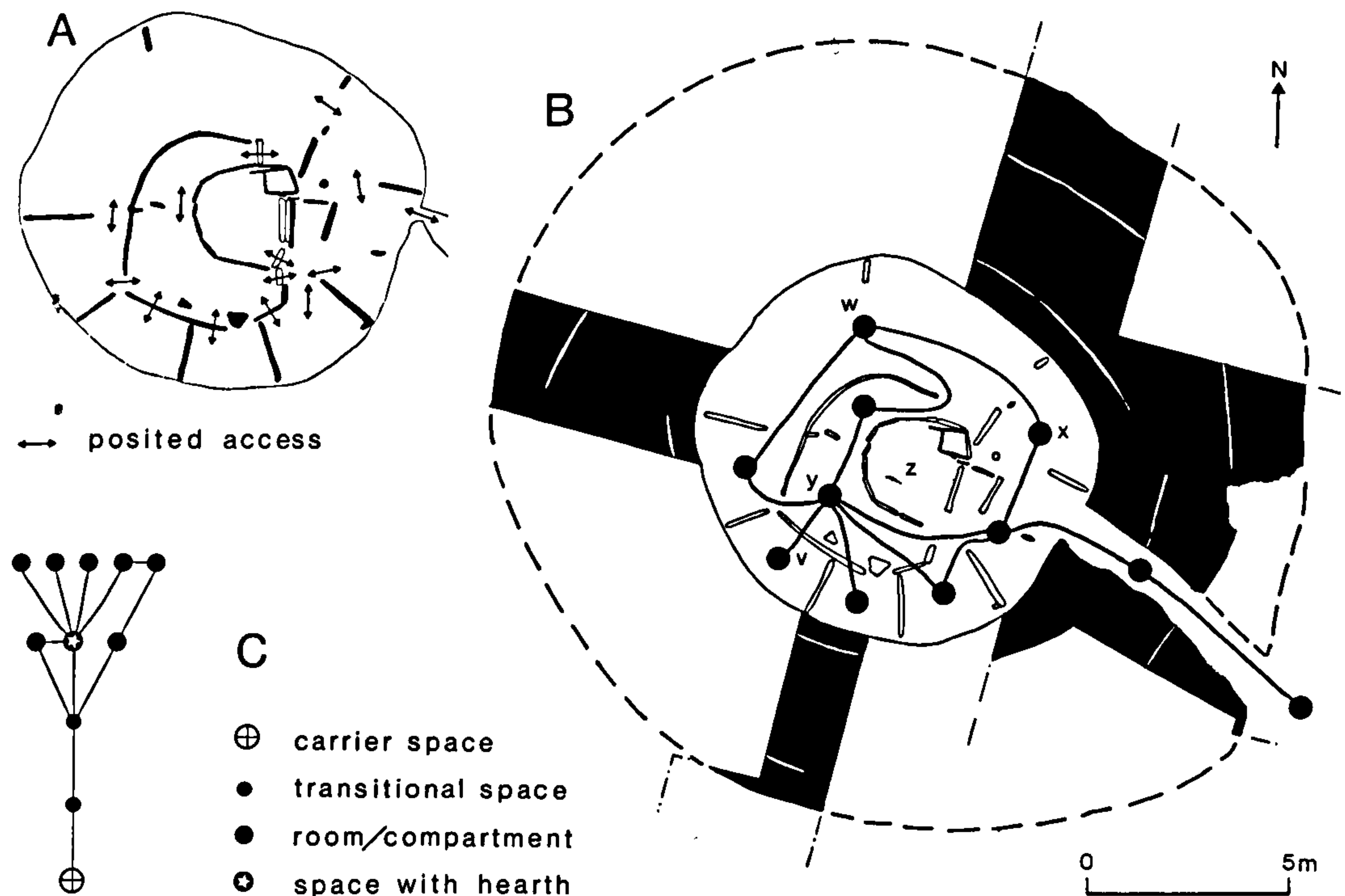


FIGURE 3. A Plan of Bu indicating points of access. (After Hedges 1987(1): figure 1.10.)  
 B Bu with unjustified access (gamma) map superimposed.  
 C Justified access map with labelled spaces.

As there may be some uncertainty about whether or not a space was enclosed, the degree to which it was socially relevant, or when access points were valid, there will inevitably be phases in the complex history of even a well recorded site when it is impossible to produce a totally accurate analysis (or any form of analysis). Yet there will be phases when a clear pattern does emerge, notably when buildings are first laid out on a virgin site. When comparisons are made of these major changes then patterns begin to emerge. In the study of Iron Age and Early Medieval Orkney four or five major phases can be identified, one of which, the Middle Iron Age, the period when brochs were prevalent, is the subject of discussion here.

#### Specific example

In the Middle Atlantic Iron Age, around 100 BC, brochs first appear – thick-walled circular

buildings, many of which had at least one upper storey or gallery. This study is specific to brochs in Orkney, but its implications are significant for the Atlantic Province as a whole, especially in areas where outbuildings are associated with the brochs (primarily Caithness, northeast Sutherland and to a certain extent Shetland). The outbuildings can roughly be divided into two forms, radial and non-radial. The radial examples (FIGURE 4) encircle the broch in a regular fashion, a passage leading through them to the broch, which is usually surrounded by a narrow encircling passage; there is a very full use of all available space between the broch and its surrounding outbuildings, where these exist. The non-radial form may be very early in the development of brochs (as at Crosskirk in Caithness: Fairhurst 1984) and may in some cases precede radial outbuildings (as possibly in phase 6 at Howe: Carter *et al.* 1984). A question hangs over the relative



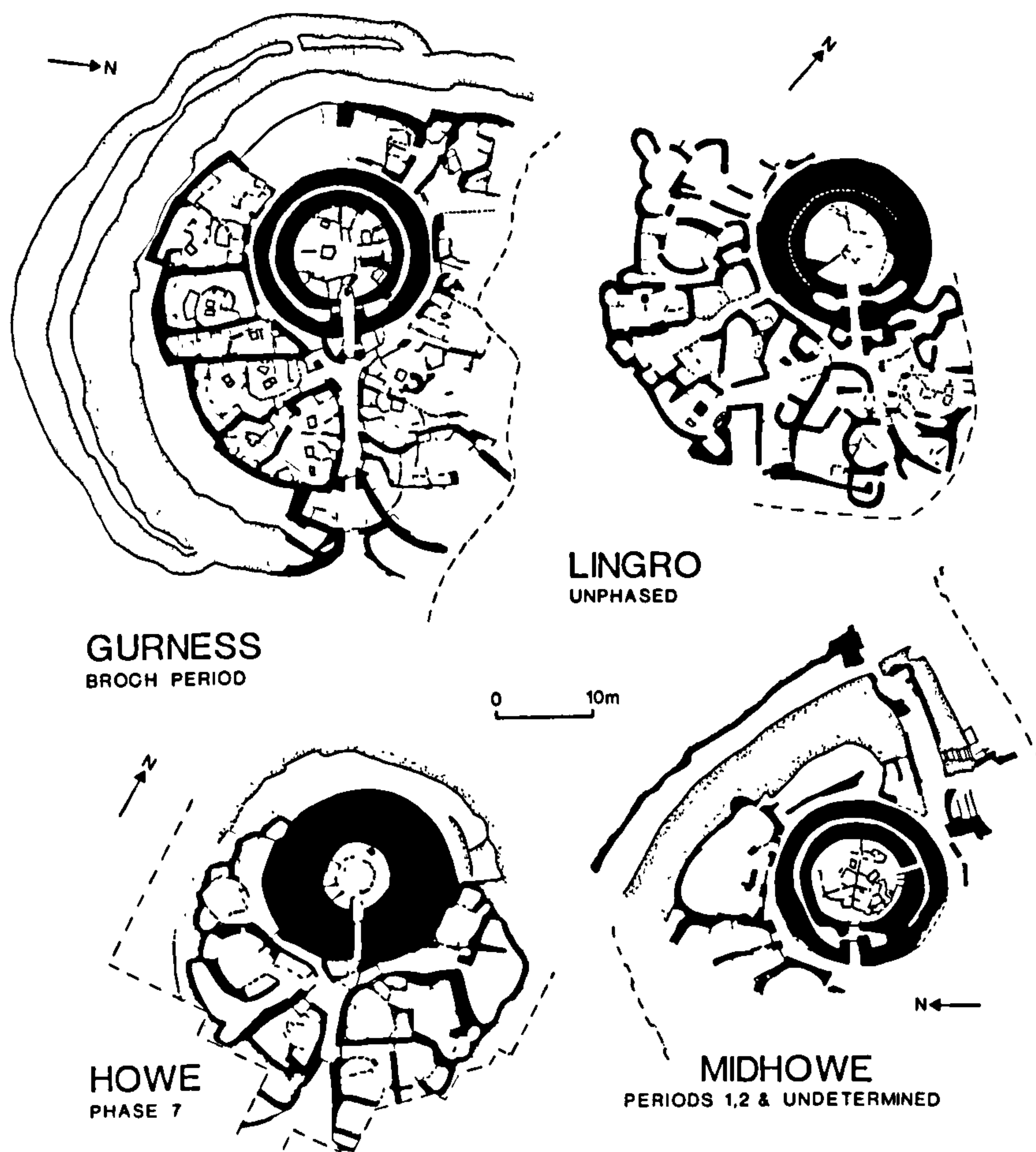


FIGURE 4. Plans of brochs with nucleated settlements. (After Hedges 1987(2); RCAMS 1946(2); Carter et al. 1984; Callander & Grant 1934).

chronology of the brochs and both types of outbuildings. This note is essentially concerned with the radial examples, where the dating evidence rests almost exclusively on the evidence from Howe, Gurness and Midhowe. These are the best understood examples, although similar plans are suggested elsewhere in Orkney (Hedges 1987(3): 14; e.g. Lingro, FIGURE 4) and northeast Sutherland. On the basis of present evidence, outbuildings elsewhere tend to be of the non-radial type. Hedges' work suggests that some of the outbuildings associated with these brochs in Orkney have been built in the same phase of construction as the broch, or are near contemporary afterthoughts, because the layout of some of the outbuildings and the broch is by and large systematic, and their floor areas, fittings, and furnishings are comparable (1987(2-3)). At

Howe the phase 7 outbuildings are contemporary with the broch, at Gurness they may be primary although little is known of what, if anything, underlies them, and at Midhowe the outbuildings are of several phases, of which the earliest may be contemporary with the broch. Whatever one's stance in this debate, it cannot be disputed that the broch and outbuildings co-existed at one point, functioning as a unity, in this writer's opinion probably early in the development of the sites.

In FIGURE 5 the nucleated settlements of Gurness, Midhowe and Howe have been treated as a single set of premises, drawn as justified gamma maps with an extended vocabulary of symbols to represent the different types of space and means of access. These access maps therefore incorporate information about the spatial properties of the

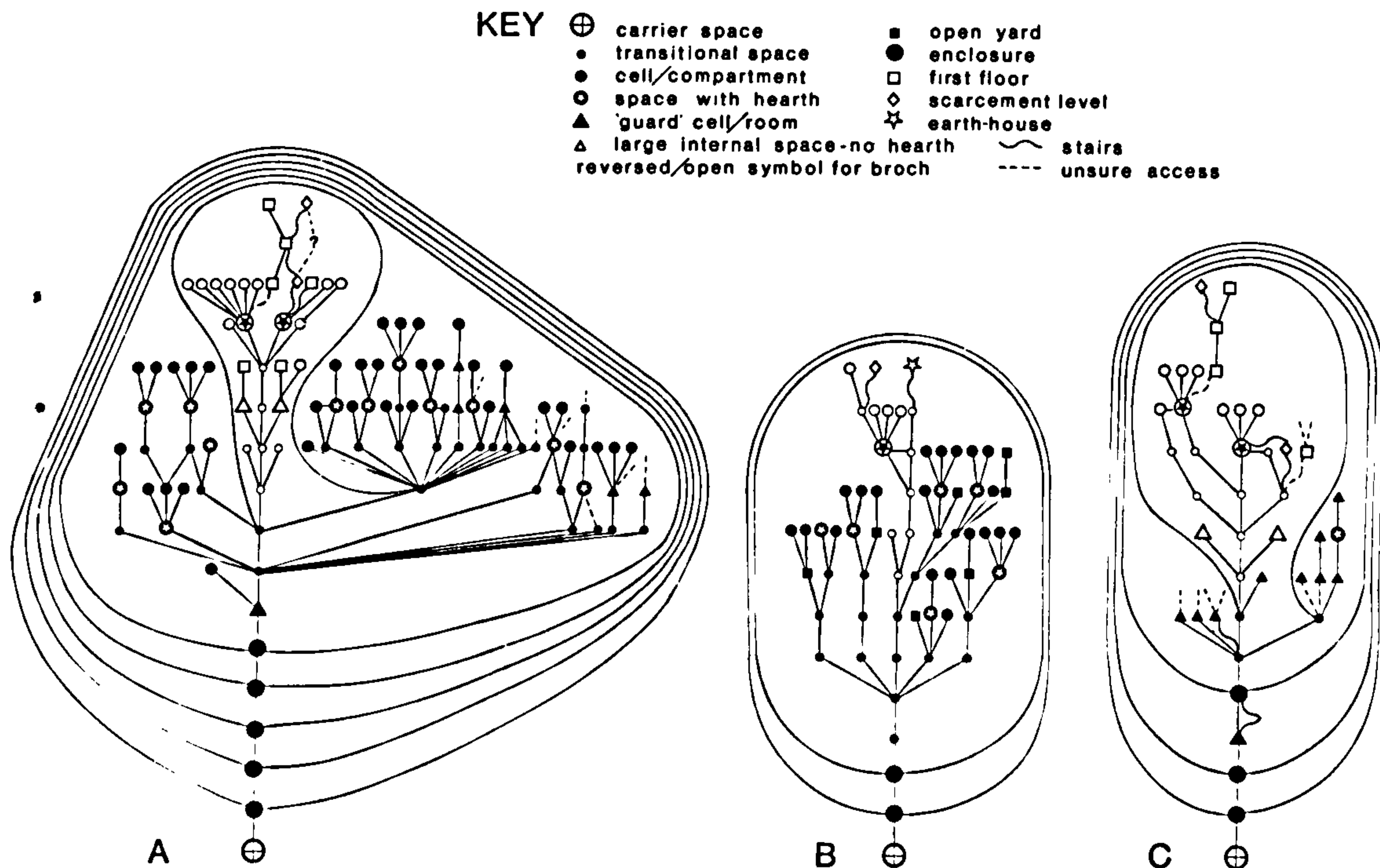


FIGURE 5. Justified access (gamma) maps for Middle Iron Age nucleated settlements (reversed/open symbols distinguish the broch from other structures).

A Gurness.

B Howe.

C Midhowe.

brochs and the potential functions of some areas. Moreover by the use of open and closed symbols the differing architectural types have also been indicated. The result is an all-embracing consideration of the architecture presented in convenient diagrammatic form.

Some general trends can be observed, and will be briefly described at the different scales of inference outlined above:

1

At the immediate visual level, the development from Early Iron Age single, agricultural and domestic units (such as Bu, FIGURE 3) to Middle Iron Age nucleated settlements reveals the introduction of a staggering hierarchical use of space. The maps become considerably deeper (more asymmetric), and the deepest, most segregated area is always the set of spaces which constitute the broch. Upper galleries and upper storeys, features not found in the

outbuildings, are the very deepest, least accessible spaces. Their usage may have included storage, extra sleeping facilities and wallheads from which surveillance might be made. Unfortunately these are the parts of the structure about which least is known as they were always the first to collapse or be dismantled, and the total number of original floors is not known. If the majority of activities and functions was in the upper storeys then obviously their exact nature can never be assessed and the ground plans tell us less (although it seems most probable that the ground floor was the main domestic forum).

The larger the access maps, then the more abstract and complicated they become to analyse, and it is helpful to break them down, for instance by dividing them into distributed ('ringy') and nondistributed ('tree-like') subsystems (FIGURE 6 for Gurness as an example). On the very outside, globally governing the



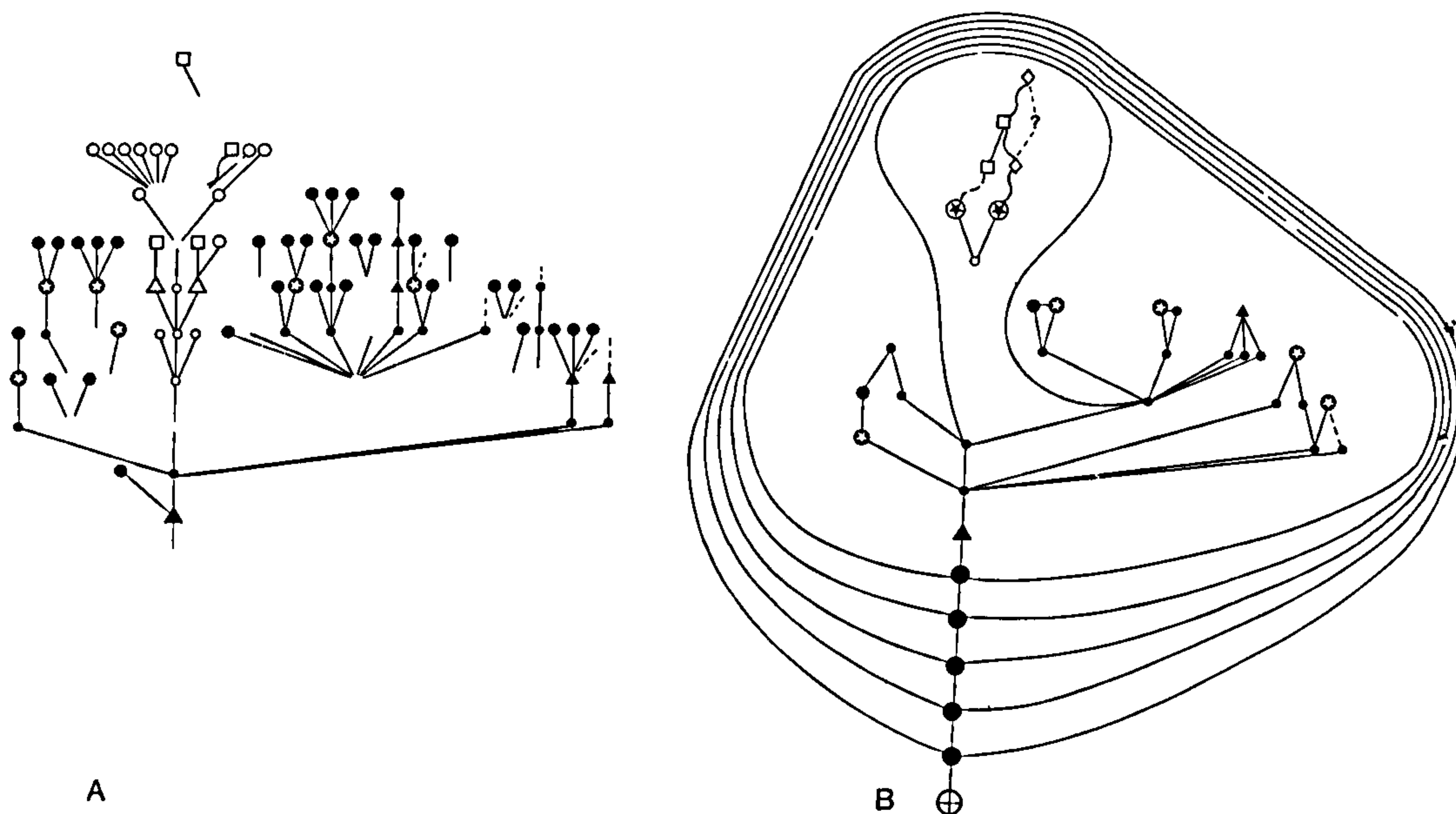


FIGURE 6. *Justified access (gamma) maps for Gurness.*  
 A the nondistributed sub-system.  
 B the distributed sub-system.

interior, are earthworks which extend the depth between the inside and outside worlds, even if in some cases they only create abstract rather than real rings. Access to the interior proper has to be via the 'guardhouse' or forecourt, a relatively convex space; this is where the transition from the outside world to an inner environment is sanctioned. From here ingress is made into a long thin passage from which access to both outbuildings and broch can be made. In the cases of Gurness, Howe and Lingro (as suggested by an early section of walling: RCAMS 1946(2), figure 230) the entrance into the settlement and the broch entrance are aligned, which must have enhanced the processional-like qualities of these passages. From here the outbuildings constitute a local, large and almost totally nondistributed area of settlement, spaces in which strangers cannot freely circulate and into which they must be invited. Such branching off thus creates the maximum segregation of spaces with the least expenditure of depth, both between and within domestic units. Entrance to and between the outbuildings is mainly by means of this passage,

therefore most movement can be monitored by control of its various sections.

From this first narrow passage access is gained to the next ring, a passageway which encircles the broch (except at Howe). This ring is at the point where ingress can be gained to further nondistributed spaces at a slightly deeper level. Ringy structures interconnect some apartments and outbuildings. Access to the broch interior is from the initial passage, at about the same level as some of the outbuildings, but is deepened by guard cells, an elaborate doorway into a long tunnel, and a series of vestibules. The form of the architecture is particularly relevant; the monumentality of the broch tower and its elaborate entrance contrast starkly with the less substantial outbuildings, all of which appear very similar in form, serving to heighten the discrepancy between these spaces. Once inside the broch, the final ringy structure is encountered, which is separated from all the others by several depth levels. This is quite complex in the case of the double domestic units at Midhowe and the later levels at Gurness. The rings connect the main domestic foci (the hearth areas) and the upper



levels. Cells and compartments are arranged in non-distributed fashion from these rings, in similar fashion to the outbuildings.

From the point of view of strangers, the overall hierarchical layout and the differences in architectural form have done nothing to encourage their admission to the broch. Therefore, its interior ringy system is unlikely to have had a major rôle in articulating immediate stranger-inhabitant relations, but was probably a means of articulating the relationships between the different domestic units, where they existed. The ringy sub-systems in the outbuildings would have played a similar role, but here there is a greater emphasis on the non-distributed component.

From the point of view of social structure a number of observations can be made on the basis of this information. Despite some similarities with the outbuildings, the broch obviously stands out as the most important area in the settlement complex because of its spatial importance, its prime location and its monumentality. This, in combination with the degree of controlled access to the outbuildings and their apartments, which are almost exclusively segregated, may suggest that the social structure on which these new relations were founded required strict control in order to be both established and maintained.

## 2

Taking an overview, the observed systems serve to emphasize the social inequalities existing between the broch and outbuilding occupants, and the settlement and the outside, the latter distinction being the strongest. Local relations between the internal cells are basically the same except for the broch; the factor of non-interchangeability has been introduced between the broch and all its surrounding units. Thus this is more of a transpatial than spatial system. In other words the emphasis is on spatial relations which have been determined by genotypic rules and produce the required restrictions of encounter, even though each physical manifestation of these rules is different. What is more, the genotypic-model is global, because it recurs, and as a result transpatial relations and integration can exist between arrangements (settlement complexes) because similarities in layout and comparable positioning may foster a conceptual form of

identification (Hillier & Hanson 1984: 238). In addition the inhabitants of a single settlement may feel a strong sense of identity with each other because they share a structured whole with others. Furthermore, the repetitive nature of these patterns may be representing the acknowledgement of a code of symbols, in this case spatially determined, by which those in the broch sustained their authority over the inhabitants of the outbuildings. The ordered layout of the outbuildings and the comprehensive use of space further suggests that these were laid out as a unity under the authority of the broch inhabitants, rather than being the result of the cumulative construction of outbuildings to a basic structuring principle.

### Social interpretation

These social inferences fit a model of ranked society where Midhowe, most probably Lingro and definitely Gurness and Howe can be interpreted as planned nucleated villages in the 'centre' of which lived the pre-eminent family or personages, surrounding whom were those who paid tribute and in return received protection or patronage (non-nucleated settlements can probably be seen as dependent settlements; this is not to exclude the possibility of other unrecognized elements in the settlement pattern for which a place could be found in this scheme). Similarities in the formal layout of these settlements and the social relations they structured, suggests that these settlements should all be seen as part of a wider society with similar values.

A clientship scheme has also been suggested by MacKie (1987). Besides the different routes of inference, the major difference between our two schemes rests upon interpretation of the primary archaeological evidence, specifically the chronological relationship between the brochs and the outbuildings. Undoubtedly some brochs, particularly early examples, did stand alone, but others aggregated settlement around them, sometimes in very formal conditions where radiated settlements were the result, on other occasions less formally, and on a lesser scale, when the non-radial outbuildings may have been the result. MacKie's scheme has a tribal aristocracy living in the brochs with about 100-300 people living in 'fragile settlements' around the broch, in structures which are as yet unrecognized in the



archaeological record. Granted that a large proportion of Iron Age settlement may exist totally unrecorded, the present scheme proposes that a large element of the non-broch population came to live in broch outbuildings.

### Conclusions

In the absence of examining the broch period in the context of the Early and Late Iron Ages, and considering all the evidence for discourse in which the architecture may have been relevant (the subject of a future paper), the true impact and significance of these spatial arrangements have been minimized. Nevertheless, it is hoped that some of the archaeological potential of the technique of access analysis has been successfully demonstrated. One can find fault in the tenets behind the gamma analysis of Hillier & Hanson, but the formal

approach is one which can be adapted and modified for archaeological purposes. Social inferences can be derived from the spatial order by circumspect consideration of the assumptions behind every appropriate step of the technique, and a clear understanding of the relationship between material culture and social reproduction. All discourse has a spatial element; access analysis is a useful tool for articulating an understanding of the part space plays in structuring social relations, and the part social relations have in structuring space.

**Acknowledgements.** I am grateful to Professor Leslie Alcock, John Barrett, Pam Graves, Dr Euan MacKie, Ross Samson, and Graeme Stewart for comments on various versions of this note. Errors in content and presentation are my own, especially where I ignored their advice.

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SCOTTISH ARCHAEOLOGICA

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REVIEW

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Volume 6 (1989)

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## TRANSFORMATIONS IN SOCIAL SPACE THE IRON AGE OF ORKNEY AND CAITHNESS

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This paper will examine the way architecture acted to structure the reproduction of society in Orkney and Caithness from around the early centuries of the first millennium BC to the eighth or ninth century AD, that is from the period of the Early Iron Age to the arrival of the Norse. The period can be divided into four phases: the Early and Middle Iron Ages and Late Iron Ages I and II (henceforth EIA, MIA, LIA I and LIA II). These divisions avoid cultural ascriptions such as 'Pictish' or 'Dalriadic', or meaningless terms such as 'post-Roman'. They will now be more specifically defined below. A scheme is suggested in outline for structural developments witnessed over this period (a future complementary article will discuss this in full, along with associated dating problems: Foster in prep a). On the basis of the general trends observed, a social interpretation is put forward. At the same time the technique of access analysis is used to investigate how the use of space acted to structure and reproduce these changing social relations. All quoted C-14 dates are calibrated to the 2 $\sigma$  level on the 1986 Trondheim curve.

### Summary of Structural Development

#### The Early Iron Age

Definition of the Iron Age is rather blurred in North Britain both chronologically and culturally, probably more so than anywhere else in the British Isles. Its traditional range is from circa 600 BC-AD 400 (RCAMS 1984, 20), although it has been speculated that it might better be ascribed to the period up to the eleventh century AD (Clarke 1978, 76). Around the beginning of this period, with the changing metal technologies, the importance of local metalworking in defining regional traditions declines markedly. In the Atlantic Province pottery has been taken as some gauge of cultural and chronological changes, but on the whole, in view of the impoverished artefactual record, reliance has been on architectural studies.

*Lobate multi-cellular buildings*, otherwise *courtyard houses*, represent an architectural tradition whose origins lie in the Neolithic (such as Scord of Brouster, Shetland: Whittle 1986), but which still occurs in the late Bronze Age, such as village I at Jarlshof (Hamilton 1956, 18-31 Fig 10). These lobate multi-cellular structures may also have continued to be constructed into the period of the EIA, such as at Wilmthrow in Shetland (Curle 1936) where a smithy is associated with an example. But the EIA is generally characterised here by the introduction of a large *roundhouse* (sometimes oval) tradition, which has been recognised as taking two organisational forms: isolated houses with thick walls sited in visually dominant situations and smaller structures with thinner walls which tend to exist in clusters, of which Jarlshof II is the best example (Sharples 1984, 119-20). Abrupt changes in many aspects of the material culture at this time are sometimes attributed to a population migration (Hamilton 1956; Hedges 1987 III, 38). In Orkney thin-walled roundhouses have been recovered at Spurdagrove (Øvrevik 1985, 148, Fig 7.4) and Skail (Gelling 1984; Buteux forth) where they are associated with further agricultural structures such as a byre. The late date of one of the Skail roundhouses highlights how late this tradition of thinner walled roundhouses continued (sometime between 360 cal BC-AD 220), and demonstrated that the development from thinner to thicker walled roundhouses was not unilineal. A series of five roundhouses were excavated at Kilphedir in Sutherland (Fairhurst and Taylor 1971) and the same

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number at Cnoc Stanger in Caithness (Mercer 1981, 52-56). In neither case can it be proved that these represent anything other than a succession of structures on one site. The slender dating evidence from these sites may be used to suggest a horizon of very large roundhouse construction in north Scotland prior to 500 BC (Mercer 1985, 73). The impression is of relatively small domestic/agricultural units, whilst the evidence from both Skaill and Kilphedir may suggest the shifting of settlement within a small area.

Thicker walled roundhouses have recently been recognised in Orkney and Caithness. Examples have been excavated at Bu (Hedges 1987 I), Howe (Carter *et al* 1984), Calf of Eday (Calder 1937; 1939), Pierowall (Sharples 1984) and Quanterness (Renfrew 1979), whilst the early broch at Crosskirk is sometimes also described as a roundhouse (Fairhurst 1984). It is clear from the evidence of Bu, Quanterness and Pierowall that these structures were established by about the seventh century BC, although a Bronze Age horizon for a large thick walled structure at Tofts Ness on Sanday, currently being excavated by Dockrill, suggests that this was not purely an EIA innovation (*Archaeol Extra*, 3-4). The particular importance of these roundhouses is that they now provide a native pedigree for the later brochs, both in their thick walling and interior features. At several sites it can be seen how both types of roundhouse acquired broch-like features.

Most roundhouses were isolated save perhaps for a few ephemeral outbuildings, probably of agricultural function. Many both thin and thicker walled structures possessed *souterrains* or *earth-houses* entered from their interiors. There is increasing evidence that examples of these which now appear as isolated monuments in the landscape were usually, if not always, ancillary to an above ground structure of a domestic nature (for example at Grain in Orkney: Haigh 1983). Most probably these northern examples were for storage of either dairy produce or grain.

The direct development from the roundhouse to the broch is chronicled at Howe. At Crosskirk the early broch resembled a roundhouse in many respects, and at Clickhimin in Shetland a roundhouse precedes the broch (Hamilton 1968). In Caithness it is becoming increasingly obvious that the brochs are but a later addition to an underlying palimpsest of earlier settlement (Mercer 1985, 98). Whilst the 'mound upon mound' profile is not one which is so common in Orkney, the same probably holds true here also.

### The Middle Iron Age

*Brochs* represent a major monumental divergence out of an otherwise fairly continuous tradition of native architecture (cf MacKie 1987) and the MIA is defined as the period when the broch becomes prevalent. It has to be recognised that the broch class (for want of a better term) covers a whole series of structures differing perhaps in age and form; a structure is best considered in terms of the 'social practices its plan was designed to cover' (Scott 1947, 26).

The date of this architectural form is not well established, but dates from Crosskirk, Howe and Dun Mor Vaul (MacKie 1974) suggest a broad horizon of use between the fourth centuries BC and AD, but probably concentrated between the second centuries BC and AD.

Many brochs in Orkney and Caithness were enclosed by outworks, sometimes incorporating a *blockhouse*. When the respective entrances are aligned it may suggest that the broch and outwork were conceived of as a unity and may have been planned at the same time. At Clickhimin and Crosskirk, where there is some evidence for pre-broch activity, the outworks may pre-date the brochs. The majority of brochs in Orkney and Caithness are situated in positions where defence was apparently not the prime consideration (cf Fojut 1982 for similar conclusions on the Shetland brochs). A number are in totally defensive positions, what Mercer (1985, 100) calls *fortalice* brochs. *Promontory forts* sometimes enclose brochs. They occur in Orkney and Shetland when hillforts do not and in Caithness where there are a few hillforts.



The primary internal broch fittings at Crosskirk (Fairhurst 1984, III 28) and Howe (Carter *et al* 1984, Fig 4) suggest that in these cases the broch had primarily a domestic function, in common with the earlier roundhouses which had similar plans. Little is known of the earliest internal features at Gurness and Midhowe, the best known brochs in Orkney. Whilst there is some suggestion that they may have been similar in nature to much of the extant features, it is obvious in the case of Midhowe that there were differences. Internal and external casing walls, which appear on many brochs in Orkney and Caithness need not be late; at Crosskirk their early construction reflected a series of structural weaknesses and the inadequate experience of the builders in constructing high walling.

Any isolated broch probably did not stand isolated for long. Outbuildings can be divided roughly into two forms: radial and non-radial. The radial examples (Fig 1) encircle the broch in a regular fashion, a passage leading through them to the broch, which is usually surrounded by a narrow encircling passage; there is a very full use of all the available space between the broch and its surrounding outworks, where these exist. The non-radial form may have arisen very early in the development of brochs (as at Crosskirk where outbuildings were constructed prior to the period of Roman artefacts, and possibly as early as 200 BC). This is in contrast to the Orcadian sites with outbuildings, where Roman artefacts may be associated with their earliest levels. In some cases non-radial outbuildings *may* precede radial outbuildings (as possibly in phase 6 at Howe).

Whilst the non-radial arrangement may be early, it is virtually impossible to assess the date of many of the sub-circular and sub-rectangular buildings which surround the brochs, most particularly those in Caithness which were excavated in the nineteenth century, or whose presence is suggested by fieldwork alone. In Caithness there is little evidence for the radially disposed settlement seen in Orkney, despite the fact that outbuildings are equally common in each area. However, there is occasional evidence for an encircling passage, and extended entrances are common, but the complexes on either side of them are amorphous and tend to exhibit a wider range of building types than is seen in Orkney. It is not known if later Iron Age structures are chronologically distinctive in Caithness, and there is virtually nothing to compare the buildings around the broch with. Artefacts are no more helpful because the contexts of either Roman or suggestively MIA artefacts have never been ascribed specifically to any of the out structures.

Returning to the examples of radial outbuildings, the dating evidence for these rests almost exclusively on the evidence from Howe (Carter *et al* 1984), Gurness (Hedges 1987 II) and Midhowe (Callander and Grant 1934) (Foster in prep a). Hedges (1987 III, 14) estimates that 20 out of 52 of his Orkney broch population have evidence for well-ordered outbuildings. On the basis of present evidence, outbuildings elsewhere tend to be of the non-radial type, although it is not always possible to distinguish the two on the basis of fieldwork alone. Hedges' work suggests that some of the outbuildings associated with brochs in Orkney have been built in the same phase of construction as the broch, or are near contemporary afterthoughts, because the layout of some of the outbuildings and the broch is by and large systematic, and their floor areas, fittings and furnishings are comparable (1987 II-III).

Opinion on the date of the outbuildings has vacillated from LIA (see for example summary of antiquarian activity in Orkney: Hedges 1987 III, 130-51) to MIA (Childe 1946, 90) to LIA (Hamilton 1966, 111; Ritchie and Ritchie 1981), but in general more recent opinion again favours a MIA horizon (Ritchie 1988). Whilst many undated non-radial outbuildings may be LIA, the redating of radial structures now generates more of a gap in the LIA settlement record. Still, whatever one's stance in the debate about how

soon after the construction of the broch the outbuildings were erected, it cannot be disputed that the broch and outbuildings co-existed at some point, functioning as a unity.

Contemporary with the brochs are likely to have been some roundhouses and more fragile settlement types which are not so obvious on the ground, particularly the settlements associated with earth-houses. The extent to which the northern MIA population lived in or in the immediate vicinity of brochs cannot be gauged.

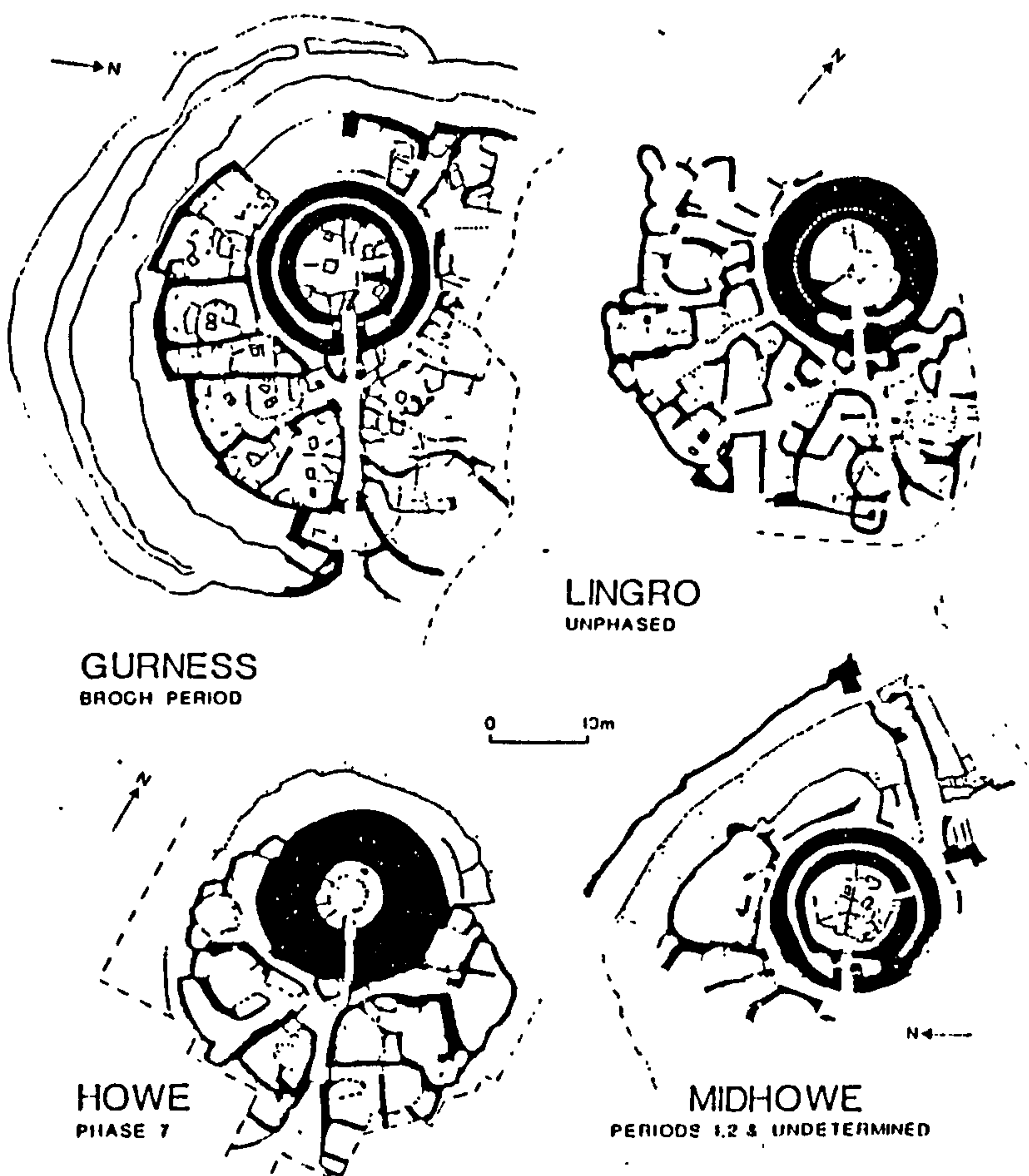


Fig. 1. Plans of brochs with nucleated settlements (after Hedges 1987 II, RCAMS 1946 II; Carter et al 1984; Callander and Grant 1934).



### The Late Iron Age I

The LIA I marks the time when the brochs ceased to be occupied as anything other than temporary workshops or for less monumental domestic structures. The function of the broch sites had probably been changing up to this time, although the broch might still be in use, for example outworks were not being maintained. Settlement either continued on the broch site in a modified manner, or was created *de novo* elsewhere. Often similar structural forms are found on both. The LIA I is taken to end in the early seventh century when more distinctive artefacts and buildings appear.

Some mention has already been made of the problems in assessing how long modified occupation continued on brochs. This is perhaps the period of which least is known because it is very difficult to recognise in both artefactual and structural terms. There are few artefact types which can be specifically assigned to the fourth, fifth and sixth centuries, and post-broch horizons were always the most summarily treated by earlier excavators. Throughout the Atlantic IA continuity is exhibited in much of the material culture (for example see Hedges 1987 III, 44-47). Some pins and combs (Stevenson 1955; Foster in prep b), brooches (Fowler 1963), class I stones and *art mobilier* decorated with Pictish symbols, parallelopiped dice and painted pebbles may belong to this period, but unfortunately not exclusively. Where these artefacts occur on broch sites it is only rarely possible to associate them with specific building forms. Recent C-14 dates help clarify this period (Foster in prep a and b).

Following the MIA there is a marked absence of C-14 dates from Orkney, Caithness and Sutherland which covers the LIA I (*circa* cal AD 230-625). In Orkney this section comprises the post-broch levels at Howe (phase 8), which scarcely trespass into the post 600 (LIA II) period, and a date for the abandonment of a late roundhouse at Skaill. The absence of dates in Caithness and Sutherland is easily explained because the sample is too small. A large number of dates fall in this time span elsewhere in Scotland. There is nothing abnormal about the stretch of the Trondheim curve covering this period and it must be concluded that this low point in the C-14 date spans for Orkney, Caithness and Sutherland can best be explained by the history of previous excavation, namely a lack of samples from broch or post-broch levels. A considerable element of LIA I settlement is probably on broch sites, as a fourth century sherd from Crosskirk may suggest (Fairhurst 1984). At present there is no dating evidence that non-broch sites, such as Pool, extend back any further than about the fourth or fifth centuries AD. As yet the sample of sites is too small, and both post-broch and non-broch settlements may be expected to fill this gap one day. Nor need it surprise us if some broch outbuildings are found to have had an extremely extended life span – at Pool a small (probably multi-celled) unit has been demonstrated to have been occupied over a number of centuries (pers comm Hunter). It is not always possible to recognise changes in structural form on broch sites because of the tendency to reuse earlier structures, but the general impression at Howe is of a series of interconnecting sub-circular and sub-rectangular rooms with yards. There is no evidence for any more than a couple of domestic units.

A new type of settlement was developed *de novo* on some non-broch sites. At Pool excavation of a settlement mound has revealed substantial prehistoric settlement underlying Norse halls and byres of the ninth to thirteenth centuries (*Archaeol Extra*; Hunter pers comm). Here, in about the fourth or fifth centuries AD a roundhouse and associated buildings preceded by a probable souterrain and associated structure, were built into Neolithic middens underlying the site. This then developed into a *cellular settlement* of adjoining and interconnecting roundhouses and smaller circular cells. Perhaps most of the site had eroded into the sea, but there is certainly no reason to suggest any broch settlement in the immediate vicinity. Indeed it seems that this cellular type of complex may be paralleled at Howmae, North Ronaldsay (Traill W 1885; Traill J

1890). This site (Fig 2) was excavated in the 1880s and consists of an unphased complex of roundhouses, one possibly a *wheelhouse* (unique so far in Orkney and Caithness), courtyards, and a long rectangular form which can also be paralleled at Pool (see below). Howmae is undated, but there is nothing in its artefactual assemblage to contradict a date of about 300-600 AD. The absence of any distinctive LIA II artefacts perhaps weighs in favour of this date. It thus seems that settlement mounds are characteristic of LIA settlement. The number of domestic units which might have been extant in any one settlement at a single time is unknown, but the presence of interconnecting courtyards hints at a degree of complexity not immediately apparent in their amorphous plans.

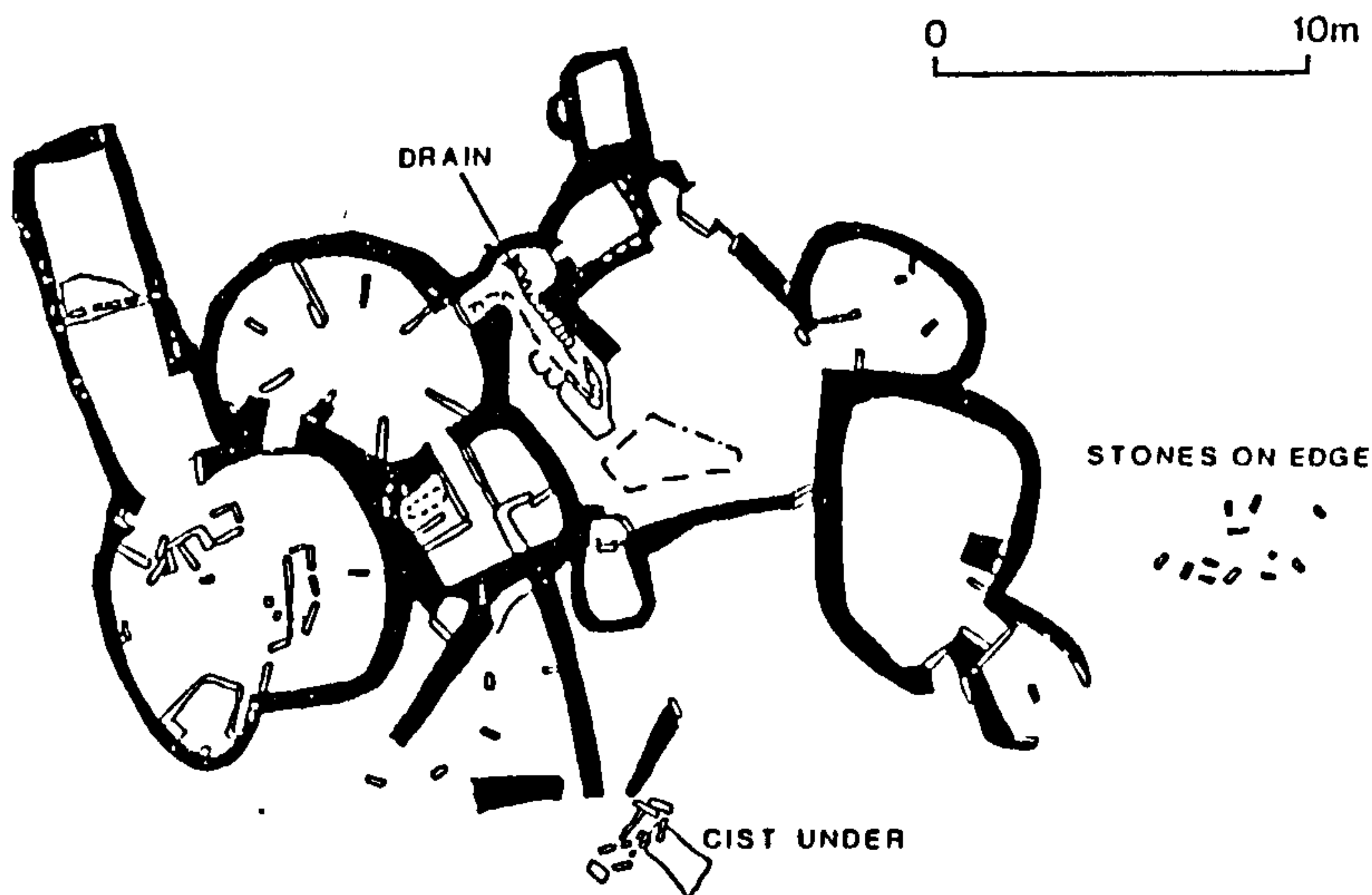


Fig. 2. Plan of Howmae (after Traill 1890, pl XVI).

It has recently been recognised that certain oblong or rectangular buildings may be pre-Norse, most notably the oblong *wags* of Caithness, of which Langwell and Forse are the only excavated examples (Curle 1912; 1941; 1946; 1948), but recent survey on the Dunbeath estate suggests further examples (Morrison 1986). Wags have long been held to be unique to Caithness, more particularly the parishes of Latheron and Dunbeath, but an increasing number of vaguely similar structures are now being discovered in Orkney where there is a growing body of evidence for their LIA pedigree: from sixth to seventh



century levels at Pool; early phase 8 at Howe; and possibly at the Brough of Birsay (for example structure 15, Hunter 1986, 56). The structure at Howe with its stalls is probably domestic rather than a byre (pers comm B Smith; *contra* Carter *et al* 1984, 68-69) and such an interpretation is not implausible for many of the other Orcadian sub-rectangular forms.

If for a moment we turn our attentions to the Udal in the Western Isles it will be seen that here there is evidence for different non-broch settlement forms which may date to cal AD 140-660 (Q-1131; Crawford and Switsur 1977; Crawford 1986). At this time the settlement shifts and the structure and artefact types change so abruptly that Crawford is compelled to think in terms of an invasion. In levels XIV-XIII (the levels are numbered beginning from the most recent), the levels pre-dating the seventh century, the buildings take the form of simple, oval bellied buildings with small satellite cells, slab-lined hearths lying along the long axis, and a single internal revetted platform. Until the site is published it is impossible to assess if these buildings bear any relationship to those around brochs in the north, or if they are indeed the by-product of an immigrant population (in addition, as the concept of the unitary broch culture province dissolves, the validity of such comparisons can be queried).

### The Late Iron Age II

A lengthy steep section in the C-14 calibration curve begins at around cal AD 625, as a result of which a disproportionately large number of C-14 dates are calibrated to within a range of a few calendrical years (Foster in prep a). Effectively the LIA is broken up into two periods on either side of around AD 625. The later bracket is henceforth described as LIA II, although, in Orkney at least, Early Medieval might be equally appropriate. Thus of all the chronological divisions imposed upon these data, this is the one most designed to suit the archaeologist. None the less, from the seventh century the Atlantic Province is starting to acquire an Early Historic mantle and much of the evidence points to a rapidly developing Pictish church and state.

To date the most distinctive LIA II structural forms are the polyventral cells (Fig 3) discovered throughout the Atlantic Province, primarily on *de novo* settlements. The main exponent of these forms occur in levels XII and XI at the Udal. In level XII the buildings take a more symmetric, 'ladybird-like' plan which Crawford (1986) describes as a *ventral house* (cf Loch na Berie: Topping 1986). In phase XI these forms were embellished with minor satellites, hence the *polyventral house*. Many of these houses were enclosed by timber palisades, which were obviously very significant, one example going through at least ten replacements. A sequence of adjacent enclosures is strung out along the machair ridge, but no details are available at present of their chronological inter-relationships. At all periods since phase XIV these buildings were accompanied by minor buildings, *four posters*. The latter have not been recognised elsewhere.

Buildings similar to the ventral buildings at the Udal have also been recovered in Orkney, as at Buckquoy (Ritchie 1977, Fig 2) and Red Craig (Morris 1983, Fig 6). At Buckquoy there is a greater axiality in the arrangement of the rooms, although this is not seen in the example which was found in the upper levels at Gurness (Hedges 1987 II, Fig 2.11). The Udal dates for these particular buildings are interesting, as they suggest that this form may have a pre-seventh century pedigree, although most other evidence points to their later date (note also a dendrochronologically derived *terminus post quem* of 648 AD from a timber version of this form in Northern Ireland: Lynn 1989). Curved gullies at Birsay are best interpreted as the thoroughly robbed foundation trenches of major cellular structures which had internal orthostatic facings and thick turf walls (Hunter 1986, 37-45, Ill 10-14), but are otherwise fairly similar in form to the polyventral form. There is no evidence for the settlement at the Brough of Birsay pre-dating the mid-

seventh century at the earliest (*ibid*, 61). It will now be obvious why non-broch settlement and non-settlement mound activity of this date is difficult to detect, because of the relative slightness of the structures, and because building techniques are such that robbing would leave the former totally unevidenced.

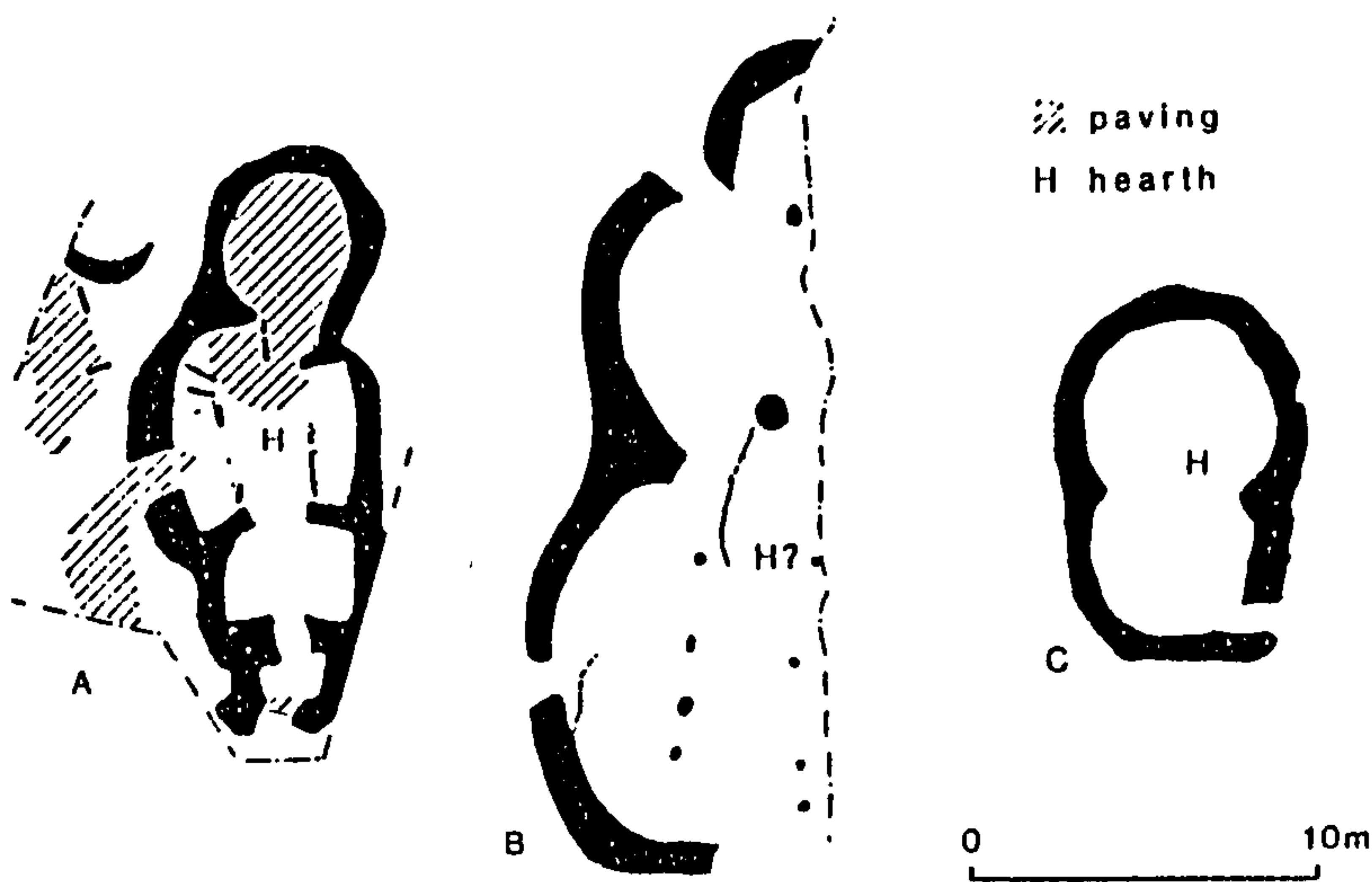


Fig. 3. Plans of polyventral structures: A Buckquoy house 4 (after Ritchie 1977, Fig 3); B Brough of Birsay structure 19 (after Hunter 1986, ill 11); C Red Craig (after Morris 1983 Fig 6; Hunter 1986, ill 3).

A roundhouse-type form has been recognised on site VIII at the Brough of Birsay (*ibid*, structure 21, Ill 17) which is assumed to be LIA II. On site VII at Birsay it is interesting to note that a drain divided two buildings from each other (*ibid*, Ill 11), and is perhaps suggestive of further divisions between buildings.

On the basis of certain pins and combs (Stevenson 1955; Foster in prep a and b) there was evidently some activity on broch sites in the LIA II. In Orkney we are perhaps seeing the preference for selective reuse of sites which have both massive outworks and surrounding settlements, sites which may by implication have been of especial importance in the MIA. At present no such pattern emerges from the Caithness evidence. However, it remains to be emphasised that there has been little excavation on late occupied brochs. There is little evidence that a site was used both for burial and a domestic purpose, nor is there any evidence for any LIA I activity on these sites used for burial. The implication is therefore that a large number of these brochs sites were grassy mounds by the time they came to be reused as burial sites, although the former presence of LIA settlement in the immediate vicinity of the broch mound can unfortunately not as yet be verified. The collapse of broch and surrounding structures might have created so much debris that it was more convenient to build adjacent to the mound, which is not



where archaeologists tend to investigate, but is where most subsequent degradation is likely to take place (as at Howe where there are suggestions of features running off into the ploughed out area which surrounded the mound: pers comm B Smith).

#### Analysis of Spatial Patterns in Buildings

The gamma (henceforth access) analysis of Hillier and Hanson (1984) is a means of investigating the relationship between spatial order and society. It looks at the patterns of relations between inhabitants and between inhabitants and strangers as they are reflected in the use of interior space, in terms of the patterns created by boundaries and entrances. Whilst one can find faults in the tenants behind the technique, the formal approach is one which can be adapted and modified for archaeological purposes. Social inferences can be derived from the spatial order by circumspect consideration of the assumptions behind every step of the technique, and a clear understanding of the relationship between material culture and social reproduction. All discourse has a spatial element (Barrett 1988) and therefore access analysis is a useful tool for articulating an understanding of the part space plays in structuring social relations, and the part social relations have in structuring space (Foster 1989). The aim of the next section is to demonstrate how this technique can be used to further an understanding of our period, and to develop in tandem a social interpretation.

The prehistoric structures of Orkney and Caithness provide one of the best databases with which to do this because we often have information about the form and function of the constituent spaces. Here, despite subsequent robbing and other vagaries of time, the wide availability of natural building blocks has resulted in the unprecedented survival of prehistoric structures, a prehistoric resource unrivalled in the British Isles.

#### The Theory and Technique

A building is made up of walls which define a series of enclosed spaces, the boundaries between which may be broken by doorways allowing access from one area to another. The importance of doors is not only that they open, but more importantly that they can close, effectively segregating spaces and controlling the means of access to any particular point. Access analysis is based on syntactic relations, and considers the arrangement of different spaces as a pattern of permeabilities, that is in terms of the interconnections between spaces. This technique is important because of its descriptive autonomy, unambiguous rules of application, and its clear exposition of how these relate at the very lowest level to relations between inhabitants, and between inhabitants and strangers. Societies which might vary in their type of physical configuration and degree to which the ordering of space appears as a conspicuous dimension of culture, can all be compared on a similar basis. This is particularly useful if we are trying to compare the social practices a building was designed to cover rather than its architectural traits.

The technique is explained with the use of the example of the EIA roundhouse at Bu (Fig 4). Each unit of space, including transitional spaces, has been represented as a dot with lines between them where there is *permeability*, giving access between spaces (Fig 4A). Each space is usually an area which is enclosed by orthostats, with access either through doorways (as in the case of Fig 4B x), or over low kerbs (v) where the access lines may therefore appear to be jumping walls. The central 'service area' (y) is defined by a low kerb and gives access to the hearth (z); it is divided into two areas because the smaller north section is partly paved and the distribution of artefacts (Hedges 1987 I, Fig 1.57) may suggest that the southern half had a different function to the northern half. Area w is treated as a single space because the central orthostat was not designed to break the space into two distinct components, and because of the extent of floor deposits which are more or less specific to this area (*ibid*). The network of dots and connecting

lines forms an unjustified access map. This map can be *justified*, in this case from an outside perspective (the *carrier*), the stance of the stranger (Fig 4C), although it could have been from any point in the building. By justification it is meant that all points of a certain *depth*, that is the minimum number of steps taken to reach them from the carrier, have been positioned on the same horizontal line, subsequent depth values on lines parallel to the first. Given the rules of construction any line will either connect with points on the same level of depth, or two levels separated by only one level of depth. The resultant map is both an aid to visual decipherment of the pattern, and could in theory be combined with quantification procedures (an aspect which is not pursued here).

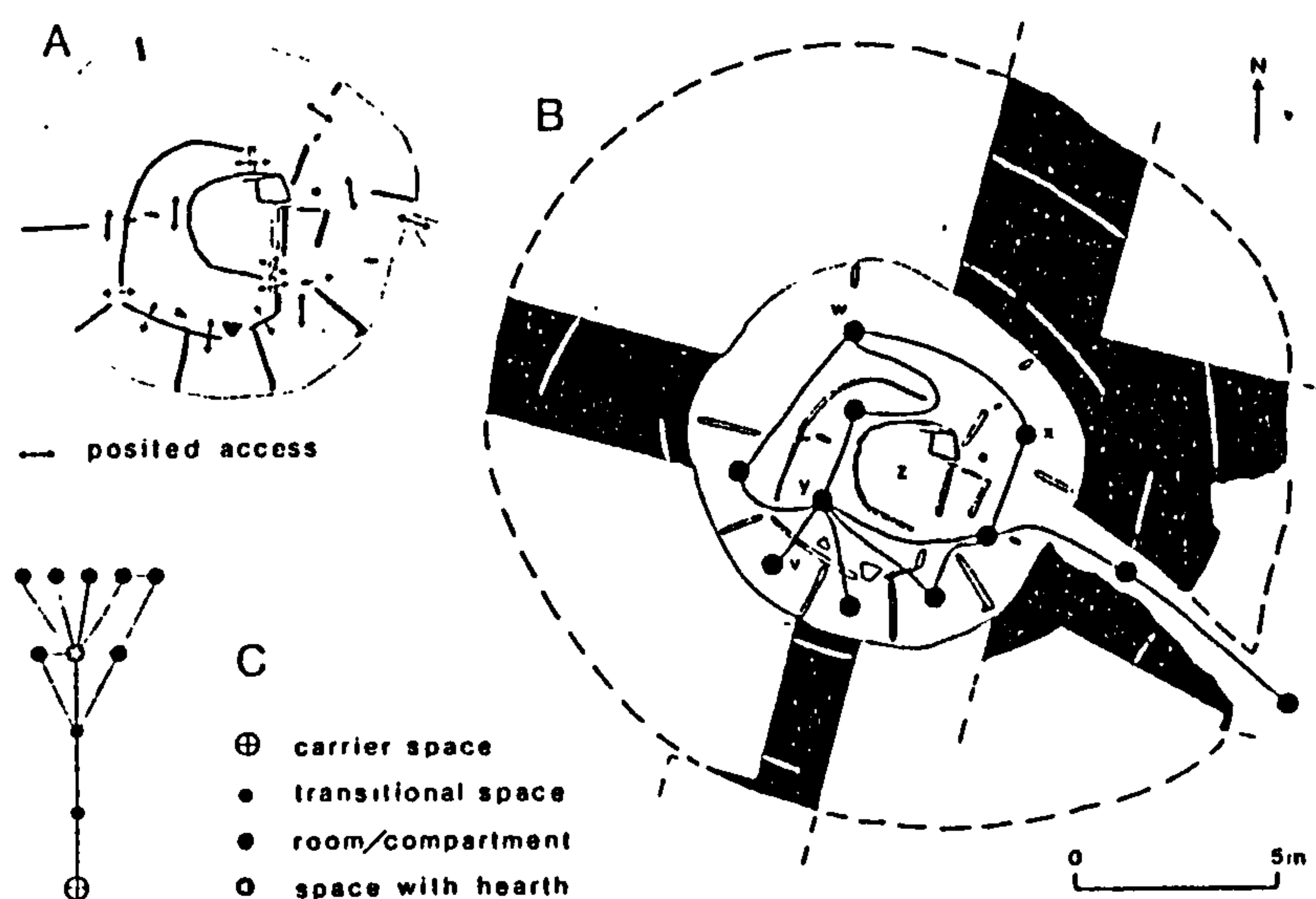


Fig. 4. A Plan of Bu indicating points of access (after Hedges 1987 I: Fig 1.10); B Bu with unjustified access (gamma) map superimposed (access to hearth omitted); C Justified access map with labelled spaces.

Buildings are easier to study than settlements because open spaces cannot be so readily separated into analytical elements (Hillier and Hanson 1984, 16), and the richness in differentiation of interior structures means that they carry more social information than exterior relations (*ibid*, 154). So, once spaces are defined, the spatial order of a structure can be represented in part by a diagram showing the interconnections of the enclosed spaces. A prerequisite for analysis is therefore an accurate map with all access points marked. Form (the formal properties of space and the boundaries which define it – its style) and function (the purpose of buildings) must also be embraced. In practice it is



virtually impossible to make a distinction between these attributes (Markus 1982, 4-6; cf Johnson 1988, 117). Hillier and Hanson (1984) minimise the interactive nature of these because of their apparent belief in the analytical autonomy of the spatial dimension. However, these other architectural dimensions have to be brought into consideration if the full archaeological value of access analysis is to be appreciated.

#### **Social Inference From Access Analysis**

It has been argued elsewhere (Foster 1989) that the application of these techniques, in combination with evidence for architectural form and function, can impart two levels of spatial understanding. Firstly it allows us to consider the reality of living in, or visiting, that particular building. Interior spaces constitute commonly inhabited *locales* of social interaction. Access analysis allows us to consider how frequently and under what architectural circumstances physical encounter might occur and thus illuminate the way that particular architecture structures social discourse. Secondly we may compare a number of spatial patterns to reveal the possible existence of underlying generic rules which govern the generation of these patterns.

In this study the designation of a space depends on the physical presence of a doorway, or crossing a low kerb or ramparts. It also depends, to a large measure, on the ascribed function of an area; it is obviously important to distinguish an enclosed area where sleeping rather than storage might have taken place. Areas with hearths are especially relevant. The recognition of functional zones, even if only defined by what in another period might have been described as furniture, is an obvious archaeological progression on a technique evolved for upstanding 'historic' structures.

#### **Orkney and Caithness c 600 BC-AD 800**

In Figs 4-6 various types of settlement have been drawn as justified gamma maps with an extended vocabulary of symbols to represent the different types of space and means of access. These access maps therefore incorporate information about the spatial properties of the settlements and the potential functions of some areas. Moreover by the use of open and closed symbols differing architectural types, where relevant, have also been indicated. The result is an all-embracing consideration of the architecture presented in convenient diagrammatic form.

In the early first millennium BC the population either lived in thick-walled roundhouses, which tended to be sited in isolation or in small clusters of thinner walled roundhouses or lobate multi-cellular structures. Gradually the thicker-walled roundhouses developed into increasingly elaborate architectural forms, ultimately the broch, as competition in society led to the local pre-eminence of certain residential groups (Hedges 1987 II). Both types of roundhouse were clearly domestic buildings, the only difference being in scale and the amount of effort put into their construction, signifying which inhabitants were more powerful. This distinction is almost undoubtedly the result of the ability to manipulate primary agricultural resources, indeed the appearance of earth-houses emphasises the importance of food storage at this time (Sharples 1984, 121). Thus the potential for social diversification and development would always have been greater in Orkney and Caithness than other areas of the Atlantic Province because the land was fertile enough to maintain large populations and the competitive demands of production and consumption. Elsewhere the piecemeal distribution of natural resources tended to produce discrete social units with less potential for development.

The authority of this new dominating social elite 'would be explicitly stated in the ritual of legitimisation and in the symbols of power displayed, but that authority would also be implicit in, amongst other things, the payment of tribute'. Thus as Barrett (1981,

215) goes on to say, the acceptance of new authority might be mobilised in the labour of building the brochs and its enclosing ramparts. Prior to this the distinction in scale between the roundhouses and the adding of extra claddings to the walls may have been equally significant. These buildings were not simply constructed for extra warmth and/or defence and/or status, but in the process of their construction actors were brought together who demonstrated their acceptance of authority whilst at the same time ramifying or creating the basis on which this power was established.

Ultimately the result was the broch, the residence of the social elite which may in some cases have formed from the amalgamation of certain social groupings, for certainly not all roundhouses/early brochs developed into fully fledged brochs, and it may have been necessary to muster resources in order to gain superiority over rival social units. The secondary double domestic units at Gurness and Midhowe suggest that a couple of domestic units, perhaps kin groups, might have amalgamated. The infilling of the roundhouses at Pierowall and Quanterness may be the result of conflict between competing lineages (Sharples 1984, 121). Factors such as raiding or land hunger (cf Scott 1947) are not directly responsible for these changes, but could be catalysts for changes in the rules by which discourse was enacted, and society continued to '*become*' (cf Pred 1985). In Caithness a large number of roundhouse sites existing on the ground do not exhibit later development, and there are relatively few brochs in Caithness which appear on the surface to be new foundations. Again this suggests that only certain earlier sites maintained the economic and social impetus to allow settlement to continue uninterrupted (Mercer 1985, 10). A similar pattern may exist in Orkney, notably when several broch or roundhouse and/or burnt mound sites occur in close proximity to each other. The general picture is thus of the increasing convergence of land and societal control under powerful groupings who symbolised and accumulated their power within the broch. The fact that there was continuity of development on particular sites may suggest maintenance of social networks, land organisation and territorial patterns, and proprietorial rights with antecedent communities (*ibid*, 10).

Turning to the spatial aspects, some general trends can be observed. At the immediate visual level, the development from Early Iron Age single, agricultural and domestic units (such as Bu, Fig 4) to Middle Iron Age nucleated settlements (Fig 5) reveals the introduction of a staggering hierarchical use of space. The maps become considerably deeper (more asymmetric), and the deepest, most segregated area is always the set of spaces which constitute the broch. Upper galleries and upper storeys, features not found in the outbuildings, are the very deepest, least accessible spaces. Their usage may have included storage, extra sleeping facilities and wallheads from which surveillance might be made. Unfortunately these are the parts of the structure about which least is known as they were always the first to collapse or be dismantled, and the total number of original floors is not known. If the majority of activities and functions was in the upper storeys then obviously their exact nature can never be assessed and the ground plans tell us less (although it seems most probable that the ground floor was the main domestic forum).

The larger the access maps, then the more abstract and complicated they become to analyse, and it is helpful to break them down, for instance by dividing them into distributed ('ringy') and nondistributed ('tree-like') sub-systems (as Gurness: Foster 1989, Fig 6). On the very outside, globally governing the interior, are earthworks which extend the depth between the inside and outside worlds, even if in some cases they only create abstract rather than real rings, that is their circuit is 'completed' by natural features. Access to the interior proper has to be via the 'guardhouse' or forecourt, a relatively convex space; this is where the transition from the outside world to an inner environment is sanctioned. From here ingress is made into a long thin passage from which access to both outbuildings and broch can be made. In the cases of Gurness, Howe



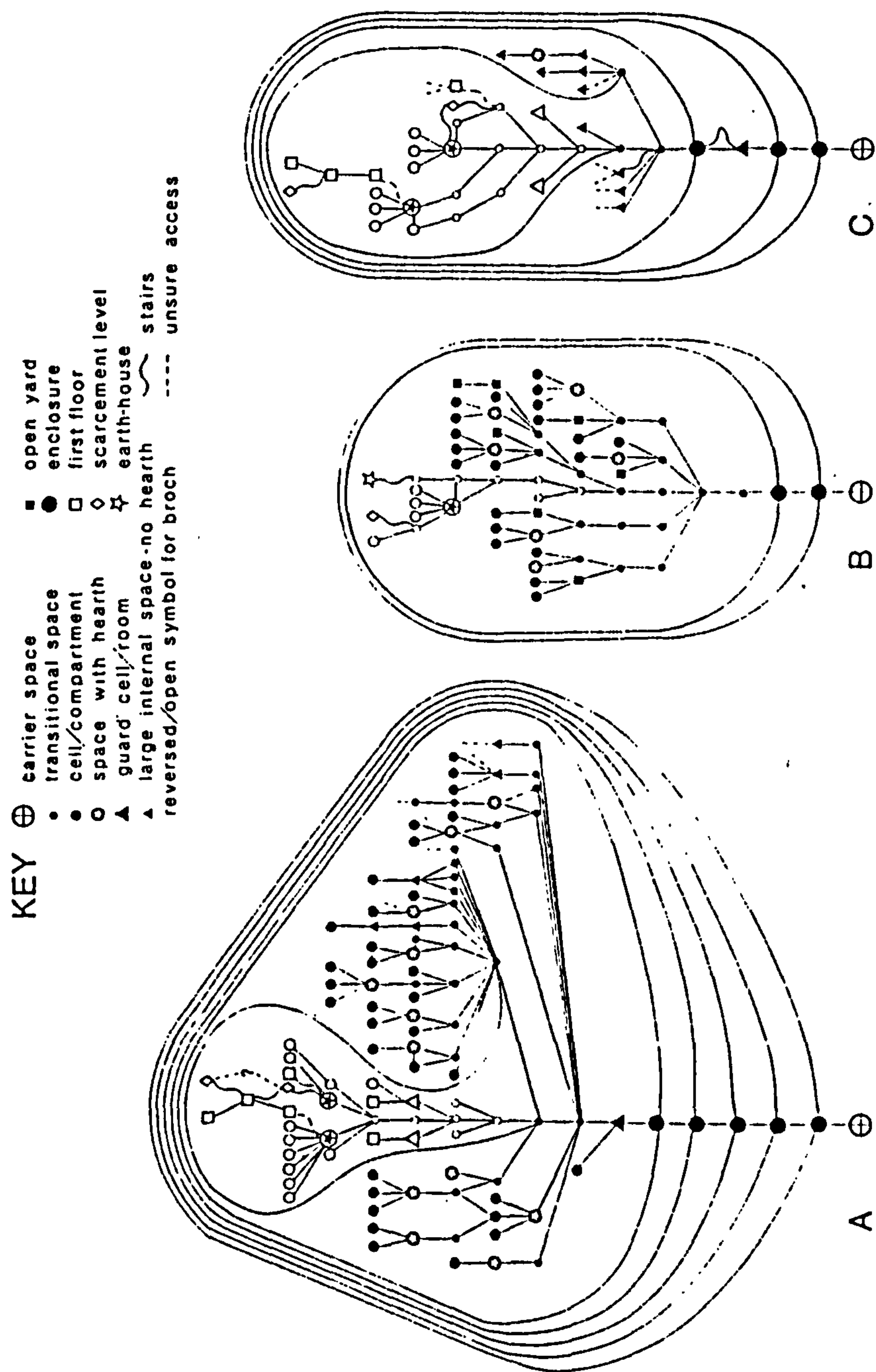


Fig. 5. Justified access (gamma) maps for Middle Iron Age nucleated settlements (reversed/open symbols distinguish the broch from other structures): A Gurness; B Howe; C Midhowe.

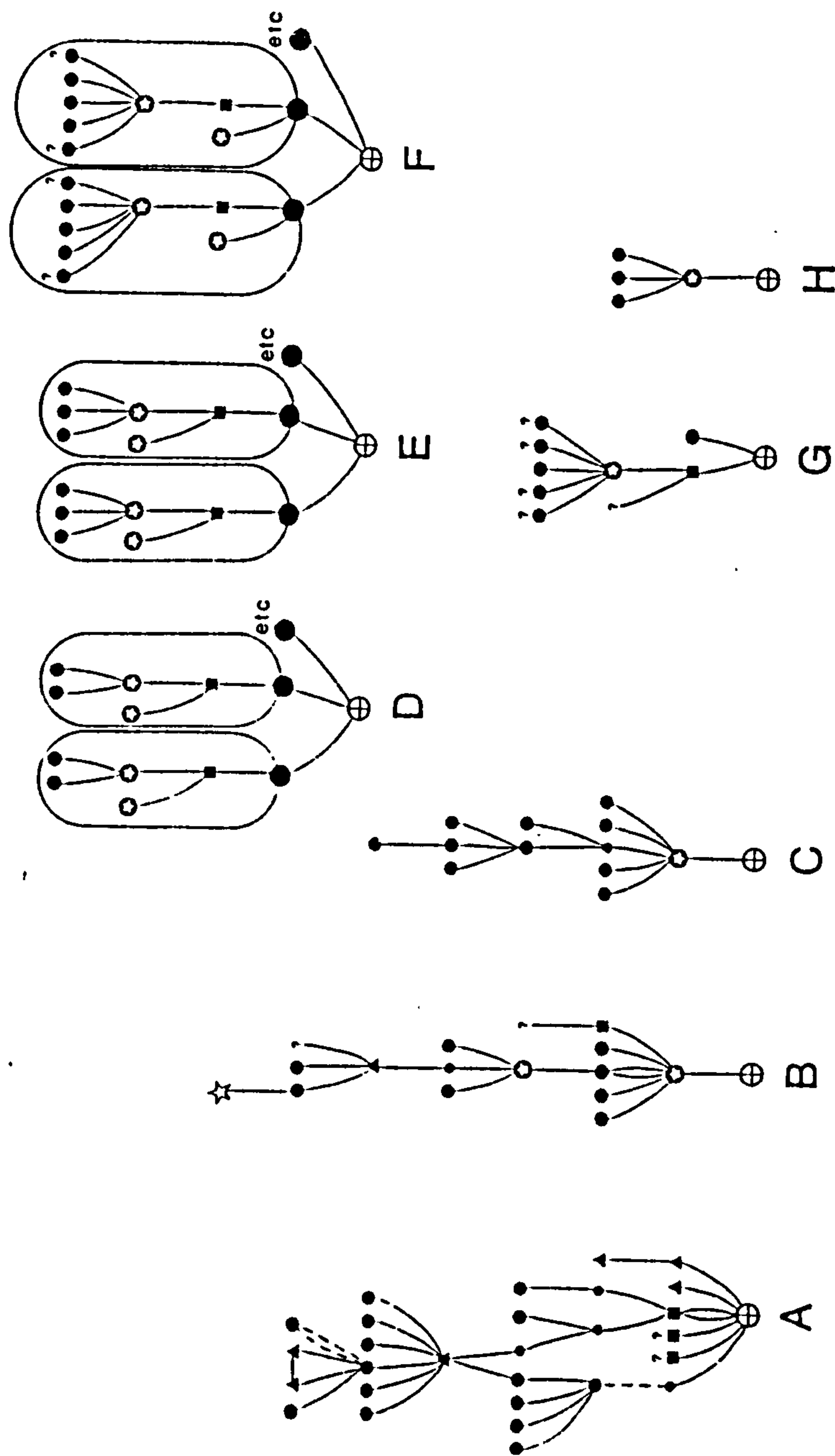


Fig. 6. Justified access (gamma) maps for LIA structures: A Ilowmae; B Ilowe phase 8, stage 6; C Gurness 'Shamrock'; D Udal level XIV-XIII; E Udal level XII; F Udal level XII; G Buckquoy phase II; H Buckquoy phase Ib. A-D are LIA I, E-H are LIA II. Key as for Fig 5.



and Lingro (as suggested by an early section of walling: RCAMS 1946 II, Fig 230) the entrance into the settlement and the broch entrance are aligned, which must have enhanced the processional like qualities of these passages. From here the outbuildings constitute a local, large and almost totally nondistributed area of settlement, spaces in which strangers cannot freely circulate and into which they must be invited. Such branching off thus creates the maximum segregation of spaces with the least expenditure of depth, both between and within domestic units. Entrance to and between the outbuildings is mainly by means of this passage, therefore most movement can be monitored by control of its various sections.

From this first narrow passage access is gained to the next ring, a passageway which encircles the broch (except at Howe). This ring is at the point where ingress can be gained to further nondistributed spaces at a slightly deeper level. Ringy structures interconnect some apartments and outbuildings. Access to the broch interior is from the initial passage, at about the same level as some of the outbuildings, but is deepened by guard cells, an elaborate doorway into a long tunnel, and a series of vestibules. The form of the architecture is particularly relevant; the monumentality of the broch tower and its elaborate entrance contrast starkly with the less substantial outbuildings, all of which appear very similar in form, serving to heighten the discrepancy between these spaces. Once inside the broch the final ringy structure is encountered, which is separated from all the others by several depth levels. This is quite complex in the case of the double domestic units at Midhowe and the later levels at Gurness. The rings connect the main domestic foci (the hearth areas) and the upper levels. Cells and compartments are arranged in non-distributed fashion from these rings, in similar fashion to the outbuildings.

From the point of view of strangers, the overall hierarchical layout and the differences in architectural form have done nothing to encourage their admission to the broch. Therefore, its interior ringy system, is unlikely to have had a major role in articulating immediate stranger-inhabitant relations, but was probably a means of articulating the relationships between the different domestic units, where they existed. The ringy sub-systems in the outbuildings would have played a similar role, but here there is a greater emphasis on the non-distributed component.

From the point of view of social structure a number of observations can be made on the basis of this information. Despite some similarities with the outbuildings, the broch obviously stands out as the most important area in the settlement complex because of its spatial importance, its prime location and its monumentality. If it were not for the double domestic units, and the spaces associated with the upper levels of the broch, then they would differ little from the earlier roundhouses. This, in combination with the degree of controlled access to the outbuildings and their apartments, which are almost exclusively segregated, may suggest that the social structure on which these new relations were founded required strict control in order to be both established and maintained.

Taking an overview, the observed systems serve to emphasise the social inequalities existing between the broch and outbuilding occupants, and the settlement and the outside, the latter distinction being the strongest. Local relations between the internal cells are basically the same except for the broch; the factor of *non interchangeability* has been introduced between the broch and all its surrounding units. Thus this is more of a *transpatial* than *spatial* system. In other words the emphasis is on spatial relations which have been determined by genotypic rules and produce the required restrictions of encounter, even though each physical manifestation of these rules is different. What is more, the genotypic-model is global, because it recurs, and as a result transpatial relations and integration can exist between *arrangements* (settlement complexes) because similarities in layout and comparable positioning may foster a conceptual form of identification (Hillier and Hanson 1984, 238).

In addition the inhabitants of a single settlement may feel a strong sense of identity with each other because they share a structured whole with others. Furthermore, the repetitive nature of these patterns may be representing the acknowledgement of a code of symbols, in this case spatially determined, by which those in the broch sustained their authority over the inhabitants of the outbuildings. The ordered layout of the outbuildings and the comprehensive use of space further suggests that these were laid out as a unity under the authority of the broch inhabitants, rather than being the result of the cumulative construction of outbuildings to a basic structuring principle. Their construction is thus a part of the symbol by which the authority of the broch inhabitants was both accepted and created. The emphasis is on the articulation of these relations at the intra-site level, but as a part of a wider society with similar values.

Fojut (1982) estimates a carrying capacity of about 100-200 people for the land surrounding a broch in Shetland. Unfortunately it is not possible to measure the size of the populations and the extent to which the carrying capacity of the land was being realised at any stage, but increasingly, and from early days in the history of the brochs, a large number of dependents came to live around the brochs. The greater the authority and wealth of the broch inhabitants the larger the number of dependents they could both attract and support. The most powerful leaders could muster the resources to lay out and build planned, integrated, nucleated villages. Under less formal circumstances, and on a lesser scale, non-radial outbuildings were built. Early brochs are seen as being contemporary with various roundhouse settlements, and not all broch sites were of equal standing. The pace of this development may have varied considerably from area to area, and was not necessarily unilineal. In a time of great change social tensions must have been strong between different groups, and it was in the interests of the social elite to attract more dependents to their fold, and preferably to accommodate them where they could be easily accounted and provided for.

Most brochs were sited with access to cultivable land as the main consideration (Scott 1947, 1948; Fojut 1982; Mercer 1985). It is presumed that all inhabitants, even craftsmen, would probably have been involved in the production of food.

Ultimately there was a change in the broch system, the result of a renegotiation of relations, which was achieved by extending the authority of certain cultural resources, or by rejecting once current authoritative symbols (cf Barrett *forth*). Certainly the broch was no longer occupied, although settlement of some form seems to have continued on many sites. The LIA I is the period for which least is known of the settlement record, but there is certainly no indication of structures which can be differentiated on social grounds in Orkney and Caithness. The exact date of this change is not known, but it would be too easy to attempt to relate this to the withdrawal of Roman interests in Scotland. Yet as the prime recorded source of authority in this period, this cannot be ignored. Although the Romans never exercised any control in the area, the classical literature suggests that there was a power base in the north which was considered worth conquering (Thomson 1987, 2-3), and the archaeology supports this. If the broch aristocracy had become clients of the Romans, the withdrawal of their patronage might have been sufficient to topple this social system, as is suggested was the case for the Lowland brochs (Macinnes 1984). When local leaders were thus no longer able to satisfy the needs and demands of their dependents, the result was the renegotiation of relations from the local power bases to more distant ones. The only broch sites which continued were those where the social elite managed to continue to derive power in this new system; presumably certain broch sites were still the major centres.

Fifth century Britain in general was experiencing a time of settlement shift as the result of the withdrawal of the Romans and migrations from both the continent and Ireland. Yet as in post-Roman Wales and north England, there is no reason to believe that the



earlier social structure did not survive, albeit in modified form. Certainly the aggression of the Picts against south Britain, recorded from the late third century onwards, suggests that the individual components of their society were able to produce between then a naval force to be reckoned with. The appearance of forts, notably Burghead, with a coastal distribution from the fifth century onwards, (Alcock 1980, 80-81), suggests not only a concentration of resources into fort construction, but is a part of the discontinuity witnessed in the settlement record throughout Pictland.

Very little is known of social stratification, but the term *regulus* was used to describe a sub-king or minor king of Orkney who was visiting the *rex potentissimus* near Inverness in AD 565. The picture presented is thus of a system of local kings with one, or possibly two overkings. Certainly the uniformity of symbol stones throughout Pictland (the majority of which probably date to the LIA II) emphasises that there was a certain cultural cohesion throughout the area (Ritchie 1985, 189).

By the seventh century there is an increasing body of evidence for settlement at this time having been made up of individual, discrete units, such as around the Birsay Bay area (Morris 1983, 132). Only one site, at the Brough of Birsay can be put forward as a particularly important centre, but then on the basis of its finds, location and subsequent importance in the Norse period, rather than any distinguishing structures (Curle 1982; Hunter 1986). The lack of farmland on the island renders interpretation as a simple farmstead unsatisfactory (Hunter 1986, 169), and the inhabitants must have been dependent on a hinterland. The settlements around the Birsay Bay may therefore perhaps be interpreted as a series of home farms or dependent settlements providing for the needs of this establishment. They may therefore not be totally typical of the settlements we may expect to find elsewhere in Orkney and Caithness. There was some selective re-use of broch sites, but on present evidence this only occurred on a few sites. In Orkney the selective reuse of sites for secular and ecclesiastical purposes which were probably particularly important in the MIA (see above) may be a means of legitimising and enforcing a new social structure (cf Bradley 1987).

In the post-broch period (Fig 6) the access maps revert to forms which are very similar to the shallow EIA examples, except that in the LIA II some of the domestic units are enclosed by fences, creating a series of discrete units which are sometimes clustered in space. In other words the basic domestic units remain very similar throughout our period, despite different architectural shells; even in the MIA they do not change, except that they are bound together spatially with strongly prescribed lines of access. In spatial terms the only difference between the thin and thick walled EIA roundhouses is in their degree of association with other structures and their monumentality.

In the LIA the emphasis thus changes from internal to external space, and there is a trend towards more egalitarian, less spatially prescribed, on-site relations. However, these changes were undoubtedly accompanied by a stricter control of the spaces between sites as a result of new forms of land organisation. In terms of social evolution this change corresponds to the shift from a ranked society to the emergent state, from local power bases to more distant sources of authority. By the eighth century there are hints that Pictish kings were developing some of the organisational capacity to manage a widespread kingdom, which was gradually acquiring some of the appearance of a state, with a degree of central administration and perhaps more closely-defined boundaries, which could at times be backed by physical violence (cf Mann 1986, 37). In AD 727 there is a reference interpreted as meaning that Nechtan had officers called *exactores*, persons collecting tax or tribute (*Annals of Ulster*, sub anno 728; Anderson 1973, 178), and it is probable that such officers worked as the king's representatives throughout Pictland. Such people lived in isolation from those from whom they were exacting tribute, benefiting considerably from the enhanced powers which they derived from their



position as agents of authority (there is thus a dialectic between centralising powers, such as the state, and the decentralising forces of its agents: Mann 1986). Agents such as these might have levied the fleets which carried out several recorded sea-borne attacks in the sixth and seventh centuries (*Tigernach Annals* c 682; *Annals of Ulster* c 580-81), and which was wrecked in the eighth (*Tigernach Annals* c 729).

Thus whilst the construction of monumental architecture, in this case hillforts, is still a material symbol of the acceptance of authority, this power is now more physically remote. Whilst there are still regionally based sources of authority, these are seemingly few in number, and their power is structured and reproduced in a different manner. There is no longer the need for tightly regulated social encounter, the existence and acceptance of physically determined social rules, or indeed the ability to maintain such a network. The relationship of dependency is no longer expressed in such overtly spatial terms and enhanced personal encounter contributes to the working of this extensive social network. That the maintenance of these long-distance relations was difficult is suggested by the fact that king Brude was reputed to have destroyed the Orkneys in AD 682 (*Tigernach Annals: Orcadies delete sunt la Bruidhe*, Skene 1867, 72), which may have resulted from Orcadian dissatisfaction with the choice of overlords, or attempts to exact tributes. The secular reuse of important MIA sites may in part be an attempt to legitimise and therefore enforce this far-flung network. Similarly the introduction of the Roman church with its pastoral organisation to Orkney by the southern Pictish king in the eighth century (Lamb 1988; Thomson 1987, 10) might be construed as a conscious effort to consolidate secular power through the church. Christianity was a form of ideological power whose authority resided in the correspondence between its doctrine and the motivations and needs of the converted (Mann 1986, 302). Whilst the appeal and influence of Christianity was universal, yet at the same time it reinforced the standing of the extant secular authority: literacy provided a stable means of communication beyond face-to-face relations, and its law and morality represented long distance regulation (*ibid* 337, 377). The extension of the church to Orkney within a few years of AD 715 may effectively date the extension of Pictish royal power, in real terms, to this area (Lamb 1988). The distribution of symbol stones and evidence for the ecclesiastical reuse of sites points to those sites where the interests of the social elite were closely tied up with the developing Pictish state and church (cf Driscoll 1988).

In a later eighth century or ninth century version of Bede's *Ecclesiastical History* Orkney was considered to be a part of the Pictish kingdom (Dumville 1976), which by the end of the century may have been consolidated under a single king (Davies 1984, 70). The general absence of mention of Caithness in the documentary sources is probably a reflection of the lesser importance of this area in comparison to the Orkney Isles which were both more accessible and strategically placed in the Atlantic seaways.

By the time the Norse arrived Orkney and Caithness were both thoroughly Pictish, but far removed from the prime sources of authority. The regional infra-structure, was thus not adequate enough to make a stand against a Norse takeover, particularly at a period when the powers of the Pictish state were diminishing. It was however a well-oiled system of administration, both secular and ecclesiastical, onto which the Norse grafted themselves (as in Ireland, England and Normandy: Crawford 1987, 168). For example, in Orkney there is evidence that the Norse land-divisions might even have been related to a pre-Norse administrative system (Marwick 1952, 208). Lamb suggests (*pers comm*) that it only became necessary to set up the Jarldom in the ninth century after the ecclesiastical structure ceased to function due to the dismantling of the Roman Church by the Scottish kings.



### Conclusions

All human action is located in both time and space. It is thus appropriate that a large proportion of the effort of archaeologists is spent in measuring, describing and recording these attributes, particularly those pertaining to humanly-made-space – architecture. Space provides the setting for all social discourse, whether it is the open landscape or an artificial environment. It is a resource with an infinite number of permutations, a cultural resource which when studied in terms of its development through time can be understood not only as the context, but also the structuring agent and product of acts of social reproduction. This paper has attempted to demonstrate this and introduced access analysis, as described above, as a useful tool for furthering an understanding of the relationship between a specific material culture and social reproduction. The shift from a ranked society where the ultimate authorities were locally based to more remote sources of central authority characterises the development of Orkney and Caithness from the MIA to the arrival of the Norse. In his account of the sources of social power, Mann (1986) distinguishes six different forms of organisational power. Here we are seeing the change from *intensive power*, where there was the ability to organize tightly and command a high level of mobilisation or commitment from the participants, to *extensive power*, where there was the ability to organise large numbers of people over far-flung territories in order to engage in minimally stable co-operation. In order to amplify our expanding picture of IA Orkney and Caithness, it now remains to examine how other aspects of social reproduction fitted within this framework, and to identify the resources through which this power was exercised. In particular we must examine the means by which the change from local to distant power bases was achieved and maintained, the answer to which undoubtedly lies in changing agricultural practice and land tenure and the introduction of Christianity (Mann 1986; cf Biddick 1984).

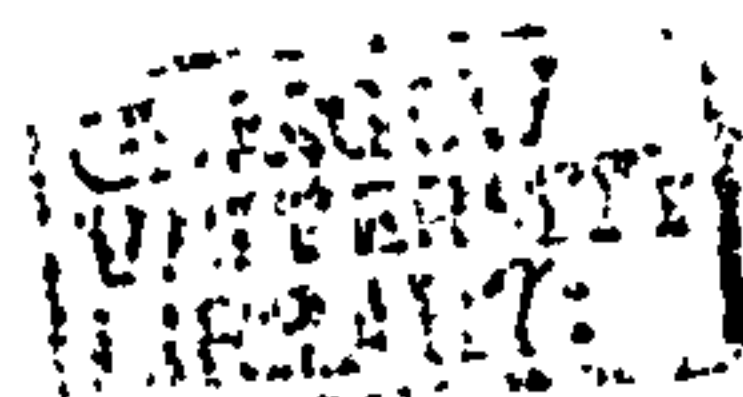
### Acknowledgements

This paper expands upon the case made in my note in *Antiquity* 1989, so I must repeat my thanks to those who helped with this, and the editor for permission to reproduce the relevant sections. In addition I would like to gratefully acknowledge those who have generously divulged of their unpublished data and ideas, let me use these, and kindly commented on various aspects of this present paper, namely Simon Buteux; Steve Dockrill; Dr John Hunter; Dr Raymond Lamb; Dr Euan MacKie; Roger Mercer; Ross Samson; Dr Liz Slater; Beverley Smith; and other colleagues in Glasgow. Professor Leslie Alcock and the Editor, John Barrett, worked hard to comprehensively criticise my text, make suggestions, and ameliorate the worst of my crimes to the English language. Ultimately the final opinions and faults, such as remain, are my own responsibility.

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## COMMUNITY AND SELF: PERCEPTIONS AND USE OF SPACE IN MEDIEVAL MONASTERIES

Roberta Gilchrist\*

This paper examines the use of architectural space in expressing social differences within monastic settlements. The subject of the analysis is the evolving perception of the concept of community in medieval English monasticism. In its desert origins, the monasticism of fourth century Egypt and Syria found both eremitic and coenobitic expressions. Between the fifth and seventh centuries, western monasticism developed a coenobitic form which tempered individual isolation with group living.

From the extant rules followed by medieval monastics, in particular the Rule of St Benedict, the letters of Jerome and Augustine, and the Scriptures themselves, it is possible to glimpse the ideal internal structure of coenobitic communities. The real observances of a particular house over the period of its occupation may be gleaned from historical documentation (account rolls, references in wills to a house, bishop's visitations), archaeological excavation and formal methods for quantifying spatial patterning. Access and movement within a monastic context can be approached through the study of modern contemplative monasticism. This last approach draws on direct historic analogy, a method of interpreting archaeological material by seeking analogues with contemporary cultures to which the past culture is historically linked. The ethnoarchaeological approach to monasticism attempted here refers to the study of a modern contemplative community living in a restored medieval monastery and following the Rule to which the house was originally committed.

Monastic perceptions of space are created by the use of boundaries, which may be of both real and ideal nature. Hence, while the boundary of a medieval precinct demarcated legal ownership of land, it also symbolised the divide between secular and religious domains. Space was (and is) used to regulate encounters between groups. Inside the precinct, the relationship between secular and religious was distinguished by an outer secular court and an inner religious cloister. Within the cloister, a more subtle segregation relied on both the physical manipulation of space and the conceptual spatial divisions informed by coenobitic ideals. Attitudes towards space were created through shared knowledge, transmitted through sermons and written traditions. This codified ritual behaviour informed attitudes toward space, which in turn reproduced the social order of the monastic community.

In the formulation of his Rule, Benedict was striving for a well-organised ascetic life which achieved sanctity through the elevation of community by the renunciation of the individual. Equality within a group of monks was assured through self-denial and spiritual humility. Renunciation of self was achieved through a rejection of private property upon induction to the community 'thenceforward he will not have disposition

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