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Anatomy of an Iron Age Roundhouse

The Cnip Wheelhouse Excavations, Lewis

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Chapter 7

Living in Iron Age Lewis

7.1 INTRODUCTION

The main purpose of this final chapter is to step back from the detailed analyses of individual bodies of material which have dominated earlier sections of this report and to examine what can be learnt overall about the Iron Age people of Cnip. I will also discuss some of the ways in which the evidence from the Cnip excavations can broaden our understanding of Iron Age society more generally. Several of the main themes of the project have been discussed in detail already, notably the importance of Cnip for our understanding of both wheelhouse architecture (Chapter 5) and chronology (Chapter 6). These discussions will not be repeated, but a number of other themes, important to recent debates in Iron Age archaeology, such as domestic ritual and cosmology, will be addressed.

I will begin with a review of the sequence of activity at Cnip, and a reflection on the parallels between the life-cycle of the Cnip settlement complex and those of other Hebridean wheelhouses. This will be followed by a summary of the ways in which the Iron Age people of Cnip made their living from the resources available to them: how they obtained food, fuel and the raw materials for tools; the ways in which their lives may have been structured year by year; and the degree to which their activities were bound or otherwise by the constraints of the Hebridean environment. Next comes a consideration of the ways in which the archaeological deposits can provide insights into the daily lives and world views of the inhabitants. The nature of Iron Age cosmologies and the ritualization of domestic life have been major preoccupations of archaeologists in recent years and the evidence from Cnip can provide some insights into these and other issues. Finally, I will examine the ways in which the settlement at Cnip may reflect, at a local scale, wider processes of social and economic change around the end of the first millennium BC.

7.2 WHAT HAPPENED AT CNIP: A SPECULATIVE SUMMARY

Discussion of the site sequence so far has been detailed and peppered with qualifications and the evaluation of alternative possibilities. In the midst of the detail it is easy to lose sight of the bigger picture. What follows is a brief narrative, shorn of most of the earlier circumspection, which seeks to describe the history of the Cnip wheelhouse complex insofar as it can be reconstructed from the detailed arguments which have gone before.

Some time in the last few centuries BC someone decided to build a new house on the machair at Cnip, a little way back from the sea, behind the coastal dunes. This patch of land lay within a landscape farmed for many centuries, if not millennia. The people who intended to occupy the wheelhouse were probably local, most likely an off-shoot from another settlement nearby. The land on which their sights were set was not simply up for grabs. Only a few hundred metres away was the Loch na Beirgh broch tower, still an imposing building and most likely still the home of prosperous and influential people. The building of the Cnip wheelhouse can only have been planned and conducted within the context of the land-holding patterns long established in the Bhaltos peninsula. It is probably not too fanciful to suggest that the project may have been overseen by the incumbents at Beirgh. The intended occupants of the new house may even have grown up in the broch tower, but perhaps were not in line to inherit it; perhaps they were the family of a second or third son, allocated a block of land within the wider holding. Maybe, given that the plan was for two houses, they were the families of two siblings.

The plan then was to build two conjoined wheelhouses. Wheelhouses were the standard 'new-build' house form of the day, and one requiring a significant amount of labour and skill. What made this particular venture unusual was the intention to build the two houses together, as most wheelhouses were single dwellings. Over time, presumably during slack periods of the farming year, resources were gathered for the project; large quantities of stone and smaller quantities of timber and thatch. The intended occupants perhaps carried out or oversaw most of this preliminary work themselves, along with neighbouring families, but skilled labour was required for the actual process of building and this may have meant

arranging for outside help. The process of building was accompanied by ritual offerings, and the residue of these activities, in the form of animal remains and other objects, were placed behind the rising walls of the structures. Midden material was brought from elsewhere to pack behind the walls of the building. This contained much metal-working debris and may have been retrieved from an abandoned settlement or an activity area nearby, perhaps the former home of the intended occupants.

At some point, during an advanced stage of construction, plans changed and the second wheelhouse was left unfinished. Perhaps it was intended that it should be completed later, but for whatever reason, perhaps the death or change in circumstance of one of the principal occupants, it never was. Instead the single wheelhouse was completed and its occupants moved in. The house was small but skilfully made, and would have been an impressive sight once inside, although from outside there would have been little more to see than a thatched roof poking above a sand-hill surrounded by midden grazed by a few pigs. For a time the house was carefully maintained and its occupants most likely remained a single family. It may have passed from father to son or mother to daughter, and there would have been a steady inflow and outflow of people as births, deaths and marriages altered the make-up of the household. But the house and the activities of the inhabitants changed little: food was prepared, cooked and served in fine decorated pottery vessels made within the community; people wove and spun, worked antler and whale bone around the fire; talked, laughed, sung, made music, played board-games, entertained guests, and everything else we might expect from a small, but fairly prosperous farming community. Nonetheless, we should not think of these people as simple, practical farming folk, familiar from our recent rural past. These were people with deep-rooted beliefs and attitudes to the world around them entirely alien to those of our own society or those of our recent ancestors; as witnessed, for example, by the presence of human skulls retained, and perhaps displayed, within the house.

Over the course of the first century AD changes began to affect the fabric of the house. The roof was becoming unstable and had to be propped up in places, while the walls and piers needed periodic buttressing and other forms of support. The form and symmetry of the wheelhouse became obscured by these changes and by the re-modelling now being carried out. The old unfinished wheelhouse was filled in and replaced by a small cell, perhaps for storage. Before it was built, the occupants (or perhaps someone more appropriate to such a solemn purpose) scooped a hollow in the sand and placed in it part of a human skull accompanied by two fragments of a pottery and a piece of animal skull. Such ceremonies were not uncommon (although the incorporation of human remains was unusual) and punctuated the lives of the household.

As generations passed the form of the house changed. A second cell was built with carefully graded stone slabs forming its lower wall. Probably no specialist help was needed for this or any other re-building works. Nothing requiring the craft and precision of the original wheelhouse was built subsequently and the skills of the inhabitants and their neighbours most probably sufficed. This second cell had its own hearth and co-existed with the main wheelhouse interior. Perhaps the household had split into two family groups, possibly once again the families of two siblings, or it may be that social norms were changing and certain groups were being segregated on the basis of age or gender. But within a generation or two this second cell had been dismantled and filled in with midden.

By around AD 100 the wheelhouse was becoming dangerously unstable. Indeed, it was no longer really possible to discern the original conception of the building from inside, such was the extent of its decay. Perhaps such buildings were no longer relevant or fashionable, or perhaps the inhabitants were by now in no position to command the resources and skilled labour that was available a few generations earlier. Whatever the reason, the new building that they chose to construct within the ruined and collapsing interior of the wheelhouse was of a rather different and simpler form: a rectangular building with a pitched roof and timber gable. It retained echoes of the wheelhouse: two of the old cells were preserved and looking up from the floor beneath them the skill of the old stonemasons could clearly be seen. The entrance passage still followed the old wheelhouse entrance line. These things were not accidental. This house had been in continuous occupation and its current occupants were most likely the descendants, perhaps between four and eight generations removed, of the first inhabitants. They would have known their predecessors names, recalled stories of their exploits, and been able to recount the events that had occurred in and around the wheelhouse. They still lived in the shadow of Loch na Beirgh which remained a focus for power in the locality no matter how battered and decayed the old broch tower might have become.

For perhaps another three or four generations this new building remained in occupation until some time during the third century AD it was finally abandoned. Perhaps the last inhabitants simply died without heirs, or perhaps other factors, such as coastal movement and increasing soil erosion, forced a change of location. There may have been a few episodes of casual re-use when people out working on the machair sheltered within the walls and made small fires from seaweed and driftwood picked up from the beach, but soon the building filled with windblown sand, disappearing from view and, eventually, from memory.

7.3 CNIP AND THE HEBRIDEAN WHEELHOUSE TRADITION

The initial design of two conjoined wheelhouses at Cnip has already been remarked upon as being highly unusual. Of the other Hebridean wheelhouses excavated in the post-war period only that at A' Cheardach Bheag, in South Uist, has evidence for two conjoined wheelhouses and there the relationship between the two is rather different (Fairhurst 1971). At A' Cheardach Bheag, the main wheelhouse is clearly the dominant structure (Ill 7.1d), while the conjoined wheelhouse is much smaller and less well built. Although the smaller wheelhouse at A' Cheardach Bheag is stratigraphically secondary to the main wheelhouse, and is thus interpreted by Fairhurst as a secondary addition, it is quite possible that it is 'secondary' only in a constructional (rather than chronological) sense, as is more clearly the case for the unfinished wheelhouse at Cnip. Nonetheless, the relationship between the buildings suggests a rather different intention on the part of the builders. A similar situation applies to Cell A at Sollas, in North Uist (Campbell 1991, 133), which is secondary in constructional terms to the wheelhouse and of poorer masonry. Cell A at Sollas, however, lacks the internal piers which define the wheelhouse form (Ill 7.1c).

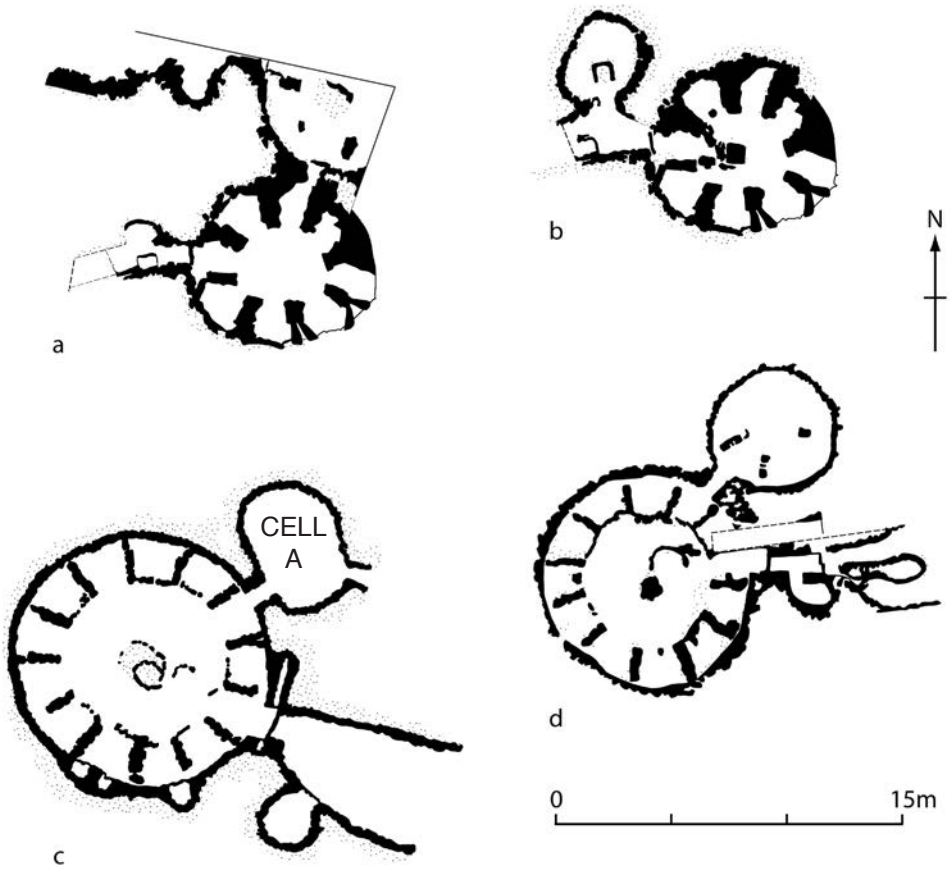

ILLUSTRATION 7.1
Simplified plans showing: (a) Cnip Phase 1; (b) Cnip Phase 2; (c) Sollas, North Uist; (d) A' Cheardach Bheag, South Uist.

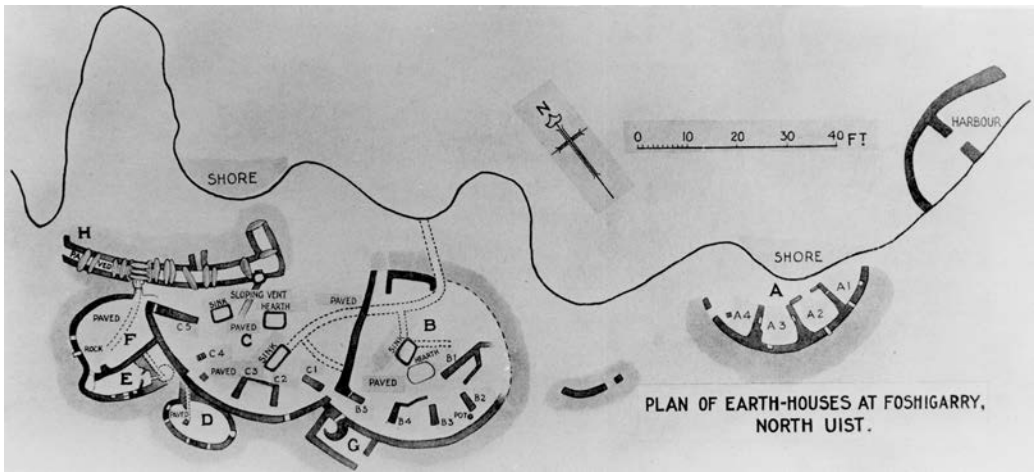

ILLUSTRATION 7.2
Foshigarry, North Uist (from Beveridge 1930, plate 2): the various excavated wheelhouses have been shown to be successive rather than contemporary.

Elsewhere there is little clear evidence for the co-existence of two or more wheelhouses on the same site, and most multiple wheelhouse sites (eg Foshigarry, in North Uist, Ill 7.2) can be shown to have developed through the periodic replacement of one wheelhouse by another, although the possibility of some chronological overlap can be hard to discount (Armit 1992, 54). The same may apply to the multiple wheelhouses at the Udal, North Uist (Crawford nd), although the relationship between the wheelhouses on that site cannot be properly evaluated in the absence of published detail.

The length and complexity of the entrance passages to both wheelhouses at Cnip is also mirrored by the passage at A' Cheardach Bheag in South Uist (Ill 7.1c). Here again Fairhurst (1971) argues that the entrance passage was a composite structure added to over time although the equally composite passage to Wheelhouse 2 at Cnip was seemingly built over a fairly short period before the wheelhouse itself was fully completed (which in this case, of course, it never was). The entrance passage to the Sollas wheelhouse was also apparently secondary and went through a number of rebuilds (Campbell 1991). The small cell in the

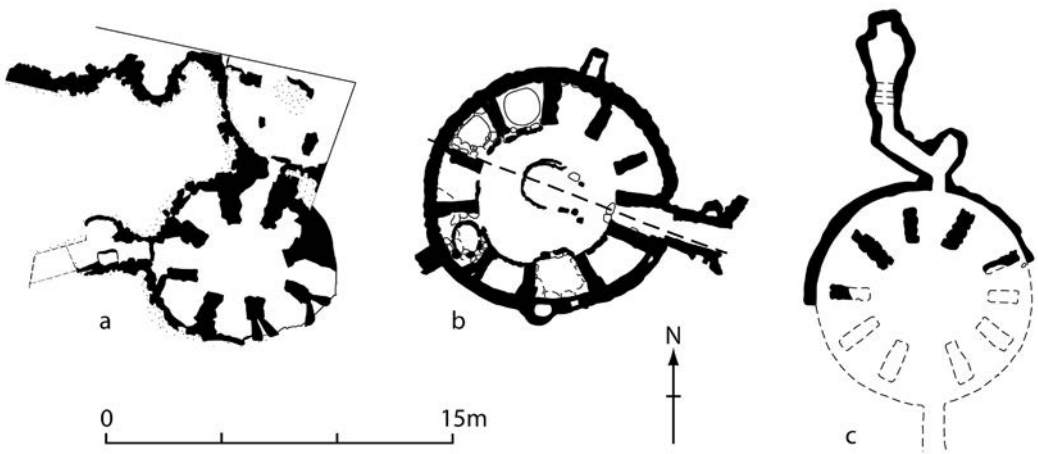

ILLUSTRATION 7.3
Simplified plans showing: (a) Cnip Phase 1; (b) Kilpheder, South Uist; (c) Usinish, South Uist.

wheelhouse passage at Sollas (ibid 1991, 135) seems closely similar to Structure 7 at Cnip, although the Sollas example has no clear stratigraphic relationship to the wheelhouse.

The life cycle of the Cnip wheelhouse complex finds some reflection in the corpus of excavated Hebridean wheelhouses, but there is considerable variability from site to site. In some cases Hebridean wheelhouses seem to have survived in more or less their original form until abandonment. The wheelhouse at Kilpheder in South Uist, for example, seems to have been largely unmodified when it was abandoned (Lethbridge 1952), suggesting either that it was exceptionally well-constructed or that its occupation was relatively short-lived (Ill 7.3b). The same appears to be the case for Sollas (Campbell 1991) although the possible removal of later structures by the antiquarian excavations of Erskine Beveridge raises some uncertainty.

One of the most striking characteristics of the settlement history at Cnip is the perseverance of the inhabitants with the wheelhouse structure long after it had become dangerously unstable, and when building afresh on another site would have seemed a far less risky alternative. Other Hebridean wheelhouses show a similar concern to maintain the integrity of these buildings. At Clettraval, in North Uist (Ill 7.4a), at least two of the wheelhouse piers had been strengthened prior to the re-modelling of the central hearth and re-roofing of the building (Scott 1948), suggesting that stresses had built up similar to those experienced by the inhabitants at Cnip. At Clettraval these problems seem to have led finally to the collapse of the building and later occupation was seemingly restricted to a small and poorly dated construction built in the former entrance to the wheelhouse (ibid). At Allasdale in Barra, two of the wheelhouse bays seem to have collapsed completely and a revetted retaining wall had to be put in place

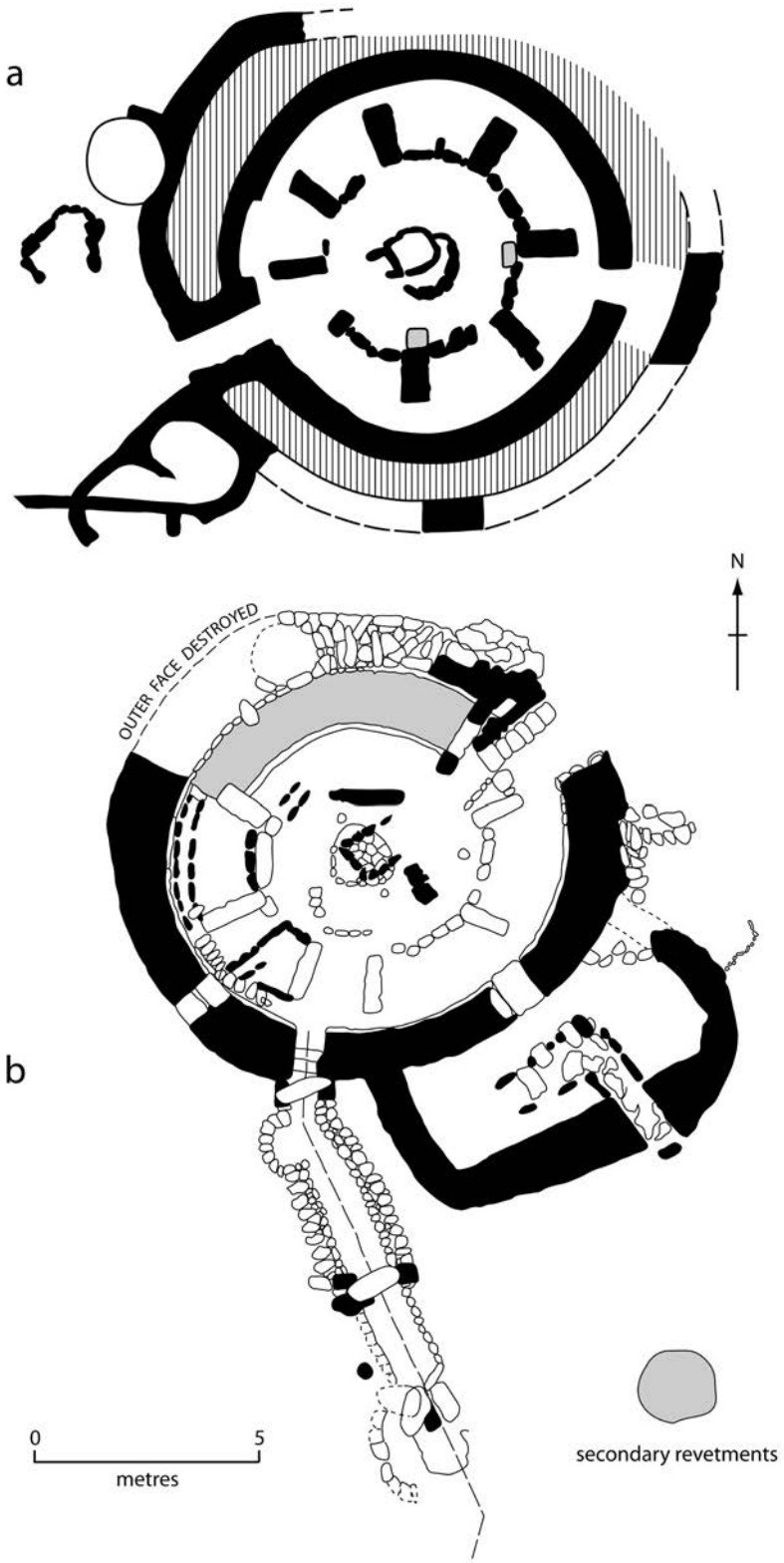

ILLUSTRATION 7.4
Wheelhouses with evidence for structural failure and repair highlighted: (a) Clettraval, North Uist (after Scott 1948); (b) Allasdale, Barra (after Young 1952).

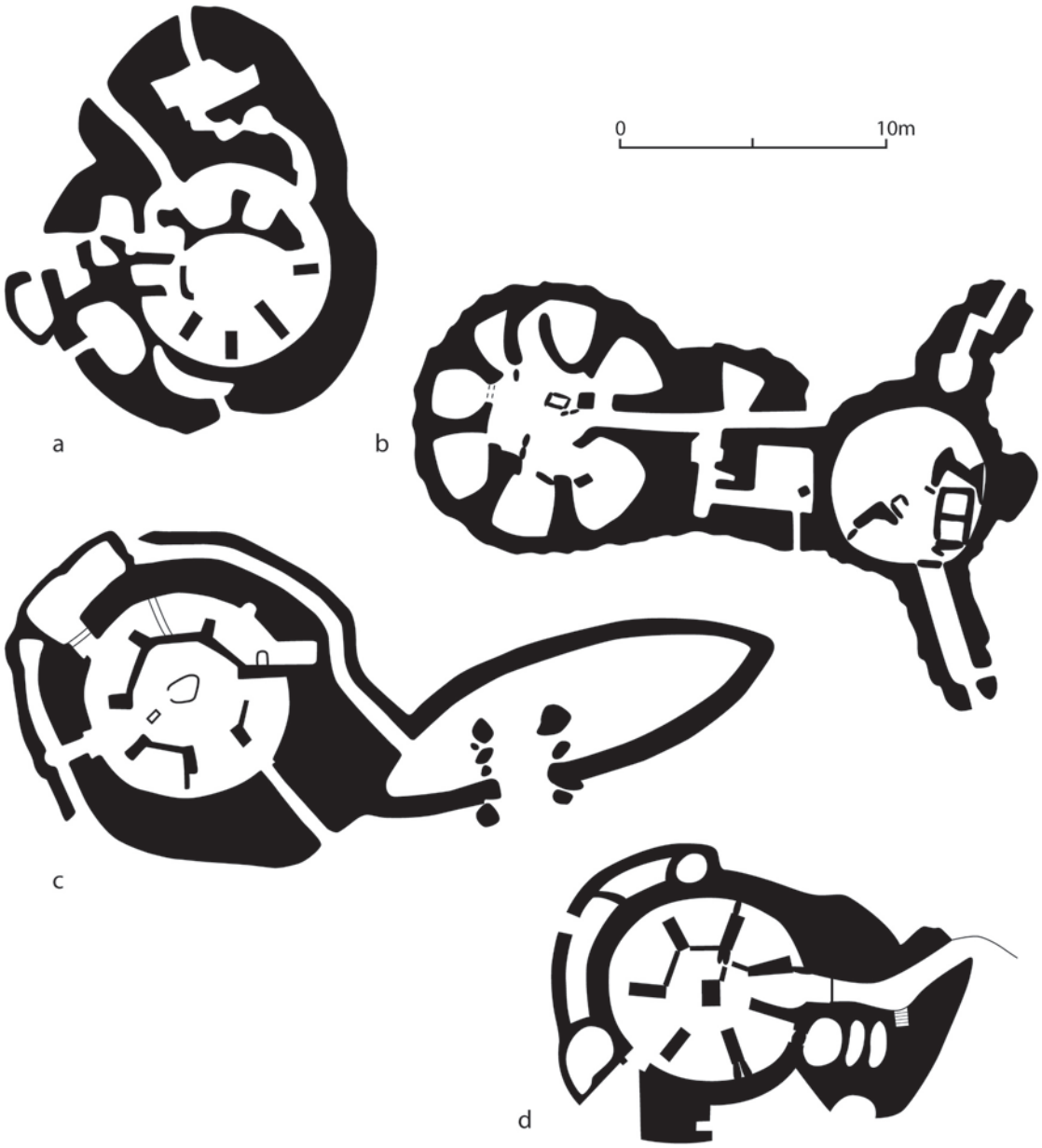

ILLUSTRATION 7.5
A selection of Erskine Beveridge's wheelhouse plans: (a) Eilean Maleit (from Beveridge 1911, 200a); (b) Bac Mhic Connain (from Beveridge 1931, Fig. 1); (c) Garry Iochdrach (from Beveridge 1931, Fig. 2); (d) Cnoc a Comhdhalach (Beveridge 1911, 208a), all in North Uist. Each apparently conflates the evidence of multiple periods of construction which went unrecognized at the time of excavation.

to stabilize the rubble, yet occupation apparently continued inside (Ill 7.4b). At several wheelhouses, notably Sollas (Campbell 1991, 128) and A' Cheardach Bheag (Fairhurst 1971, 77) most of the aisles between the piers and the outer wall had been blocked with poor quality masonry, again mirroring the situation at Cnip.

It is difficult in the available literature to find any obvious parallels for Structure 4 at Cnip, which seems to have operated as a secondary focus of quite careful design, with its own independent access leading off the wheelhouse entrance passage. Where post-wheelhouse structures occur on other wheelhouse sites, they tend to be fragmentary and perhaps ephemeral, as with the

succession of structures which overlay the robbed-out wheelhouse of A' Cheardach Mhor, in South Uist (Young & Richardson 1960), which may have been associated with metal-working (perhaps suggesting that they were set apart from the settlement of the time for social or practical reasons). It should be remembered, however, that many excavations of wheelhouses were carried out early in the twentieth century and that later, less substantial buildings may well have been removed without full understanding of their character, to reveal the more immediately obvious wheelhouse plan beneath. This may well be the situation with a number of Erskine Beveridge's excavations in North Uist (Ill 7.2 and 7.5), for example Foshigarry (Beveridge 1930) and Bac Mhic Connain (Beveridge 1931), and is almost certainly the case at Eilean Maleit (Beveridge 1911; Armit 1998). Examination of the available plans does not suggest any close parallels for Structure 4 at Cnip. Although there are numerous possible parallels for the small pit-like structures represented by Structures 5 and 6 at Cnip, for example adjacent to Wheelhouse C at Foshigarry (Beveridge 1930 and see especially structure 'D' on Ill 7.2), these small structures have not been given any real attention in the older literature.

The reorganization of the settlement in Phase 2, which included the construction of Structure 4, has been interpreted as resulting from a desire to segregate either two groups within the household, or certain activities carried out within the settlement. It may be that a similar division is reflected by the secondary constructions of the smaller wheelhouse at A' Cheardach Bheag (Fairhurst 1971) and Cell A at Sollas (Campbell 1991), although in these cases the secondary cell is accessed through the wheelhouse rather than directly from the entrance passage. Although all three structures are quite different in design, they may represent local responses to a wider shift in social practice.

Anna Ritchie (2003) has recently included Structure 4 at Cnip in a small group of structures from the Northern and Western Isles which she identifies as possible 'oracle shrines'. These structures share the peculiarity of having hearths which nearly or actually block access to the interior, as was clearly the case in the primary (although not the secondary) occupation of Structure 4 at Cnip. Ritchie suggests that the use of such structures, which include House 5 at Buckquoy in Orkney, and buildings at Clickhimin and Old Scatness in Shetland, may have involved a gathering together of select individuals, prior to the lighting of the fire which would prohibit subsequent movement in or out of the building until the completion of the ritual (ibid, 6–7). Other Hebridean examples cited by Ritchie comprise secondary structures from Dun Bharabhat and Loch na Beirgh broch tower in the Bhaltos peninsula (ibid, 6) although these are perhaps less compelling than the northern examples. The ritual interpretation for at least some of these buildings is attractive, and would go some way to explaining the differences in depositional patterning between Structure 4 and the contemporary wheelhouse deposits at Cnip. Given the small numbers and fairly broad date range of these buildings, however, it would be unwise at present to place too much interpretive weight on the putative oracular function of the building.

The low-roofed, souterrain-like structure running out from one of the bays at Allasdale (Young 1952) is perhaps the closest parallel for Structure 3 at Cnip both in terms of its relationship to the main body of the wheelhouse and its difficulties of access, but its elongated form is quite different (Ill 7.6). The Allasdale 'souterrain' is closely similar in form to one recorded by Captain Thomas at Usinish, in South Uist (Thomas 1870), and similar structures are implied by the narrow passages leading off from Bay 5 at Kilpheder (Lethbridge 1952) and Bay 5 at Sollas (Campbell 1991, 129). The form and construction of Structure 3 at Cnip, however, are presently unique.

It is equally difficult to find a close parallel for the rectilinear Structure 8 at Cnip. Within the Western Isles, the two rectilinear buildings close to the wheelhouse at Allasdale seem superficially the most similar in form (Ill 7.6). One of these is a lean-to 'kiln-house' leading off from a northern bay of the wheelhouse (Young 1952) but its chronological relationship to that structure is far from clear and it may indeed be a relatively recent building. The same problem applies to the rectilinear 'barn' on the same site which may very well be medieval or later. Excavations at Tungadale, in Skye, revealed a substantial rectilinear building, partially terraced into a hillside, with an entrance in its short, east end (Miket 2002, 98–9). This appears to have been a domestic building with a formal central hearth and an attached souterrain (Ill 7.7). The parallels with Structure 8 at Cnip, however, extend little beyond its shared rectilinear form and the position of its entrance in one of the short walls; and the radiocarbon dating evidence for Tungadale seems to suggest an earlier date, perhaps around the third century BC (ibid).

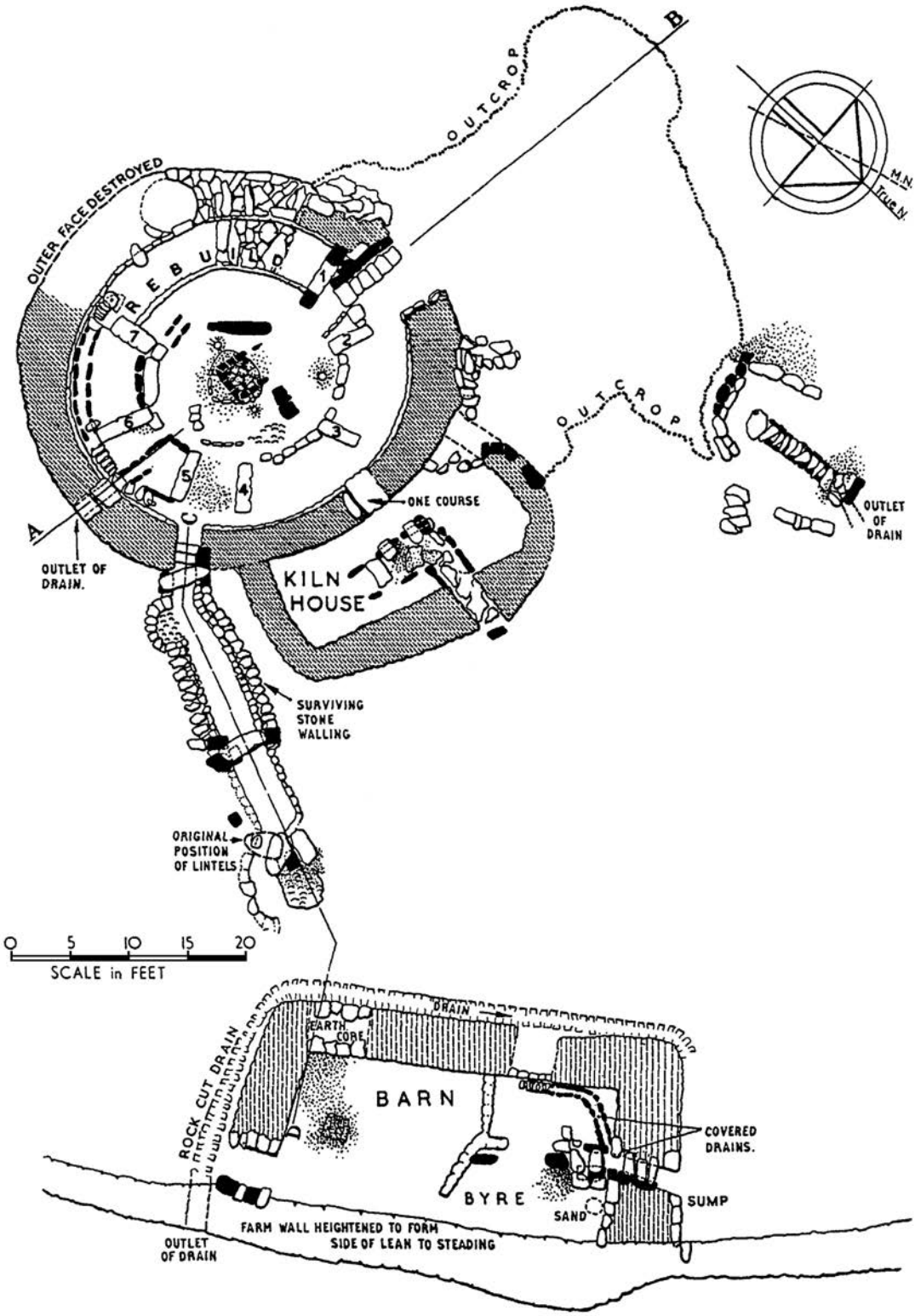

ILLUSTRATION 7.6

Allasdale, Barra (from Young 1952, Fig 3): the wheelhouse lies within an enclosure and in association with other buildings. It is unclear whether this complex is contemporary with the wheelhouse or, more likely, a series of later, perhaps post-medieval accretions.

Further afield, the rectilinear form of Structure 8 suggests possible parallels with the distinctive oblong, stalled wags of Caithness (Ill 7.7), such as those at Langwell and Forse (Curle 1912, 1941, 1946, 1948). Sally Foster has suggested that these may have a *floruit* in the sixth and seventh centuries AD (1989, 39–40). Although wags have traditionally been thought to be exclusive to Caithness, particularly the parishes of Latheron and Dunbeath, Foster has suggested links to similar rectilinear structures recently recognized in Orkney at Pool, Howe and Structure 15 at the Brough of Birsay (Hunter 1986, 56). It is possible, therefore, that a move towards rectangularity across Atlantic Scotland may have resulted in a series of architectural variants of which Structure 8 at Cnip was a localized Hebridean example, although if so it was clearly rather early in the sequence.

7.4 MAKING A LIVING: HOUSEHOLD, SOCIETY AND ENVIRONMENT

The archaeological and palaeoenvironmental remains recovered from Cnip illuminate a range of aspects of resource exploitation in Iron Age Lewis. Many of these have already been detailed in Chapters 3 and 4, where specific categories of material have been considered. This section presents a brief thematic review concentrating on the evidence for food production, the use of wild resources, the gathering of fuel, and the evidence for movement across the landscape. The settlement at Cnip did not exist in isolation, and it is important also to consider the wider evidence for Middle Iron Age settlement in the area.

7.4.1 THE NEIGHBOURS

The Iron Age archaeology of the Bhaltos peninsula is dominated by the long-lived settlement complex at Loch na Beirgh (Ill 7.8). The broch tower which forms the earliest identified element of the settlement sequence, is the largest in the Western Isles and incorporates an extremely well built scarcement ledge and indications of dressed granite facing stones around its entrance (Harding & Gilmour, 2000). It was clearly a monumental and prestigious building when first constructed, and must reflect the high status of its original inhabitants. It may have been of more than local significance. Indeed there is continuing evidence throughout the Beirgh sequence to suggest that the settlement retained its high status throughout its occupation, despite the changing forms of the main building. By the second century AD, this exceptionally fine structure had been significantly reduced in height and the settlement seems to have focused on a secondary roundhouse (Harding & Gilmour 2000, 64). Yet it was presumably at around this time that Samian pottery, imported ultimately from the Roman Empire, was obtained by the inhabitants, even though the sole sherd recovered was re-deposited in a much later context. Roman imports are exceptionally rare in Atlantic Scotland generally, and in the Western Isles in particular, yet as well as the sherd from Loch na Beirgh itself, two further sherds were found from the eroded middens on the beach a few hundred metres away. The evidence is limited, but this access to imported pottery suggests that the occupants of the secondary roundhouse at Beirgh had inherited something of the status and contacts of their predecessors in the broch tower; a supposition supported by the total absence of Roman imports in the substantial finds assemblage from Cnip.

In later years, the cellular settlement at Beirgh continued to provide evidence of high status inhabitants judging by the presence of copper alloy metal-working debris relating to the production of objects such as spear-butts (Heald 2001). Bronze brooches attest to

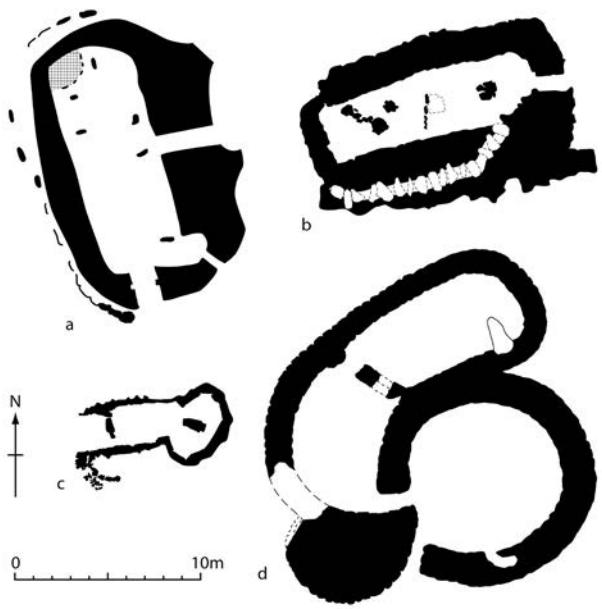

ILLUSTRATION 7.7
Rectilinear structures from the Late Iron Age in Atlantic Scotland: (a) Wag of Forse (after Curle 1946, fig 1); (b) Tungadale (after Miket 2002); (c) Cnip Structure 8; (d) Latheron, Caithness (after RCAHMS 1911, fig 13).

ILLUSTRATION 7.8
The broch tower of Loch na Beirgh seen from the shore.

the presence of individuals with access to high-quality goods in the centuries leading up to Norse colonization (Harding & Gilmour 2000). It would appear then, that the Loch na Beirgh settlement remained a high status settlement throughout its known period of occupation from the last few centuries BC until the early ninth century AD. There seems little doubt that it would have formed the dominant presence in the social and settlement landscape of the Bhaltos peninsula.

When the settlement at Cnip was first established, the Loch na Beirgh broch tower would still have stood in something close to its original form. During the occupation of Cnip, the tower would have been partially dismantled and the succession of secondary roundhouses constructed. By the time the settlement at Cnip fell into decline, the Loch na Beirgh settlement continued to prosper and was entering its phase of cellular building. It seems a reasonable assumption

that, throughout this period, there would have been a close, most likely familial, relationship between the occupants of the two sites, with Loch na Beirgh being the dominant partner in terms of social status and economic influence.

The status of other contemporary settlements within the Bhaltos peninsula is less well established but some possibilities are apparent. The complex roundhouse of Dun Bharabhat lies on an islet in a small loch in the hills which form the core of the Bhaltos peninsula (Ill 7.9). The dating of this site is less secure than that of Loch na Beirgh, but it does appear that secondary occupation, after the collapse of the primary structure, focused towards the end of the first millennium BC, while slighter occupation of uncertain character extended, perhaps sporadically, into the first millennium AD (Harding & Dixon 2000, 26–7). Full analysis of the pottery assemblage should help to determine the chronological relationship with Cnip more closely than is currently possible. At present it seems more likely than not that Dun Bharabhat was still occupied when the Cnip wheelhouse complex was built, though no longer in its primary form. The dating of the other Atlantic roundhouse on the peninsula, Dun Camus na Clibhe, is entirely unknown at present.

There is a second wheelhouse, set on a sand-covered knoll at the rear of the Traigh na Beirgh, nestling at the foot of the low hills which form the interior of the peninsula. This site was dug into by a local resident, Calum MacLeod, during the 1950s and enough was done to establish that it was a wheelhouse of the conventional Hebridean type. Surface inspection reveals it to have an internal diameter of around 7–8m, closely similar to that at Cnip, and several pier ends remain visible (Armit 1994, 80). From what we know of wheelhouse chronology in the west it seems highly probable that this settlement was a direct contemporary of the Cnip wheelhouse, less than 1km away. Calum MacLeod's wheelhouse lies only 200m from the Loch na Beirgh broch tower to which it must have had close

ILLUSTRATION 7.9
The complex roundhouse of Dun Bharabhat, prior to excavation (photograph by D W Harding).

socio-economic ties. Further wheelhouses may of course remain undiscovered in the machair systems of the peninsula or may have been destroyed by coastal erosion. A series of middens recorded along the Traigh na Beirgh beach-face in the early twentieth century, for example contained at least one apparently stone corbelled structure (RCAHMS 1928, no. 98). These middens have now entirely disappeared. Hints of other broadly Iron Age settlements are provided by the discoveries of two souterrains (Armit 1994, sites 10 and 11), though virtually nothing is known of their form, chronology or associations. This was, nonetheless, a well-populated landscape: in all aspects of their lives, familial, social, political, economic, and religious, the inhabitants at Cnip would have interacted with their close neighbours.

7.4.2 ARABLE AGRICULTURE

Despite the general lack of direct evidence from earlier wheelhouse excavations, the common occurrence of querns, both rotary and the earlier saddle varieties, suggests that arable agriculture was routinely practised. The analysis of the carbonized plant macrofossils from Cnip indicates a reliance on six-row hulled barley as the dominant crop. Indeed, barley is the only crop which can be proven to have been deliberately grown as the single caryopsis of emmer is insufficient to suggest the deliberate cultivation of wheat. Barley seems to have been harvested by uprooting, judging from the presence of culm nodes and bases, presumably to conserve as much of the straw as possible (Chapter 4).

The siting of so many wheelhouses on the machair probably relates, at least in part, to the amenability of these soils to arable agriculture, despite the problems they pose in terms of both drought and vulnerability to erosion. Unfortunately, as at Cnip, the light and highly mobile machair soils seldom preserve any dateable traces of Iron Age agriculture, in the forms of field systems or boundaries, and the settlements themselves characteristically survive as islands of preservation in landscapes otherwise deflated and episodically re-worked by wind and sea (Armit 1994). Indeed, the best chance for the recovery of contemporary fields and land divisions probably lies in the detailed exploration of the environs of upland wheelhouse settlements like those at Clettraval (Scott 1948) and Allasdale (Young 1952), although these are unlikely to be representative of the more common machair wheelhouse settlements.

The pollen analysis of the adjacent Loch na Beirgh catchment (Lomax 1997) suggests that the arable fields associated with Cnip would have focused on the light machair soils in the immediate environments of the settlement. If these light sandy soils were indeed farmed, then there must have been ongoing concern for the stabilization of the machair which, as in more recent times, would have been extremely vulnerable to erosion and redeposition which could be potentially devastating to the barley harvest. This would have been the case particularly if uprooting was the favoured harvesting technique, since this would inevitably break the soil surface. Mike Church (infra) has suggested that the prevalence of wild turnip may have been a response to this problem, intended to stabilize the sandy machair soil, either as a fallow crop, or growing with the barley. This weed species has been identified in the Loch na Beirgh pollen profiles (Lomax 1997) and from the plant macrofossils at both Cnip and Loch na Beirgh.

As well as cultivation of the machair it is likely that further arable fields were located away from the coast. Weed species including slender St Johns Wort, as well as sedges, suggest either the presence of damp arable fields or ridged fields with damp ditches, both indicative of cultivation off the machair.

7.4.3 ANIMAL HUSBANDRY

The most important domestic animals at Cnip were cattle and sheep, with cattle playing a more important role than might have been predicted from a purely environmental viewpoint. Even by the standards of Iron Age Scotland, the Cnip cattle were extremely small, perhaps as a result of isolated breeding or, as McCormick suggests (see Section 4.2.2.), because of the poor quality of the available grazings in the area; essentially the peat-covered uplands which rise sharply from the machair.

A major area of recent debate has been the extent to which dairying was practised in the Atlantic Scottish Iron Age. For McCormick (see Section 4.2.2) the slaughter patterns of the cattle from Cnip seem to rule out a dairy-based economy and suggest that cattle were kept primarily for meat, with milk and secondary products like cheese being of much lesser importance. This view is supported by early documentary sources which suggest that primitive cattle would only yield milk if stimulated by the presence of their calves. Martin Martin, travelling in the Hebrides at the end of the seventeenth century, reports exactly this problem

(Martin Martin 1716). Following this argument, the culling of young calves, as seen at Cnip and other Hebridean Iron Age sites, would seem to be incompatible with dairying. Instead, these slaughter patterns may simply reflect the difficulties faced by the community in securing sufficient fodder to over-winter young cattle. Faced with this problem it may have been preferable simply to slaughter the young cattle as a ready source of meat at a time when other resources were scarce.

For others, the high proportion of calf bones in middens associated with Atlantic Scottish sites suggests exactly the opposite, ie that calves were slaughtered as part of a dairying strategy, freeing up milk for human consumption. This view finds some support in both documentary and ethnographic records. As McCormick has noted (see Section 4.2.2) in this volume, there are accounts from the Hebrides suggesting that cows could be encouraged to yield milk by the use of a calf-skin draped across a frame. Records from Ireland, dating to the seventeenth century, record practices such as 'cow-blowing', which involved blowing into the 'bearing place' of the cow to stimulate milk-flow. It is possible, therefore, that the community at Cnip, as elsewhere in the Hebrides, could have developed strategies to maintain milk production while slaughtering the great majority of their young calves for meat.

This is an important debate as the two divergent views reflect different perceptions of the sophistication and stability of Hebridean Iron Age economies. The dairying hypothesis reflects a well-established and stable pattern of husbandry producing storable secondary products, such as cheese, which could have formed an important part of the diet at times when other resources were scarce. By contrast, McCormick's view of calf slaughter as a mechanism to provide ready meat and relieve pressure on scarce fodder resources, is more suggestive of a marginal economy under chronic stress.

The reliance on cattle in preference to sheep may appear surprising given the environmental setting of Cnip. Indeed the unsuitability of the area for cattle husbandry is reflected in the poor condition of the Cnip cattle themselves and it seems probable that cultural rather than environmental factors favoured the raising of cattle. It is not uncommon ethnographically for cattle to be used as an indicator of wealth and status and some such mechanism in the Atlantic Scottish Iron Age may have encouraged communities to persevere with the raising of poor quality cattle when sheep may have been a more economically productive option. While sheep were roughly equal in numbers to cattle at Cnip they were far less significant as a food resource, although their wool would have been a significant asset. Unlike the scrawny local cattle, the Cnip sheep appear to have been broadly similar in stature to other Iron Age populations in Scotland.

Cook (nda) notes that the cattle from Loch na Beirgh are significantly larger than those at Cnip suggesting that they were better provided with winter fodder, although the slaughter pattern is still indicative of a cull of calves prior to the onset of winter. This might simply relate to the slightly later date of the elements of the Beirgh assemblage so far studied (third century AD onwards), but it might also relate to the status difference between the two sites, with the Beirgh inhabitants having access to a greater supply of winter fodder for their livestock.

Pigs were also kept at Cnip, as is shown by the presence of a neo-natal specimen, although probably in small numbers. It seems improbable that pigs would have been allowed to graze at will on the vulnerable machair soils, where they could have initiated serious soil erosion. The most likely scenario is that a small number of pigs was kept on or close to the settlement, scavenging scraps and waste and providing a ready meat source as and when required. Such a practice may explain the relative lack of bone debris in the midden deposits which formed on the ground surface around the settlement during Phase 3. Domesticated dogs were also present although there is no evidence that they were eaten. The presence of gnawed bones within the buildings suggests that dogs were allowed into the houses.

7.4.4 WILD RESOURCES

Red deer were another major source of food for the people of Cnip, although whether they can be truly classed as a wild resource in this context is debatable. It may be more appropriate to see the exploitation of red deer as another facet of animal husbandry practices. Although a marked contrast to the situation in the Uists, where they hardly feature in most faunal assemblages, the high proportion of red deer at Cnip does accord with both the mid–late first millennium AD assemblage from the nearby Loch na Bergh broch tower (Cook nda), and late first millennium BC material from Dun Bharabhat (Cook ndb). The implication is, therefore, that the management and

exploitation of red deer was an important feature of the economy of communities in the Bhaltos peninsula over a period of at least 1,000 years.

The proximity of the Bhaltos peninsula to extensive areas of upland in the west of Lewis may have made the locality more environmentally suited to the maintenance of red deer herds than the relatively crowded and intensively exploited Uists. However, the high proportion of red deer from Dun Mor Vaul on Tiree, despite the manifest unsuitability of that island for the co-existence of humans and wild deer herds, suggests that red deer exploitation in the Hebridean Iron Age was probably not dictated by environmental expediency. McCormick has suggested that the combined evidence from Cnip and Dun Mor Vaul indicates that certain communities in the Hebrides were treating red deer more or less as a domesticated animal, conserving and managing their herds through highly selective culling regimes.

Aside from red deer, the evidence for the exploitation of other wild land mammals is minimal. Indeed, only in Phase 3 is there some limited evidence for the exploitation of otter, perhaps hunted opportunistically for food and/or fur.

Despite the prevalence of whale bone from the various floor deposits at Cnip, it is unlikely that whales were actively hunted. More likely the inhabitants of Cnip exploited occasional strandings (cf Angus 1993 for modern data on strandings in the area). Meat would presumably have been stripped from the carcass in situ, so the bones retrieved from the settlement probably represent materials specifically retrieved for tool-making, structural use and fuel. Similar activities, albeit on a more convenient scale, probably apply to the exploitation of seals for meat, skins and oil. Other marine resources may have been more regularly available but did not necessarily occupy a major role in the diet of the site's inhabitants. Fishing seems to have been small-scale and shore-bound and perhaps undertaken preferentially at slack times within the yearly round. The hunting of sea-birds, particularly shag and great auk, may similarly have been conducted as seasonal ventures.

There is some evidence in the carbonized plant macrofossil assemblage that might suggest the limited consumption of wild plant species, such as brassicas and Bear berry. There is little scope in the Hebridean environment for wild plants to play any significant dietary role, although certain species may of course have been sought out for specific culinary or medicinal purposes.

7.4.5 CRAFT-WORKING

A range of crafts was practised at Cnip, although the quality of evidence is variable. There is clear evidence for both antler and mammal bone-working although, as we shall see below (Section 7.5.2), these seem to have been carried out in different areas. Other objects suggest activities such as leather and textile-working, with both spinning and weaving being carried out within the houses. Again the evidence for the zoning of activities will be discussed in more detail below. There is no conclusive evidence for either pottery manufacture or metal-working on the site itself, although both were clearly carried out somewhere within the vicinity of the settlement. The site of Cnip 2/3, only around 150m north-west along the beach from the settlement, seems to have been a specialist metal-working area where both iron- and bronze-working were practised at various times (Armit & Dunwell 1992). Unfortunately, the site cannot be precisely dated, although a broadly Iron Age date is probable and a period of overlap with Cnip cannot be ruled out. Pot-making was most likely carried out in the open air, close to the settlement, though there is no evidence for it beyond a few tools of bone and pumice that may have been employed in the finishing and decorating of vessels (but may equally have had other uses unrelated to pot-making). Although the archaeological evidence is lacking, it is likely that other crafts such as wood-working and basketry would also have been practised.

7.4.6 FUEL

A variety of fuel sources were available to the inhabitants of Cnip, as is indicated both from the soil analyses and the carbonized plant macrofossils. While peat was apparently the predominant fuel, turves, dung, crop processing waste, and seaweed (represented indirectly by parasites rather than directly by carbonized remains) also seem to have been used. It seems likely that wood was not commonly used as fuel, presumably being too valuable as a resource for building and tool manufacture. Driftwood would certainly have been available and small managed stands of woodland may have survived within the Loch Bharabhat catchment in the nearby higher ground.

The burning of seaweed is restricted to certain groups of deposits: in particular the very latest deposits within Structure 8 (Phase 3). In this case, the burning of seaweed may simply reflect a shortage of more efficient fuel sources as the settlement fell out of use, or

the opportunistic utilization of seaweed available from the beach, perhaps in the absence of a curated fuel source such as a peat or turf stack. A similar apparently expedient use of seaweed as a fuel is recorded at the burnt mound complex of Ceann nan Clachan in North Uist (Armit & Braby 2002).

7.4.7 ECONOMY, ENVIRONMENT AND IDEOLOGY

The evidence for local site economies in the Hebridean Iron Age does not appear to represent a strictly environmentally determined model. The environs of Cnip were peculiarly unsuited to the raising of cattle, yet cattle were present in far higher proportion than in the Uists. At Dun Mor Vaul, too, the apparent reliance on red deer flies in the face of local environmental conditions. While the husbandry of deer at Cnip, and probably also somewhat later at Loch na Beirgh, is more explicable, it is still puzzling why deer rather than sheep should have been accorded so much attention. Deer, apparently uniquely, occur occasionally as a motif on Hebridean decorated pottery (Ill 7.10) for example at the Kilpheder wheelhouse, in South Uist, and at Dun Borbaidh, on Coll (Lethbridge 1952, 189), and on a fine wooden handle from Dun Bharabhat close to Cnip itself (Harding & Dixon, fig 34); and in medieval times their hunting and consumption was to acquire connotations of high status. This may be a local reflection of a much more widespread phenomenon since deer are also the only animals represented on late La Tène painted pottery on the Continent (Ralston pers. comm.), and may have been hunted for sport in certain parts of Gaul during the final last centuries BC (eg Ménez 1996). It is possible, therefore, that the hunting and/or husbandry and consumption of red deer at monumental settlements like Cnip and Dun Mor Vaul may have been associated with a desire to demonstrate the status of the site's occupants. Similarly, cattle, even if rather tawdry specimens, may have had a status value not accorded to sheep, as was the case in the Early Christian period in Ireland.

7.4.8 SEASONAL PATTERNING AND MOVEMENT THROUGH THE LANDSCAPE

Cook (ndb) has suggested that the Pictish period inhabitants of Loch na Beirgh may have practised a system of transhumance, whereby cattle and sheep were removed to higher grazings inland from Bhaltos during the summer, and returned to the lower ground after the harvest to graze on the lower pastures and arable stubble where their manure would enrich the

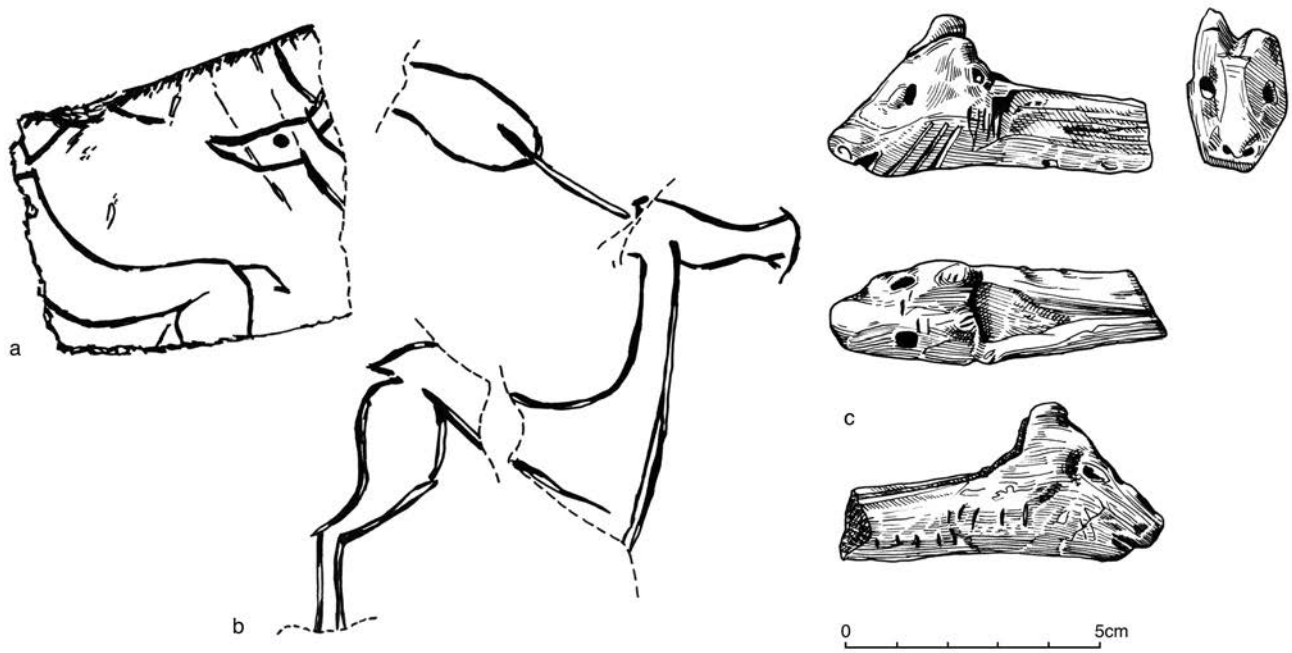

ILLUSTRATION 7.10
Comparative drawings of deer on pottery at: (a) Kilpheder, South Uist and (b) Dun Borbaidh, Coll (after Lethbridge 1952, 189), and on a wooden handle from Dun Bharabhat, Lewis (after Harding & Dixon 2000, fig 34).

soil for the next crop. A system of this kind would keep livestock away from the growing crops and make most efficient use of the limited grazings available, and it seems probable that the inhabitants of Cnip would have operated in a similar way. The time spent in the higher pastures would also have enabled the exploitation of red deer which, as Cook notes (ndb), may have articulated well with a mixed stocking regime. For example, red deer may, in some instances, preferentially graze areas previously grazed by cattle (Gordon 1988). Other summer tasks in the uplands may have included the cutting of peats and the gathering of wild plants such as Bear berry, which grows on cliff or upland bogs. Clearly the exploitation of the landscape extended well beyond the confines of the Bhaltos peninsula and would have involved the negotiation and maintenance of rights to resources such as peatlands, red deer herds and upland pastures. On the basis of more recent transhumant regimes in upland Scotland it seems unlikely that such a system would have been operated independently by a single household such as that occupying the Cnip wheelhouse. It is more likely that it would have operated at a wider community-based level, perhaps focused on the Bhaltos peninsula as a whole, or perhaps a still wider area. In terms of their economic and social lives, then, we should not see the Cnip household as self-contained or self-sufficient.

The seasonal splitting of the community into groups engaged in distinct tasks, such as tending stock in the uplands, or tending crops on and around the machair would have involved the division of the household for periods of time, perhaps along age or gender lines, and the mixing of elements of the household with their peers in the wider community. This temporary disaggregation of the household and close contact with neighbours may help us interpret two of the major themes in the study of wheelhouse architecture and inhabitation: the importance of the house in defining and structuring household identity, and the concern with the visual impact of household interiors on visitors in an increasingly socially integrated community.

7.5 LIFE AT CNIP

The various buildings at Cnip formed elements within a permanently occupied settlement which was the focus of domestic life over many generations. Although we have discussed the possibility that groups within the household may have spent time away from the settlement, for example in the uplands during the summer months, it seems highly probable, in view of its scale and permanence, that the wheelhouse complex was the centre of social life for the household, occupied through the summer by at least part of the community, and through the winter by the whole group.

The large concentrations of pottery sherds, mostly highly fragmented and often heavily sooted, suggest that cooking and eating were among the principal activities carried out within all of the domestic structures at Cnip. We can probably assume that sleeping and food storage were also functions of these buildings, although there is little direct evidence. It seems intuitively likely that people slept in some or all of the bays, the structure of which would inevitably have acted to define and segregate individuals, couples and groups within the household. For example, there may have been bays set aside for children or household dependants of low status, while others may have been reserved for the household heads or elders. We will examine the limited evidence for such segregation below (see Section 7.5.2). First, it is important to consider how the major archaeological deposits on the site might have formed, and how these issues of taphonomy might affect our interpretation.

7.5.1 FLOOR FORMATION AND THE ARCHAEOLOGY OF THE NON-ROUTINE

It is inevitably difficult to identify specific activity areas within the buildings at Cnip, and indeed within any prehistoric building, principally because of the uncertainties over the ways in which the various floor deposits may have formed. Indeed, the very existence of floor deposits in prehistoric buildings has increasingly come to be recognized as a problem. Until quite recently, layers of sediment confined to the interiors of Iron Age roundhouses, and variously peppered with pot sherds, lumps of bone and other fragmentary objects, were accepted fairly unproblematically as 'occupation' or 'floor' deposits. In other words, the build-up of debris which had accumulated during the occupation of the building, directly reflecting the nature and the distribution of activities carried out inside.

In recent years questions have begun to be asked as to how floor deposits actually form within an inhabited building. Different cultures obviously have radically different attitudes to the disposal of rubbish. Yet it still seems intuitively improbable that societies like those of Iron Age Britain, that put so much effort into the construction of elaborate and monumental homes, should have spent their domestic lives wading

around in their own waste (cf Matthews 1993). In monumental buildings like wheelhouses, where the interior was clearly intended to create an impression of symmetry, height and space, these accumulations of floor deposits seem even less in keeping. Yet how else are we to explain the artefact-rich sediments that repeatedly turn up in the roundhouses of Atlantic Scotland?

If we accept that Iron Age roundhouses would generally have been kept reasonably clean and free from any substantial build-up of domestic waste, at least during their initial period of use, those 'floor' deposits which do survive might best be interpreted as 'terminal' deposits, ie debris which accumulated or was deposited on the floor of the house shortly before, during, or even after, the abandonment of the building. We might expect that this sort of material will, generally speaking, fall into one or more of the following categories:

1. material deposited when the house is in terminal decline, and thus when the activities carried out inside it, or the status of the occupants, may be unrepresentative of the period of its construction and primary use.
2. a succession of deposits built up through ad hoc temporary re-use of the building following abandonment.
3. the remnants of midden debris dumped in the building following abandonment.
4. material deliberately deposited to mark the abandonment or 'death' of the building.

Only in exceptional circumstances should we expect that genuine 'floor' deposits, directly representative of the activities carried out in the house, will be preserved in situ. This might happen, for example, when a building is abandoned or destroyed unexpectedly; perhaps by fire, through violence, or the sudden death of the inhabitants.

Structure 4 at Cnip provides a clear picture of what we might expect to have been the 'normal' treatment of floor deposits on a settlement of this kind, ie truncation. The earliest coherent floor plan recovered from Structure 4 is shown on Ill 2.28b. It comprises a central hearth and areas of ash deposit which survive only within slight depressions in the natural sand floor. These deposits seem to have been 'skimmed off' horizontally at that level, but even underneath these truncated deposits there were earlier, even more truncated deposits (Ill 2.28a). These comprise just a few fragments of an even earlier hearth, and a small number of ash deposits again surviving in hollows. It is impossible to say if these features were associated with each other, as parts of a primary floor, or if they represent a palimpsest of fortuitously surviving deposits from any number of floors which have otherwise been entirely removed. Indeed, such truncation of surfaces is typical of the sequence at Cnip and it seems clear that, as might be expected, the removal of domestic waste from the floors of buildings was routine. Rubbish was not simply allowed to accumulate for the benefit of future excavators.

This, however, is not the whole picture. Following the disuse of the second hearth in Structure 4, a new floor was apparently deliberately laid, some 0.15m thick, sealing all of the earlier deposits (Ill 2.28c) and containing an entirely new hearth built towards the rear of the building. Ill 2.31 shows the earlier hearth (not the very earliest one), the laid floor above it, and the later hearth. So why was it decided to insert this secondary floor, particularly in a low-walled building where vertical space was already at a premium, and where the routine practice seems to have been to clear out and truncate earlier floors to re-expose the natural sand below?

Indeed throughout the occupation of the Cnip wheelhouse complex, two contrasting practices can be defined:

1. the routine cleaning-out and consequent truncation of floors which can, by definition, be inferred only from those instances where it was imperfectly achieved

and

2. the periodic burial and sealing of floors which accounts for the vast majority of the surviving deposits.

This same phenomenon can be discerned at other wheelhouse sites such as Sollas, in North Uist, where the clean sand lenses, originally interpreted as windblown sand, appear instead to be deliberately laid floors, sealing earlier activity (Armit 1996, 145–8). The same pattern may be inferred at A' Cheardach Bheag, in South Uist, where Fairhurst describes lenses of clean sand at various levels within the bays of the wheelhouse (Fairhurst 1971, 74). The laying of new floors, and the consequent burial of old floor deposits, therefore, marks a break from the routine maintenance

of the buildings. So what factors might have given rise to these non-routine events? As is so often the case, we can consider both functional and ritual/symbolic explanations.

A functionalist explanation might suggest that the laying of a new floor, eg of clean sand, might be a reasonably effective way to cover up and neutralize the noxious filth that would otherwise have to be carted out of the house in buckets. However, it is not at all clear that carrying sand into the building would be any less labour intensive than carrying waste out, particularly when that very waste would have been a valuable source of soil enrichment in the unstable machair fields.

Another possible explanation is that the periodic burial of old floors was a symbolic or ritual act. The settlement sequence at Cnip is, as will be discussed below, punctuated by unambiguously ritual deposits, principally relating to the foundation and abandonment of buildings, and often involving human and animal remains. In each case, the deposits can be interpreted as marking events in the life of the household by the careful placing of significant deposits. It could be argued that the laying of new floors (and, perhaps more importantly, the burial of old floors) played a similar role in marking the passage of time within the settlement. Burying, rather than removing, earlier floor deposits, particularly when these form a potentially valuable economic resource, suggests both a degree of reverence, and a mark of closure. It suggests a desire to mark the passing of time by the incorporation of material relating to the past (albeit presumably the very recent past) within the domestic environment.

This interpretation is given some support by the treatment afforded to the small cell, Structure 3, leading off from Wheelhouse 1. During Phase 2 the perfectly sound paved floor within Structure 3 was overlaid with a near-identical secondary paving, within a structure where the internal space was already extremely cramped. It is hard to imagine any functional reason for this like-for-like replacement, and it seems more in keeping in the context of a symbolic or ritual interpretation, particularly in view of the more clearly ritualistic foundation deposits associated with this structure (see Section 7.5.3).

The most obvious interpretation might be that these events mark the deaths of individuals within the household. Seen in this light, they might perhaps represent a rare visible trace of otherwise fugitive Iron Age funerary rites. The recurrence of re-flooring episodes at Cnip, set against the radiocarbon chronology for the site, would allow their interpretation as generational events. Other non-routine events which may have proved significant or traumatic in the life of the community may have included failed harvests, diseased livestock, prolonged bad weather, episodes of warfare, or perhaps specific 'bad' or unpropitious deaths. Any such event might have precipitated ritual acts of closure.

7.5.2 ZONING OF ACTIVITIES

Despite the non-routine nature of these acts of closure, there is nothing to suggest that the floor deposits thus sealed were anything other than the accumulation of debris discarded or lost during the normal domestic occupation of the houses. Much of the make-up of the surviving floor deposits appears to reflect the discard, spread and trampling of hearth debris, and the decay in situ of organic floor coverings. There is clearly a danger, therefore, that some of the artefactual material within these deposits will have been re-deposited, even if only marginally: for example, sherds from a pot broken on the hearth may have been swept out along with the ash to form part of the central area floor deposit. Nonetheless it has been possible to identify broad scale patterns of difference between the various spatial zones, both between buildings and within them.

Food was apparently consumed in most, if not all, excavated parts of the settlement, given the widespread occurrence of animal bone debris and pot-sherds, although it is unclear whether the grinding of grain for domestic consumption was carried out within the house, as all five rotary quern fragments were found in secondary contexts (see Section 7.5.4). It is also difficult to separate the evidence for food preparation from that of consumption, particularly since the same pottery vessels may have been used for storage, cooking and serving.

There is clear evidence for the 'vertical' zoning of pottery in that the amount of pottery being deposited within the floor deposits declines sharply through time. Phase 3, with an estimated span of around 150 years has a minimum representation of 144 vessels, while the estimated 100 year span of Phase 2 saw the deposition of some 1494 vessels. Despite the uncertainties of taphonomy and the rather greater volume of deposits associated with Phase 2, this is a startling contrast and must reflect real differences in the consumption of ceramics through the generations.

When considered alongside the narrowing of the decorative and morphological range of pottery in Phase 3 it suggests that the use of pottery for the preparation and serving of food, and the time and skill devoted to its production, were in decline.

The volume of ceramics consumed within Phase 2 merits some comment in its own right. A crude calculation of the number of vessels represented against the estimated duration of the occupation suggests that fragments of around 15 vessels were deposited each year (rather more than one per month). This, however, takes no account of the general regime of floor clearance outlined above which must presumably have removed all traces of the great majority of pottery vessels broken within the house. The overall quantity of pottery recovered from Cnip is very large given that it was generated by a single household, albeit over some 250 years. The 84 kg of recovered pottery can be compared, for example, with the 34 kg of Early Iron Age pottery from the much larger, multi-household, enclosed settlement at Winnall Down, Hampshire (figures from Hill 1995, 129).

Ethnoarchaeological studies drawn from a wide range of societies provide an indication of the amounts of pottery and the use-life of individual pots present in households of various types (Mills 1989). In societies where large quantities of pottery are used on a daily basis, such as among the Fulani of West Africa, mean numbers of vessels in use in any one household at any one time range up to around 21 (ibid, 138). For other ceramic-using societies, the figures can of course be much lower (as low as five in Mill's study). The same studies show that the use-life of individual vessels varies a good deal (eg cooking pots last less time than storage pots), but mean use-lives can nonetheless be calculated. These calculations show that, in the societies studied, vessels tend to last for around four years on average, but mean use-lives range from as little as nine months to as much as nine years.

Drawing on these figures J D Hill has shown that a hypothetical society with the largest number of vessels in use, who used those pots for the shortest time, would break and discard around 22 vessels per year (Hill 1995, 128–9). At Cnip, for Phase 2, as we have seen, we seem to have physical evidence for the breakage and discard of around 15 vessels per year, with clear indications that these represent only a fraction of the vessels originally in use. The potential volume of 'missing' pottery is impossible to estimate but it does appear nonetheless that the inhabitants of Cnip during Phase 2 were using a substantial number of pots at any given time, and were breaking and discarding them at a substantially greater rate than most societies documented in Mills' ethnographic study (closer perhaps to the Mayan households also documented by Mills but left aside by Hill as potentially misleading for a consideration of British Iron Age societies). The purpose of these wide-ranging comparisons is not to suggest any specific linkages but simply to highlight the scale of ceramic consumption and deposition at Cnip.

The large scale of pottery breakage at Cnip seems unlikely to be simply the result of congenital domestic clumsiness. If nothing else, it signals that large numbers of pottery vessels were present within the wheelhouse throughout its use. Pottery production must have been a regular and important activity. It is also possible that at least some pottery vessels were deliberately broken in certain social contexts, or were made for (and broken at the conclusion of) specific occasions. This is probably not unique to Cnip: settlements in Atlantic Scotland generally, but the Western Isles in particular, tend to produce very substantial assemblages of pottery. It is seldom possible, however, to be so specific regarding the duration of the occupation and thus to establish the rate of breakage and discard. The question of ceramic consumption patterns and their change through time clearly merits more discussion than is possible here and would benefit from a thorough review of previously excavated assemblages.

There are indications that certain activities were restricted to certain parts of the settlement. Metal-working, for example, seems to have been carried out at some distance from the houses (understandably given the unpleasant and potentially dangerous conditions involved). Metal-working debris occurs mainly in structural contexts, the largest concentrations being found in the wall-packing material of Wheelhouse 1 (Phase 1), the packing of Structure 4 (Phase 2) and of Structure 8 (Phase 3). It may of course have been deliberately sourced from elsewhere for this purpose, but it is perhaps more likely that it derives from metal-working somewhere in the vicinity of the settlement, perhaps at the nearby metal-working site of Cnip 2/3 (Armit & Dunwell 1992).

More surprisingly, virtually the only evidence for mammal bone-working (other than whale bone) comes from two small waste pieces contained within deposits dumped in Structure 5 at the beginning of Phase 3. This material is presumably re-deposited but seemingly from somewhere other than the excavated houses, since it contains a quite distinct material

assemblage. It would appear, therefore, that mammal bone-working was carried out within the settlement but not within the houses. By contrast there is plentiful evidence for antler-working and the working of whale bone within Wheelhouse 1, suggesting that a distinction was made between the areas appropriate for working these various materials. Conceivably this distinction could relate to the 'wild' whale and deer, as against the 'cultural' domesticates, although even deer bone does not seem to have been worked within the houses.

Despite their presence within Wheelhouse 1 during Phase 2, even antler-working and whale bone-working debris are absent from the contemporary deposits in Structure 4 (Table 2.4). Indeed the general paucity of cultural material other than pottery within Structure 4 is striking. This distinction cannot be explained by differential degrees of clearing out of the structures, as the pottery assemblages of the two are comparable. It would appear, therefore, that while certain craft activities were carried out within the wheelhouse during Phase 2, the neighbouring Structure 4 was not used in this way.

The differences between Structure 4 and Wheelhouse 1 are particularly striking given the detailed similarities in patterns of movement within these two buildings, and parallels in the construction and modifications of their hearths (see Sections 2.3.1 and 2.4.3). These distinctions might reflect a division of the household, based perhaps on age, rank or gender, with Wheelhouse 1 perhaps housing the lower status members of the household. Thus Structure 4 might have been an area where food was consumed by certain elements of the household, with food preparation and other tasks restricted to Wheelhouse 1. Alternatively I have already discussed Anna Ritchie's suggestion that Structure 4 may have served as a form of 'oracle-shrine' (Ritchie 2003, 6–7).

7.5.3 STRUCTURED DEPOSITION AND THE TREATMENT OF HUMAN REMAINS

While the evidence for zoning may be taken to be a relatively unconscious reflection of the spatial distribution of domestic activities, there are a number of deposits which have clearly been deliberately assembled and buried in carefully chosen locations. These occur under floors, behind walls, within abandoned structures, and in several cases appear to mark liminal spaces (eg entrances) or times (eg the construction or abandonment of a building).

Liminality of both space and time is reflected in particular by two deposits associated with the construction of Structure 3, the small, low cell which led off from Bay 2 of Wheelhouse 1. Prior to construction, a hollow had been scooped in the underlying sand, within the infill of the unfinished Wheelhouse 2. Into this hollow was placed the upper part of a human skull (Ill 2.26) and two fragments of pottery. At the threshold between Structure 3 and Wheelhouse 1 a second pit was dug into which were placed the skulls of two sheep along with the butchered bones of one of them. A bone beater tip (SF172, see Section 3.5.3.3, Ill 3.21b), probably a weaving implement, seems also to have been a deliberately selected item in this deposit. The first deposit suggests a desire to mark the closure of the abandoned Wheelhouse 2 and/or the foundation of the new Structure 3. It marks a particular time or event in the life of the settlement. The threshold deposit need not have been dug at the same time, although this cannot be ruled out. Certainly, the puzzling re-flooring episode in the same structure, (see Section 7.5.1) demonstrates that continuing attention was devoted to this small structure throughout the course of its use. A deposit of antler-working debris (SF66, SF69a-d, SF69f. SF52, and SF291, see Section 3.5.2.1) and a stone disc or pot-lid (SF087, see Section 3.6.4, Ill 3.25g) in the make-up of the primary floor of the rectilinear Structure 8 show the continuation of such depositional practices into the later stages of the site's use.

The human skull fragment within the pit below Structure 3 raises wider issues concerning the treatment and curation of human remains. The absence of conventional or routine human burial across most of Iron Age Britain has tended to suggest that the prevalent rite for disposal of the dead was excarnation (eg Carr and Knüsel 1997), and the arguments apply in Atlantic Scotland as much as in southern England, where most work on this issue has been done. Against this background, however, we see the periodic occurrence of human remains on settlement sites, suggesting either that bodies or body parts were periodically retrieved from excarnation areas for the performance of secondary rites, or that certain individuals were selectively denied 'normal' funerary treatment (Armit & Ginn forthcoming).

The human bone assemblage from Cnip, although small, is far from random in its composition. Three of the four recovered pieces are cranial fragments, and the only non-skull fragment (HB04, see Section 3.4) part of a tibia, was also the only piece to derive

from the external midden rather than the houses themselves. The three cranial fragments were all from adults, and the only one for which the sex could be identified was male. Two had been deliberately modified prior to deposition, one drilled apparently to enable suspension.

The preponderance of skull fragments at Cnip recalls the composition of the Early Iron Age human bone assemblage at All Cannings Cross in Wiltshire (Cunnington 1923, 40), where the assemblage was restricted to 32 skull fragments from at least 9–12 individuals (Keith 1923, 41–2). At least four of the fragments had been modified, one to create a perforated roundel, perhaps worn as a pendant or charm (Cunnington 1923, plate 26). Whimster cites similar 'cranial amulets' from Iron Age sites at Glastonbury in Somerset, and Handley in Dorset, as well as eight northern French examples from the Marne region (1981, 185). The drilled fragment from Cnip could have belonged to a similar, though larger roundel, although it could equally have come from a complete suspended head or skull. Supporting the latter interpretation is the occurrence of a cranial vault from Hillhead broch in Caithness which has been perforated with three holes, presumably to enable suspension, and a similar triple-perforated skull from Hunsbury in Northamptonshire (Parry 1930, 96, plates IIIb and IVa); a further skull with a single perforation was found, along with numerous other human bones, under one of the ramparts of the promontory fort at Burghead in Moray (MacDonald 1862, 358). In each example the skull modifications were apparently made post mortem.

Although the cut-marks visible on these fragments do not seem to represent trepanation in the commonly understood sense, of a medico-religious operation performed on a living individual, they nonetheless fall within the general category of trepanation defined in a recent overview (Roberts & McKinley 2003). This recent study lists only six Iron Age sites in Britain with evidence for trepanation: Cnip, Hillhead and Burghead form a distinct northern Scottish group while the remainder, including the Hunsbury examples, are concentrated in central southern England (Ill 7.11). Aside from the quoted examples, the remainder seem to display larger trepanations more likely to represent medical interventions. Nonetheless, the example at Watchfield, in Oxfordshire, was deposited as a de-fleshed skull in a pit accompanied by a pig skull in a rite resonant of the depositional practices in Iron Age Atlantic Scotland. Fragments of skull, although apparently unmodified, also dominate the human bone assemblage from the Atlantic roundhouse of Dun Vulan in South Uist and have been radiocarbon dated to the same span of occupation as is represented at Cnip (Mulville et al 2003, 23–4).

While far from conclusive, the small sample of human bone from Cnip (and indeed from Hillhead, Burghead and Hunsbury) is at least consistent with the retention of adult male heads for curation and/or display; a familiar 'Celtic' motif, recorded in contemporary Iron Age communities in Gaul, most famously in the works of Posidonius and his successors, notably Diodorus Siculus and Strabo (Tierney 1960). Cunnington, for example, had no hesitation in invoking classical literary sources to provide a context for the All Cannings Cross material (1923, 40–1), although the evidence for the treatment of skulls there is less immediately suggestive of display than at sites like Hillhead and Hunsbury.

The communities of Atlantic Scotland were, nonetheless, very different to their semi-urbanized contemporaries in southern Gaul where this 'cult of the head' is most clearly manifested in sanctuary sites such as Entremont and Roquepertuse (eg Arcelin et al 1992; André & Charrière 1998; Rapin 2003). Indeed, there is nothing especially 'Celtic' about an interest in heads, as even the briefest review of the ethnographic literature shows (eg Hoskins 1996; Armit 2006). Even within Iron Age Europe, the taking and display of heads as a by-product of warfare is known well beyond the supposed extent of Celtic territory: most famously in the depiction of human heads displayed on stakes at a Dacian town depicted on Trajan's column in Rome. Rather than relying upon attractive but potentially misleading 'Celtic' models from the Continent, we need to consider the interest in heads among Atlantic Scottish communities within their own archaeological context (Armit & Ginn forthcoming).

An alternative to the possibility of hostile head-taking is the reverential retention of human bodies or body parts from within the community. Parker Pearson has recently recovered what he interprets as evidence for preserved human bodies (in effect mummies, preserved perhaps by drying), curated over many generations prior to eventual deposition, at the Later Bronze Age settlement of Cladh Hallan in South Uist (Parker Pearson et al 2002). While it does not appear that these Cladh Hallan bodies showed the degree of modification seen in the worked skull fragments from Cnip, there are nonetheless resonances with the foundation skull deposit under Structure 3. This

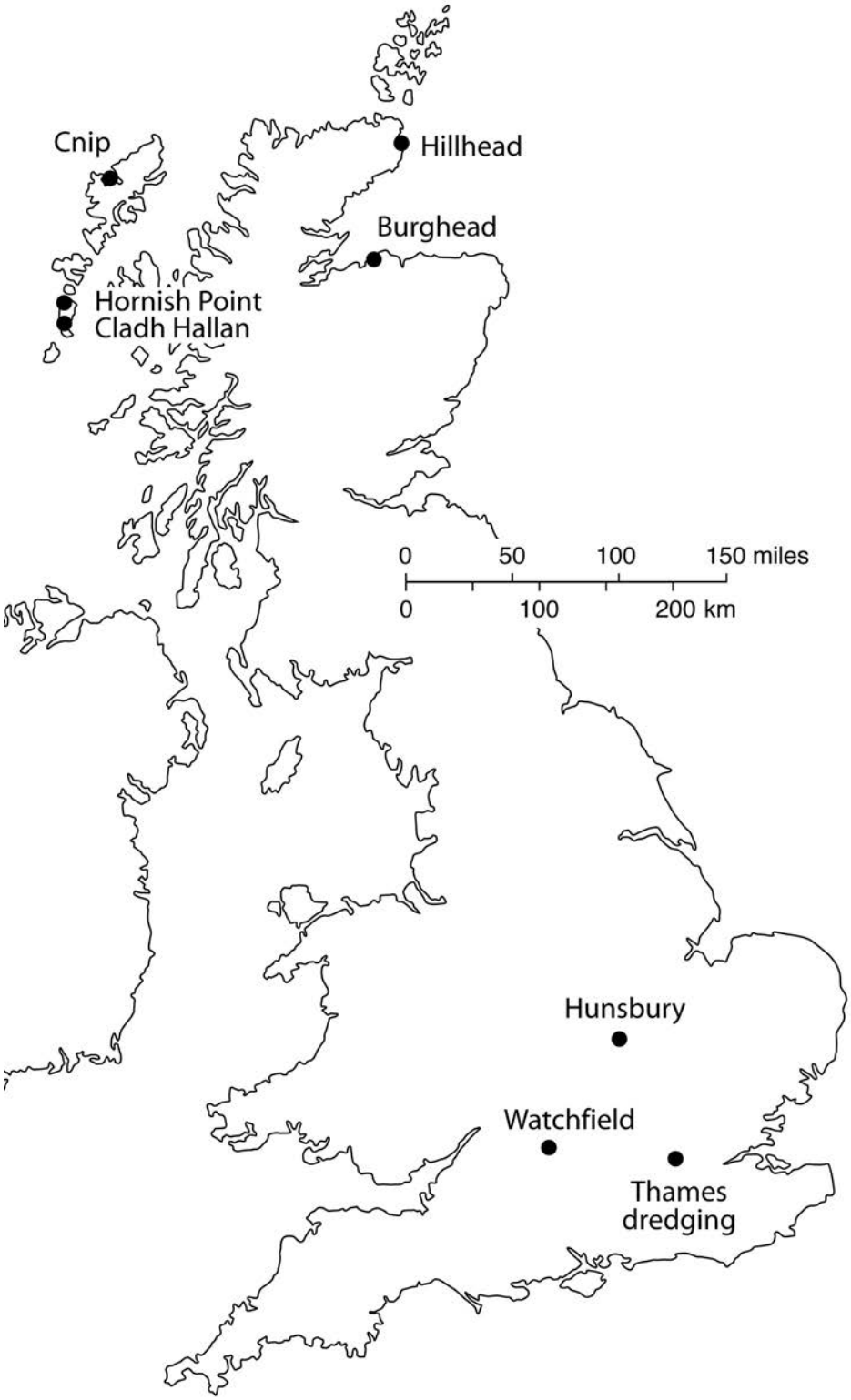

ILLUSTRATION 7.11
Distribution of Iron Age sites in Britain with evidence for trepanation, also indicating the location of Hebridean sites with evidence for obviously curated remains (data from Roberts and McKinley 2003, with additions).

deposit does not appear to represent someone killed for the occasion or even freshly dead. The skull, belonging to a middle-aged male, was partial and found with a small fragment of animal bone (or just possibly human but from another skull) either chosen because of its resemblance to the human skull, or else mistaken for a genuine part of it. The rite appears consistent with the disposal of a body part which had been curated for some time prior to deposition. Interestingly, this skull showed no sign of modification or suspension and may indicate the co-existence of at least two separate rites involving human skulls or heads.

Human remains are not a particularly common occurrence on previously excavated wheelhouse sites, but a striking example does come from Hornish Point in South Uist; a radially partitioned structure clearly related to the wheelhouse tradition (Barber et al 1989). The floor of this building contained a series of four pits, each holding parts of a boy aged around 12 years (ibid). The boy had been dismembered after death when decomposition had already begun to take effect. The human remains were accompanied by the butchered bones of young cattle and sheep, suggesting that an episode of feasting had occurred in association with this unusual burial (although the human bones were not subjected to butchering). It seems most likely from the context of the pits that these rites were intended as an act of propitiation for the building. As at Cnip, the human remains used for this ritual were not fresh. The excavator has suggested that the boy may have died at sea and subsequently washed up on the beach: perhaps as a stranger or having suffered an inauspicious death he was thus disposed of in this unusual way. Perhaps more likely, given the incorporation of the body within the house, he was a member of the local community whose death had occurred, whether by accident or design, some time prior to the completion of the building.

Although lacking human remains, the wheelhouse at Sollas in North Uist contained around 150 pits dug into its soft sand floor (Ill 7.12), of which around 60 contained animal deposits, including cattle, sheep and pig, both burnt and unburnt (Campbell 1991). Three, for example, contained entire sheep, recalling the Structure 3 threshold pit at Cnip, described above. Other pits lacked animal remains but contained other sorts of deposit, for example a crucible covered with mica plates. Over another was laid the perforated upper stone of a rotary quern, which Campbell has argued may have allowed the pouring of libations into the pit below, or at least some form of communication with the ritual world (ibid, 147). Other, apparently empty pits, may conceivably have contained more perishable materials, such as dairy or plant foods. Although interpreted in the published report as foundation deposits, set in place before the occupation of the structure, it is perhaps more likely that many of these inter-cutting pits were dug at various times during the primary occupation of the building (Armit 1996, 154–7). Other wheelhouses contained similarly structured deposits, placed during the period of primary occupation, including a kerb of red deer jawbones and a cache of 32 ox teeth at A' Cheardach Bheag in South Uist (Fairhurst 1971).

It is unfortunate that there was no opportunity to examine the primary floor of Wheelhouse 1 at Cnip to establish the presence or otherwise of pit deposits. There were, however, a series of clearly structured deposits in other locations, aside from those already discussed. Most important was a series of deposits placed within the walls of the Wheelhouse 2 during construction. Only a short stretch of walling to the south of the entrance was dismantled during the final days of the excavation, yet a series of discrete deposits was found including a complete pottery vessel, the head of a great auk, and an articulated portion of cattle vertebrae. This strongly suggests a series of acts relating to propitiation of the building during its construction, paralleling the burial of the boy and accompanying animals at Hornish Point and the earliest pits at Sollas. It is an intriguing possibility that similar wall deposits may exist unnoticed at previously excavated wheelhouse sites, since it is not clear from the published literature that any have previously been dismantled in this way.

The identification of these sorts of deposit as ritual or religious in intent is no longer particularly controversial, although one could question the central significance they are sometimes accorded in interpretations of the British Iron Age. For example, a recent book on Hebridean blackhouses noted that 'pieces of iron, old horse shoes, and other metal objects are added to the core material [of blackhouse walls] for luck' (Walker & MacGregor 1996, 4). While this might be an interesting observation of the behaviour of rural house-builders in the nineteenth-century Highlands, it cannot be claimed as a particularly useful starting point for understanding their social or religious life on any wider level. The present-day deposition of coins into more or less any pond, well or pool is a similar example of what we might term the 'holy well' syndrome of structured deposition. We

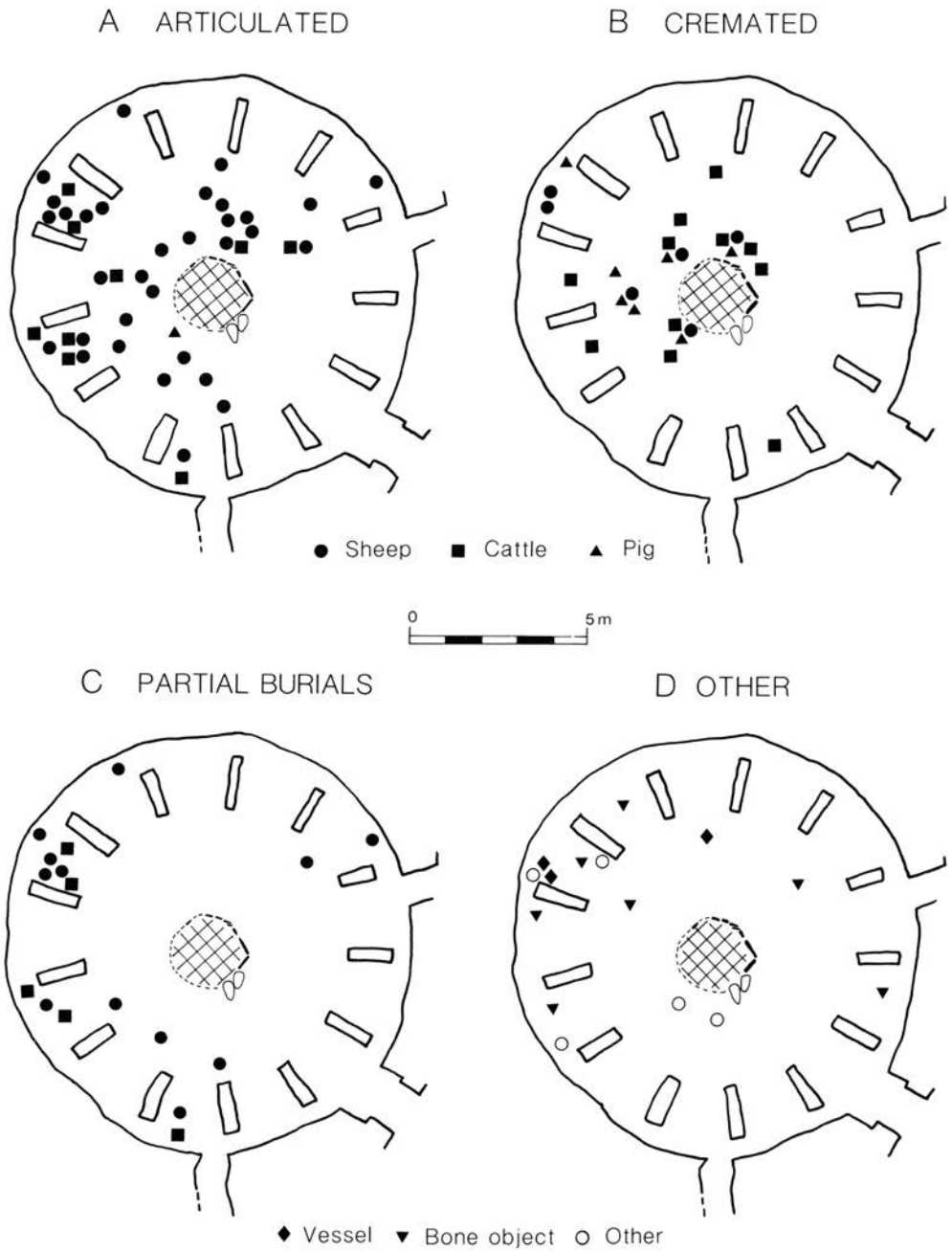

ILLUSTRATION 7.12
The pit deposits at Sollas, North Uist (from Campbell 1991).

need to be wary, then, of any assumption that such acts had greater significance in the Iron Age than in more recent times. What most forcibly distinguishes Iron Age depositional practice of course is the periodic incorporation of human remains into such deposits, suggesting that these acts may indeed have been of central importance within the lives of those present.

7.5.4 UNSTRUCTURED DEPOSITION? QUESTIONING THE QUERNS

A final aspect of structured deposition of relevance here is the treatment of querns. All five rotary quern fragments recovered from Cnip were found in secondary contexts, either built into walls, paving, or in one case the lining of a pit. It has become

commonplace to view such occurrences as deliberate, ritually charged deposits, connected presumably with agricultural symbolism, and in some cases this interpretation seems highly probable (cf Hingley 1992, 32; Armit 1999, 584). Unfortunately, however, broken rotary querns lying around a settlement, even if they had no ritual significance whatever, would most likely have been used opportunistically in the patching and repair of drystone structures, for paving, and for the construction of internal stone furniture. Thus to have any confidence in the attribution of a symbolic dimension to their deposition we have to be able to demonstrate either that the patterning of querns on the site differs from that which would be expected by the sceptical functionalist, or else that usable (and thus presumably valuable) querns had been deliberately taken out of commission.

There is nothing in the locations of the three querns built into the walls at Cnip that immediately marks them out as special or unduly liminal locations (since almost any part of a wheelhouse with the possible exception of the piers and central area could be considered as liminal to some extent). Each relates to a different phase of occupation: one was built into the middle of the north wall of Structure 8 in Phase 3; another was built into Structure 7, the small cell that replaced Structure 4 in the latter part of Phase 2; and the other formed part of the small entrance passage cell of Wheelhouse 2 in Phase 1. There may of course be numerous other quern fragments unrecognized within the wheelhouse walls which were not dismantled during excavation. Both the wheelhouse paving and the pit lining were put in place during the Phase 2 occupation, and neither need relate to major building works on the site (indeed the same could be said of Structure 7 which seems to represent a small-scale building episode confined to the entrance passage). One could argue, therefore, that these were construction episodes where there was a greater than usual chance of the opportunistic re-use of stone which happened to be lying around the settlement. In large-scale building episodes, by contrast, there is more likely to have been a concerted effort to import quantities of suitable building stone from elsewhere. Of the five quernstones recovered from the site, three had clearly been broken before being incorporated into the walls, while another had been badly damaged. The fifth was a lower stone and may of course have originally belonged with an upper stone which had itself been broken. There is certainly nothing to suggest that pristine or even serviceable querns were deliberately 'sacrificed' during the various building episodes.

If one wanted to pursue the symbolic line on this issue, one could suggest that the pit was of ritual significance in itself, that the paving represented a liminal zone between inside and outside, and that the two entrance locations (the wheelhouse 2 entrance cell and Structure 7), were similarly liminal areas between the 'domestic' interior and 'wild' outer world. One might be struggling somewhat with the fragment in the Structure 8 wall, but could perhaps dismiss it as a later chance occurrence. While we should remain open to the possibility that these querns are of ritual significance, there is nothing in either the contexts or condition of the Cnip quern fragments that would not equally have been predicted by the sceptical functionalist viewpoint.

7.5.5 IRON AGE COSMOLOGIES

One focus of recent work on the British Iron Age has been the interpretation of the cosmological principles by which past societies understood and structured their lives (Haselgrove et al 2001, 8). Although the Iron Age in Britain lacks evidence for specialized religious buildings, structured deposition of the type described above occurs widely on settlement sites (eg Hill 1995). Several studies have considered the ways in which cosmological principles may be reflected in domestic architecture, in patterns of daily living, and through periodic acts of structured deposition in and around the home (eg Parker Pearson 1996a, 1996b; Fitzpatrick 1997; Oswald 1997). Although this work focused initially on central southern England, the unusually high quality of site preservation in Atlantic Scotland, and particularly the survival of human and animal bone deposits in the machair environment, has increasingly brought this region centre stage. The recent report on the excavations of Dun Vulan in South Uist, for example, contains a section headed 'the broch as cosmological encoder' (Parker Pearson & Sharples 1999, 353), although it is on wheelhouses that the most detailed cosmological arguments have been based.

Following Parker Pearson and Sharples' discussion (1999, 16–21) the following principles have been suggested as most relevant to the structuring of life within Hebridean wheelhouses:

1. The importance of the movement of the sun in determining the orientation of roundhouses; leading to a predominance of 'east-facers' which respect the equinoctial sunrise.

2. The importance of the sun's daily path in structuring domestic activities; ie 'day-time' activities such as food preparation, cooking and craft-working in the south, and 'night-time' activities such as sleeping in the north.
3. The importance of the hearth as both the real and symbolic centre of the house, around which other activities are ordered in a series of concentric zones.
4. The importance of structured deposition in reflecting cosmological principles, through the specific composition and location of deposits.

The contribution of the Cnip excavations to this debate is limited since it was not possible to excavate the primary floor of the main wheelhouse, nor was it possible to excavate all of the bays. There are some points, however, where the work at Cnip has provided additional insights. Both wheelhouses at Cnip, for example, face west rather than east. Parker Pearson and Sharples recognize this and list Cnip along with Allasdale, Barra and Clettraval, North Uist, as exceptions to their general rule (1999, 17). They attempt to account for these exceptions by suggesting that the inhabitants of Cnip may have been different because of 'their status as specialist metalworkers' (ibid). This interpretation perhaps places undue weight on the undated (though putatively Iron Age) metal-working area along the beach at Cnip 2/3 (Armit & Dunwell 1992): there is nothing from the excavations at the wheelhouse complex itself to suggest that the inhabitants were specialist metalworkers. The problem becomes greater when we add further exceptions; the west-facing wheelhouses on Grimsay and Eilean Maleit, North Uist (Armit 1998), and the north-facing Bruach Ban in South Uist (Scott pers. comm.) bringing the total to seven (counting both Cnip examples separately). Overall, the predominance is still for an east to southeast direction (11 examples) but there is a greater degree of variation than a strict adherence to the cosmological model might suggest (Ill 7.13). The variation is not random and suggests that certain principles did underlie the decision to orientate wheelhouses, even if we might struggle to establish what these principles might have been. It is worth re-stating the case that Oswald (1997) makes regarding the inadequacy of earlier functional arguments for house orientation. These usually focus on the issues of prevailing wind direction and the admittance of light to the building. The latter is patently irrelevant in the context of wheelhouse architecture where the semi-subterranean setting and lengthy entrance passages on most structures would prevent light reaching the interior whichever way it faced. The reconstructed Late Iron Age house at Bostadh is instructive in this respect as, even without an expanded entrance passage, the interior remains in near-complete darkness on even the brightest days. The issue of wind direction is harder to deal with in a Hebridean context where micro-topographical factors may have a greater than usual role, but it has been shown to be insufficient as an explanation for the general distribution of house orientations across Britain as a whole (ibid).

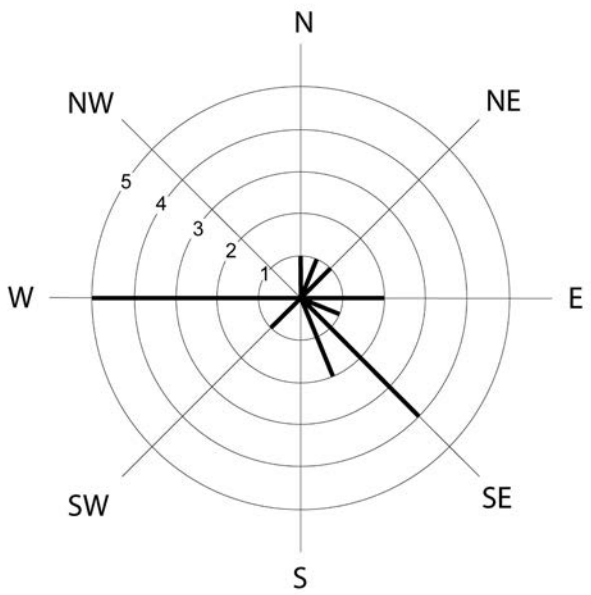

ILLUSTRATION 7.13
This diagram shows the entrance orientations of all Hebridean wheelhouses for which data is available.

Assessing the second proposition, regarding the split between a 'day-time' south and a 'night-time' north within the wheelhouse, is even more problematic. Following the cosmological model this divide should be reflected in the bias of deposition of such materials as pottery, animal waste and querns towards the south side of the structure. At Cnip the relevant data is largely unavailable, since the primary levels remained unexcavated. A second, equally vexing, problem concerns the way in which we interpret west-facing wheelhouses within this cosmological scheme. Parker Pearson and Sharples (1999, 17) suggest that these buildings represent conscious reversals of the 'normal' pattern and that their interiors may thus be arranged as

a mirror image of the expected pattern. Following this line they argue that movement within the wheelhouse at Cnip (see Ill 2.15), shown by the arrangement of stone furniture in Phase 2a, was channelled anti-sunwise (or anti-clockwise), reversing the pattern seen at 'east-facers' like Sollas an A'Cheardach Bheag (ibid). This seems a reasonable interpretation of the situation at these three sites, although it is worth mentioning that the relationship of the hearth to the entrance at A'Cheardach Mhor, another east-facing wheelhouse, but one not discussed by Parker Pearson and Sharples in this context, seems to dictate an anti-sunwise progression around the interior (Young 1959, fig. 2). Nonetheless, the floor layout from Phase 2a at Cnip certainly suggests an anti-sunwise pattern of access within the wheelhouse, as does the evidence from the contemporary floor of Structure 4. All of this would tend to suggest that the north side of the Cnip wheelhouse 'ought' to have been used for 'day-time' activities, while the south side, 'ought' to have been reserved primarily for sleeping.

The data relating to this is, as we have seen, limited, but we can at least compare the nature of the finds assemblages from the north Bays 1 and 2, and the south Bay 7 (though we have to double the numbers for the latter since only half was excavated). The results are mixed (Ill 2.22a and b) since the south bay falls somewhere between the two north bays in terms of the proportions of pottery present, although it does have a significantly higher degree of pottery fragmentation than the other excavated parts of the interior. All of the excavated bays exhibited a marked 'bowling' of deposits which has been interpreted as caused by compression, perhaps through repeated use for sleeping.

The third point in the cosmological model, that relating to the centrality of the hearth, applies to Cnip as to any other excavated wheelhouse. At least in Phase 2a, when Wheelhouse 1 was still maintained in more or less its original form, the hearth was both central and dominant, and was carefully built and kerbed. It is perhaps significant that it was not geometrically central, as we might expect if a cosmological plan was being rigidly adhered to, but was instead rather closer to the entrance than to the rear of the house. Nor did the excavated hearths display the 'horseshoe' form, with the open end aligned with the entrance, which has been suggested as both characteristic of wheelhouses and 'a microcosm of the house's structure' (Parker Pearson & Sharples 1999, 17). Indeed, it also lacked the waterworn pebble construction which Parker Pearson and Sharples identify as ubiquitous in wheelhouse hearths in the Hebrides (ibid, 17–18) although the second hearth in Phase 2a did include some waterworn pebbles as well as angular edge-set slabs. It seems intuitively probable, nonetheless, that the design of the wheelhouse and position of the hearth would have promoted a broadly concentric ordering of space.

Finally with regard to the cosmological model, we might expect that the pattern of structured deposition within the wheelhouse should reflect the cosmological principles around which the house was constructed and inhabited. Again the problem lies in the partial nature of the recovery; not enough walls were dismantled and not enough primary floor excavated to talk sensibly of patterning in this material. The contribution of the work at Cnip here lies in the realisation that the walls, as well as the floors, were considered as appropriate vessels for ritualized offerings; and that these offerings could be similar in composition to those found in under-floor pits at sites like Sollas.

7.6 WHY WERE WHEELHOUSES BUILT?

We looked in Chapter 5 at 'how' wheelhouses were built. Now it is important to consider 'why'. Wheelhouses have been found so far only in the Western Isles and Shetland. Their apparent absence from Orkney is all more remarkable given the long history of archaeological and antiquarian effort in those islands. During the last century or so BC and first couple of centuries AD, at the time when wheelhouses were being built in the Western Isles, settlement patterns in Orkney seem to have been increasingly dominated by nucleated broch villages like those at Gurness and Howe (Hedges 1987b; Smith 1994; Armit 2003, Chapter 5). Both regions thus demonstrate significant changes in settlement patterns over the same broad period, though each results in the emergence of quite different archaeological monuments. It can be argued that both developments reflect similar social processes characterized by a trend away from egalitarianism. Before examining this idea further we need to look at the nature of the settlement landscapes of the Hebrides towards the end of the first millennium BC.

7.6.1 BREAKING WITH THE PAST

Although the specific architectural form of the wheelhouse was restricted to a fairly brief span of a few centuries in the Hebrides (though probably much longer in Shetland), it belonged to a tradition

of radially partitioned domestic buildings with a much longer history. Similar spatial divisions can be seen, for example, in the Later Bronze Age structures at Jarlshof in Shetland (Hamilton 1956), and in Orcadian broch towers such as Gurness (Hedges 1987b) and Howe (Ballin Smith 1994). Oddly, however, there is little evidence for such spatial arrangements in the Hebridean Bronze or Early Iron Ages. Indeed, it is possible that the wheelhouse was adopted in the west as an 'exotic' architectural style having developed from the pre-existing vernacular traditions of the Northern Isles.

Whatever their origins, wheelhouses fulfilled essentially the same functions as Atlantic roundhouses in the west, serving as single-household settlements. Wheelhouses, however, differ from Atlantic roundhouses in a number of significant respects. These can be interpreted, to some extent, in terms of the degree to which the buildings are adapted to the natural environment of the Hebrides. The following structural contrasts can be drawn:

Atlantic Roundhouses	**Wheelhouses**
Long roofing spans	Short roofing spans
Heavy use of timber	Minimal use of timber
Poorly insulated	Well-insulated
Exposed	Sheltered

The reasons for the emergence and eventual disappearance of the Atlantic roundhouse tradition have been discussed exhaustively elsewhere (eg Armit 2003) and need not be rehearsed here. What is important for present purposes is that wheelhouse design and construction were better-adapted to the problems posed by high winds, low temperatures and the shortage of timber. From this rather limited, functional perspective, wheelhouses marked a return to a more energy and resource efficient form of construction, more akin to Neolithic and Bronze Age house forms, after the interlude of extravagant and ill-adapted architectural bombast represented by the Atlantic roundhouse tradition.

To explain the emergence of wheelhouse architecture in these functional terms, however, is inadequate. The adaptive qualities of wheelhouse architecture probably were important as one of a range of inter-linked factors which led to the adoption of this new architectural form. Yet wheelhouses were by no means simple, utilitarian buildings: they were monumental structures. But the monumentality of wheelhouses was directed entirely inwardly. As we have seen, the apex of the roof of Wheelhouse 1 at Cnip would have risen some 6m above the hearth, while the stone piers rose gracefully from their narrow foundations to create an extraordinary display of drystone virtuosity. Yet these impressive and imposing internal spaces could be appreciated only by the inhabitants and their guests. The imprint of most wheelhouses on the external landscape was virtually nil. In this sense, they presented no challenge to the territorial statements made by neighbouring Atlantic roundhouses. A second set of distinctions can, therefore, be proposed, which moves beyond the purely functional:

Atlantic Roundhouses	**Wheelhouses**
Prominent in landscape	Hidden in landscape
Outwardly monumental	Inwardly monumental
Limited defensive potential	No defensive potential

As has been suggested elsewhere (Armit 2005) these distinctions suggest that Atlantic roundhouses and wheelhouses embody rather different relationships between the household and the landscape and between neighbouring households. So how did these distinctions emerge? Despite uncertainties over chronology, it is tolerably certain that the pattern of settlement represented by wheelhouses is later than that represented by Atlantic roundhouses (Armit 1997). Clearly, however, occupation of certain Atlantic roundhouses, and particularly some of the most elaborate broch towers, continued through this subsequent period. The Loch na Beirgh broch tower is an obvious and immediate example. Indeed, I have suggested elsewhere, that the most important centres during the period of wheelhouse construction, may have been broch towers occupied by the most successful and influential households in the region (Armit 2005). The nature of these successive settlement patterns has been discussed in detail elsewhere (eg Armit 1992, 1997, 2002, 2005) but the following summary outlines some of their main characteristics.

The Atlantic roundhouse landscapes of the Western Isles date broadly to the Middle Iron Age, from around 400–100 BC. Throughout the islands, dense distributions of these monumental roundhouses dominate discrete parcels of land upon which they seem to imprint the territorial claims of their builders (Armit 2002). Studies in North Uist and Barra suggest that Atlantic roundhouses were the standard settlement type for land-holding households,

who probably formed the majority of the islands' population, although there may of course have been a landless element of the population whose existence has left little trace. There were certainly far too many Atlantic roundhouses to justify the assertion that they were (in any meaningful sense) elite residences.

The distribution of Hebridean wheelhouses is more difficult to reconstruct as it is dependent on the vagaries of discovery through excavation (wheelhouses being only rarely identifiable through surface survey). Nonetheless, the density of Erskine Beveridge's excavations and later work in the Vallay Strand area of North Uist allow us to make some generalisations. Essentially it appears that that the general pattern of dispersed single-household farmsteads carried on into this period, although the locations of individual settlements often changed, with an increased focus on the machair fringe. The density of wheelhouses around the Vallay Strand is similar to that of Atlantic roundhouses and there is nothing to suggest any substantial increase or decrease in population. There must presumably have been a period of transition, of unknown duration, during which certain people lived in Atlantic roundhouses while certain others lived in wheelhouses, with the balance shifting over time to a point where only a minority of households inhabited Atlantic roundhouses.

7.6.2 LAND, INHERITANCE AND POWER

Atlantic roundhouses, where excavated, appear to have formed the focus of settlement within their local areas over many generations. This carries some implications for the nature of land-holding and inheritance patterns in the region, which have been the subject of a recent study (Armit 2005). Commonly cited forms of inheritance tend to centre around variants of either unigeniture or partible inheritance. The various forms of unigeniture (eg primogeniture, where the eldest inherits the entire holding) will tend to lead to the gradual emergence of larger holdings, as certain individuals inherit lands from their own parents and from close kin who die without heir. It also produces an ever-expanding landless class of surplus offspring. By contrast, most forms of partible inheritance, where the holding is divided between multiple heirs, result in the fragmentation of land-holdings over time.

Modelling both these modes of inheritance produces considerably more dynamic patterns of expansion, contraction and movement of settlement locations than is seen archaeologically in the Atlantic Scottish Iron Age (Armit 2005). Neither seems adequate to account for the apparent stability seen within Atlantic roundhouse settlement patterns. Instead there may have existed a system similar to that seen in Early Christian Ireland where land was redistributed within a kin-group (Charles-Edwards 1972). In such a system, which I have dubbed 'redistributive partible inheritance' (Armit 2005), substantial areas of land are held in common by a kin group within which individual households occupy individual land-holdings. When a holding falls vacant, normally through the death of the incumbent, it is allocated to younger kin who may or may not be a direct descendant of the previous incumbent. The new incumbent takes over the existing house and land in its entirety, ensuring the integrity and thus continued viability of the holding. Such a system avoids the fragmentation of land-holdings associated with other forms of partible inheritance, while also preventing the emergence of the social inequalities which are an inevitable by-product of primogeniture.

In Ireland during the seventh century AD, for example, a redistributive form of partible inheritance was initially practised within a kin group (the *derbfine*) based on descent over four generations, which later gave way to one based on descent over three generations (the *gelfine*) (Edwards 1990, 53). Such a system can only operate within a relatively egalitarian social structure and creates little sense of permanent land 'ownership', at least for the individual. Assuming more or less constant population numbers, the observed settlement pattern under such a system would remain essentially unchanged from generation to generation.

While there was clearly variation in the degree of elaboration evidenced among Atlantic roundhouses, for example between the imposing and expertly built Loch na Beirgh broch tower and the tiny and rather shoddily constructed Dun Bharabhat, these were differences in scale rather than kind. It is in this context that the adoption of wheelhouse architecture signals a marked change. For the first time we begin to see landscapes within the Hebrides where two entirely (and presumably consciously) distinct, forms of architecture co-existed. Certain households, like that at Loch na Beirgh, continued to inhabit long-lived, outwardly monumental traditional centres, while others built new, inwardly monumental wheelhouses like those at Cnip. Lesser Atlantic roundhouse sites, like that at Dun Bharabhat, ceased to be occupied

altogether. Thus the broadly egalitarian settlement pattern of the Atlantic roundhouses began to pass to one in which marked social distinctions became increasingly evident.

So what was the relationship between the inhabitants of Atlantic roundhouses and wheelhouses? Traditionally they have been seen as distinct classes; broch lords and wheelhouse peasants (eg Barber 1985). As we have seen, however, that there is little to suggest that the land-holdings associated with wheelhouses were in any way inferior. Indeed some wheelhouses are built into the disused Atlantic roundhouses, suggesting a broad continuity of tenure. Yet, although the pattern of holdings itself may have retained its overall shape, a disparity seems to have emerged between those who inherited and maintained Atlantic roundhouses, and those who established the new wheelhouse settlements.

One possibility is that there had been a move towards unigeniture. There must always have been some mechanism for decision-making in the allocation of land-holdings within the kin-group. It is possible then that those with the decision-making power, perhaps the eldest or most senior member of the kin group, may have begun to retain some lingering authority over the reallocated holdings. This might have taken many forms, for example, the payment of tribute by junior kin, obligations of labour, or the recognition of subservient status. One outcome of such a changing relationship may have been that Atlantic roundhouses, as symbols of autonomy and territoriality, would have become appropriate residences only for those with control of the land. The emergence of wheelhouses may thus reflect the beginnings of more explicit social ranking within previously egalitarian kin-groups.

This rather abstract model of land inheritance has been developed on the basis of the general patterns in the settlement landscapes of the Hebridean Iron Age. Yet it also provides a potential explanatory model for the settlement changes seen locally in the Bhaltos peninsula in the last centuries BC. Applying the general model to this specific environment we might interpret the Loch na Beirgh broch tower as the dominant presence throughout, and one which was continually inhabited by the senior household and their immediate heirs. The establishment of the settlement at Cnip, and other wheelhouses in the peninsula, would then represent the allocation of land to junior branches of the kin-group, whilst overall authority remained vested in the traditional centre. These junior families would continue to perceive themselves as being of high status (at least in the sense of being land-holders and members of the kin-group to whom the broch tower and land belonged) while forming part of an increasingly inegalitarian system of land control and economic power. The wheelhouses at Cnip reflect this perceived status, displaying the relative wealth and resources of the builders without challenging the territorial authority of senior kin.

7.6.3 WIDER CHANGES

The increasing socio-economic inequalities reflected by changing settlement patterns in the Western Isles may also underlie the contemporary developments seen in Orkney. The emergence of broch villages, like that at Gurness, where a central broch tower was surrounded by a nucleated village of subordinate dwellings, again suggest changes in the local land-holding regime. At Gurness the effects of this process are displayed more starkly than in the Western Isles. Where their immediate ancestors had occupied scattered, autonomous farmsteads, the inhabitants of the Gurness village were physically and symbolically drawn within the shadow of the broch tower; which was presumably occupied by the senior household within the kin-group (Armit 2003).

7.6.4 CONCLUSION

A host of reasons, many inter-connected, may be suggested to explain the adoption of wheelhouse architecture in the Western Isles. Most immediately apparent are the practical difficulties that must have been experienced in maintaining the extravagant broch towers and other Atlantic roundhouses of the preceding period. Environmental constraints, most importantly the limitations of the timber supply, must have played a part in setting the limits of what was achievable architecturally. It is little surprise then that traditional vernacular principles which maximized heat retention and minimized wind exposure were re-employed.

Social factors were at least as important in determining the specific adoption of the wheelhouse form. As we have seen, this highly distinctive architectural style may have evolved in Shetland and may have been adopted quite consciously as an 'exotic' style. Its monumentality and symmetry lent themselves to the interpretation of the house within wider cosmological schemes. Wheelhouses retained the aura of status and permanence previously associated with Atlantic roundhouses. They were not the dwellings

of an oppressed peasantry yet they may, nonetheless, represent the first real archaeological indications of a growing trend towards social inequality within Atlantic Scotland. As the first millennium AD progressed, the ideological basis of Atlantic Scottish societies seems to have progressively shifted from an emphasis on the household and community towards an emphasis on the status of individual (Armit 1990b, 206). Houses became less elaborate, less monumental and less pivotal within communal ritual practice. Pottery, also central to domestic sphere, declined in elaboration and importance (as we have seen in snapshot form at Cnip itself). If, as in many societies, pottery manufacture was carried out primarily by women, it may be possible to interpret this transformation as reflecting a down-grading of women's roles during the first millennium AD. Individual burial becomes increasingly important, as does the production of jewellery to adorn the individual body in life. Overall it seems that we can trace a long-term trend towards a more socially divided society, both in terms of the relationships between households, and in the status of individuals within these households. This cannot be unrelated to the political transformations seen over the first millennium AD; societies organized only at the local level of the kin-group seem to have been enmeshed within ever-larger polities during the early centuries AD; a process leading ultimately to the development of the Pictish kingdom. It is tempting to see the changing settlement patterns of both the Western Isles and Orkney as foreshadowing the medieval clan system; an ideology based around common descent, but characterized in reality by deep-rooted social inequalities.

For the inhabitants at Cnip these wider social processes would have been quite irrelevant. For all its undoubted hardships, theirs was a stable, settled and integrated community. The character of certain objects from the excavations (the lyre peg, the gaming piece, the pottery), together with the beauty and symmetry of the wheelhouse itself suggest a lifestyle far removed from that of the lower echelons of the rigidly hierarchical societies which were to emerge in the Hebrides, as elsewhere, in later times.