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SCOTLAND

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Last Reviewed:	2019

STATEMENT OF SIGNIFICANCE

CARN LIATH (BROCH)



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HISTORIC ENVIRONMENT SCOTLAND STATEMENT OF SIGNIFICANCE

CARN LIATH (BROCH)

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1. Summary

1.1 Introduction

Carn Liath is an Iron Age monument on the east coast of Sutherland, comprising a broch enclosed within an outer wall, between which lie the remains of later Iron Age structures. It stands on a low rise overlooking the coast of the Moray Firth.

Carn Liath was taken into State care in 1975 under a Guardianship agreement.

The site is unstaffed, and accessible throughout the year. It is reached by a signed access track from a parking area alongside the A9 road: access involves crossing this busy road.

1.2 Statement of Significance

Brochs are an Iron Age phenomenon; they were first constructed (on current evidence) at a date between 400 and 200 BC, and are a prehistoric building type unique to Scotland. They are typified by a circular internal ground plan with massive drystone walls capable of rising to tower-like heights. The tallest among them are believed to have been the tallest prehistoric stone structures in North Western Europe, though very few have survived to any great height.

Carn Liath is of national importance as one of the best-preserved examples of a broch in northern mainland Scotland: close to the main A9, it is also less remote than many. The site has a broad chronological sequence, having been used prior to the construction of the broch. Excavation revealed evidence for Bronze Age activity, in the form of a cist burial and post holes indicative of a circular wooden structure. Evidence of a second such structure, directly beneath the broch, may also pre-date the broch. No direct dating evidence has yet emerged for the broch itself, but on analogy with some other sites excavated in Caithness and Sutherland, a date of construction in the last two centuries BC seems most likely.

The broch is surrounded by a low, thick drystone rampart. Between this and the broch are traces of sub-rectangular buildings, probably a little later in date than the broch itself.

Key aspects of the site's significance include:

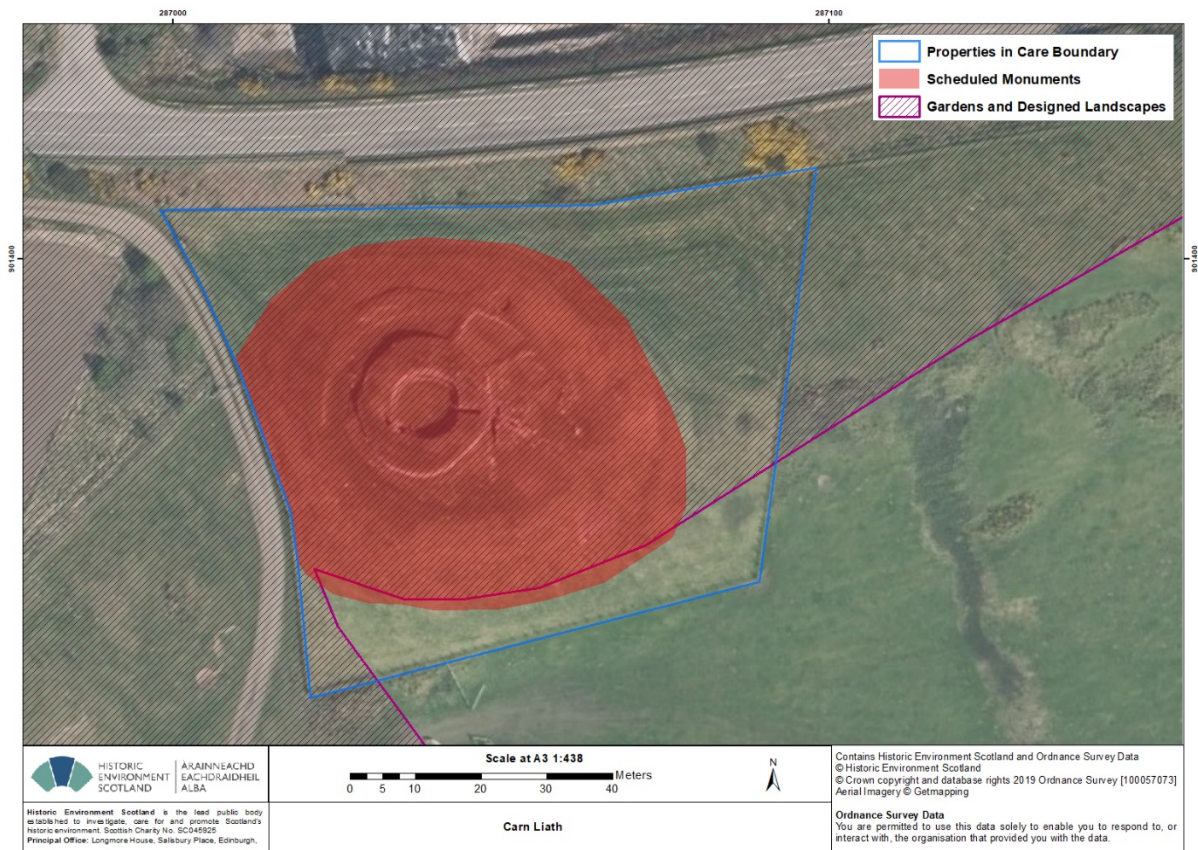
- The evidence for pre-broch activity (though this is not currently visible on site).
- The deep chambers within the broch's floor: again, not visible on site, but similar features occur at several other broch sites. Their purpose is unknown - perhaps linked to storage or ritual practice.
- Its history of antiquarian and archaeological investigation.
- The small but interesting finds assemblage, including a few Roman-period objects (some of the finds are displayed in the small museum at nearby Dunrobin Castle¹).
- Its context, siting and relationship to other archaeological and landscape features as compared with other broch sites; the degree to

¹ Other finds are in the collections of the National Museums of Scotland, Edinburgh.

which it typifies, or is exceptional to, the generality of brochs and how it has been referenced in developing theories of Iron Age architecture, society and economy.

- Its use and presentation as an Ancient Monument: Carn Liath was taken into care in 1975, rather later than most of the brochs maintained by HES.

The following pages give a fuller background to the site and go on to discuss the various aspects of its significance. A range of Appendices includes an overview of Brochs – theories and interpretations at Appendix 4.



Carn Liath: Scheduled Area and Property in Care Boundary, within Dunrobin Castle Garden and Designed Landscape, for illustrative purposes only. Further images at Appendix 3.

2 Assessment of values

2.1 Background

2.11 Introduction – Brochs

Brochs have been the subject of much study, and attempts to understand them have given rise to numerous theories about their genesis, purpose, context and relationships to other Iron Age structures. The best-preserved examples are striking and distinctive sights.

Broch towers are characterised by their conformity to certain design elements which make them seem a very cohesive group (near-circular ground plan, hollow or galleried wall construction, a single narrow entrance passage, a staircase within the wall thickness, stacked voids and tower form). Dating evidence is scarce, and most reliable dates relate to periods of occupation rather than construction. However, recent radiocarbon dates from sites in South Uist and Shetland (sampled within walls or beneath the structure) indicate construction before 100 BC and between 200 and 400 BC respectively.² It is generally thought that the small number of brochs in the Scottish Lowlands and Southern Uplands are late examples, and some, at least, seem to have been built in the second century AD.

Brochs are acknowledged as one of the only building types unique to Scotland; their remains occur most frequently in the north and west, rarely in the south. As it is not known how many brochs were built, much depends upon survival rates and upon adequate investigation. Estimates for potential broch sites range from 150 – 600 sites; however, most have not been investigated, and criteria for assessing the sites vary. It is generally agreed that about 80 known sites meet the definition for broch used here, though there may be many more which might be proven, if sufficiently investigated.

There are many competing theories as to the social context which gave rise to brochs, and their use and meanings for Iron Age society. As yet, there are no agreed conclusions, and a fuller account of these themes is given at Appendix 4.

The distribution, location and frequency of brochs varies markedly between different regions. There is a major concentration of brochs in eastern Sutherland and in Caithness: within this group Carn Liath forms one of a small cluster at the southern end of this group, along with nearby sites such as Backies³, Kintradwell⁴, Carrol⁵ and, most southerly of all, the now destroyed Dun Alisaig⁶. The accessibility of these brochs, and the interest of 19th-century landowners, led to them being the objects of early exploration.

2.12 Descriptive overview

Note: A more detailed site description is provided at Appendix 3.

Carn Liath is situated a few kilometres east-north-east of Golspie, on a rise above a raised beach which runs for many kilometres along the Moray Firth coast. It has wide views along the coastline and, in clear weather, right across the Firth to Moray and Banffshire.

The broch survives to about 3.6 metres high, and measures about 21 metres in external diameter and 10 metres in internal diameter. A “guard chamber” in the

² Parker Pearson and Sharples 1999, 355; Dockrill et al 2015, 59-60

³ Worsaae 1934, MacKie 636-7

⁴ Joass 1890 (paper read 1871) 95-102, MacKie 2007, 648-50

⁵ Joass 1890 (paper read 1871) 107-109, MacKie 2007, 643-5

⁶ MacKie 2007, 780-2

thickness of the wall opens off to the right of the narrow entrance passage, at a point just inward from a pair of upright stone slabs which probably formed the seating for a wooden door. Within the broch, a single entrance from the central space gives access to a stair which rises clockwise to the surviving wallhead. There are no surviving traces of upper galleries in the wall, although at least one is recorded in older descriptions, as is a chamber above the entrance passage.

A scarcement, or ledge, runs around the interior wall-face at about 2m from ground level. Around part of the inside of the inner wall-face additional walling, about 0.5 to 0.6 metres thick, has been constructed and survives to about 1.5m above ground level. To either side of the broch entrance passage, the scarcement and this inner walling appear to merge. This impression may well be the product of earlier consolidation, since the scarcement clearly pre-dates the inner walling.

Outside the broch's entrance are the remains of an extension of the passage towards the south-east, where it passes through the site's outer bank, as well as a shorter passage towards the southern interior of the enclosed area. A small stone-built structure immediately outside the broch entrance has been likened to a dog-kennel. To the south, the area between the broch and the outer bank is level, whereas to the north it is very uneven, with grass-covered remains of sub-rectangular structures. Beyond these features a broad, low bank surrounds the whole site: a gully leading up through it from the south-east probably represents the Iron Age entrance to the site.

Finds from the 19th century excavations are displayed in the nearby Dunrobin Castle Museum (an independent visitor attraction, charging for access to castle, gardens and museum). Within the central space of the broch, past excavations also revealed two deep chambers, a hearth, and also a partial ring of postholes: this latter feature appears to pre-date the broch. These features have been filled in for safety reasons – the soil below the broch is a very loose mixture of sand and gravel. The deep chambers are further discussed in Section 2.3.

2.13 Antiquarian interest

Carn Liath attracted quite early attention from travellers and antiquarians, in part due to its proximity to Dunrobin Castle. Pennant visited in 1769 and offered a general description, which is open to different interpretations⁷.

2.14 Clearance, structural consolidation and later work

In 1868 the landowner, the Duke of Sutherland, arranged for the site to be cleared. Carn Liath was one of a number of brochs dug on the Sutherland Estates from the

⁷ Pennant 1774. The reference in this text to “three low concentric galleries, at small distances from each other” has been read by some (e.g. MacKie, p 641) as implying that Carn Liath stood much taller at this date. However, the text does not fully support this: it may be that Pennant was referring to three stretches of gallery at a single level and not to superimposed galleries.

late 1840s onwards, many of which were eventually reported upon by the Reverend J. M. Joass⁸, although Joass's publication was pre-empted in some aspects by the pioneering female archaeologist Christian MacLagan⁹ and also by T.M. Wise¹⁰, who described a now-vanished inscribed stone. Many of the finds went to the museum at nearby Dunrobin Castle, where they remain; others are among the collections of the National Museum of Scotland, Edinburgh. These excavations exposed the general plan of the broch and exposed two deep chambers within the broch's interior, which were partially excavated.

Thereafter, the site was left to the elements, and there is no record of any effort to conserve the ruins. There are photographs showing it in a very poor state of repair in 1963¹¹.

In 1971 there was an unauthorised dig by a school group, after which J.X.W.P. Corcoran was invited by the Ministry of Works to excavate the site more fully, as a precursor to its being taken into State care. Corcoran died soon after his first season of work in 1972, and the record of his excavation is fragmentary. Consolidation of the upstanding walling took place when the site came into State care in 1975, and appears to have masked various details recorded earlier, such as a bar-hole behind the door-checks in the entrance passage¹².

Deterioration continued, and in 1984 and 1986-7 Paula Love undertook limited excavations¹³ prior to further consolidation by Historic Environment Scotland's predecessor. This work revealed new elements of the site's history, including pre-broch features, although it was not possible to leave these newly-discovered elements open to view. Love also attempted, with some success, to clarify the character and extent of Corcoran's unpublished work¹⁴.

Following the late 1980s consolidation works, the site has been regularly monitored, with minor stone replacement and work to maintain the turf capping undertaken on several occasions.

2.2 Evidential values

The evidential value of Carn Liath is high for what its constructional details, physical fabric, location and setting can tell us about settlement during the Iron Age; and for its potential to yield further information through ongoing research. Carn Liath is relatively unusual among mainland brochs in having produced securely dated evidence for the use of its site prior to the construction of the broch.

⁸ Joass 1890

⁹ MacLagan 1875

¹⁰ Wise 1881

¹¹ MacKie 2007, 638

¹² MacKie 2007, 638

¹³ In the northern part of the interior and a broad transect running from the outer wall of the broch to the north-east as far as the external slope of the outer bank.

¹⁴ Love 1989

Carn Liath as displayed is a good example of a “solid-based” broch of fairly typical dimensions, with a plan which shows many similarities in detail to neighbouring brochs. However, the upstanding structural remains have been extensively altered during various episodes of conservation, and it would hence be reasonable to regard the broch’s setting as having almost as much importance as its fabric.

It can be argued that Carn Liath’s primary importance lies in the relatively rare discovery of several pre-broch features, and in the finds assemblage. The discovery, during the 1980s excavation, of the remains of a Bronze Age cist burial (with an associated Food Vessel) beneath one of the sub-rectangular outer buildings, is a clear indication that the site was in use at that date, and part of a substantial ring-shaped post-built structure found in the same area may be of similar date. A stray sherd of cord-impressed Beaker pottery adds to this evidence for earlier activity.

Equally early may be the stone¹⁵ decorated with passage-grave style motifs, including pecked concentric circles¹⁶. A second, now-vanished slab, bearing incised decoration was reported in 1881¹⁷. It is likely that these represent earlier carvings which have been reused and incorporated into the broch¹⁸; there is a fairly widespread pattern of brochs incorporating older carved stones¹⁹. The suggestion that the broch overlies the remains of an even earlier Neolithic tomb has been discussed and rejected²⁰.

The 1980s excavation also confirmed the presence of a circular post-built structure, visible on the broch floor, and apparently running under the walls of the broch. While this could be of any date from the Bronze Age onwards, it is most likely to date to shortly before the broch’s construction, and appears similar to the structure found at Buchlyvie broch in Stirlingshire, which has been interpreted as a roundhouse²¹. Taken with the Bronze Age burial and the adjacent circular wooden structure, this all seems to confirm the fact that the site was already of some importance long before the broch was built upon it.

Despite at least four separate interventions, the site retains considerable archaeological potential, especially in relatively undisturbed areas. Areas of high sensitivity include:

- The circuit of the wall or rampart surrounding the broch has been little explored: the 1980s excavations suggested that this feature is a stone-faced earthen bank, and that it may have been rebuilt or repaired at least once in antiquity. It may overlie deposits which could shed light upon the site’s pre-broch history.

¹⁵ Now housed in the Dunrobin Castle museum

¹⁶ See <https://canmore.org.uk/site/6547/carn-liath>

¹⁷ Wise 1881

¹⁸ The slab decorated with concentric circles may be a reused fragment of a larger panel from an Early Bronze Age burial cist.

¹⁹ For example at Howe in Orkney. For more information on prehistoric rock art in Sutherland and elsewhere in Scotland, see Scotland’s Rock Art Project at: www.rockart.scot/

²⁰ MacKie 2007, 641-2

²¹ Main 1998

- The area between the broch and the inner side of this rampart has been relatively little excavated. It appears to contain the remains of several sub-rectangular structures which seem likely to be of post-broch date. Further earlier features may lie beneath, in addition to the Bronze Age cist burial and the circular structure identified in 1986-7.
- Beneath the massive wall of the broch, much may survive: most interestingly it would be possible to establish if the post-ring found in the 1980s really does run under, and thus pre-date, the broch. Accessing the area below the broch's footprint would be very challenging, but there is a (small) chance it could reveal evidence to date the broch's construction: securely-contexted construction dates for brochs remain rare and thus of high value.

The finds from the excavations, although largely lacking stratigraphic contexts, are a very interesting assemblage in themselves and for what they hint at as regards Carn Liath's history. As well as the stone decorated with passage-grave style motifs including concentric circles, and the vanished incised lintel mentioned above, the finds include several objects which hint at long-range contacts: two heavy plates of bronze with hammer-marks suggest the working of metal for which there is no local source, and two steatite (soapstone) "cups" (more probably lamps) are of material which could have come only from Shetland or from the west coast near Glenelg²².

The bronze plates found "near the floor" recall the copper ingots found low down in the deposits at **Edin's Hall Broch** in Berwickshire²³. They, and a silver Roman-style fibula brooch which is likely to be 4th century AD or later, may relate to activity long after the broch was constructed and perhaps even when the site was declining in status.

In contrast with these exotic items, numerous fragments of armlet, beads and rings made in a local Jurassic shale offer clear evidence for working on site, in the form of discarded waste from the shaping process. It is evident that this activity began long before the broch (as witness, the necklace of small circular beads from the Bronze Age burial) and appears to continue throughout the site's occupation. It is possible that the local shale offered a more readily available substitute for the jet of East Yorkshire, which was made into higher quality, but generally similar, objects over the same period. There was also abundant evidence for iron-working, in the form of both slag and fragments of crucibles²⁴.

2.3 Historical values

The primary historical importance of Carn Liath is its ability to contribute to evidence-based narratives describing how society in Iron Age northern Scotland may have operated, and changed, during the middle Iron Age. It also offers evidence to support

²² Or even further afield.

²³ Dunwell 1999, 338-42

²⁴ Love 1989

considerations of how that society related to its own heritage, in respect of re-using sites.

At the centre of such narratives, the appearance of the broch is a particular source of fascination. Brochs are such striking and singular structures that it remains a constant frustration that, despite an abundance of theory and interpretation (see Appendix 4), we do not actually know much for certain about who built these structures or why. Consequently, their value for the development of explanatory narratives is a collective one. No individual broch, however closely investigated, would be capable of answering all of the questions which might be posed, and for many purposes, data from a large number of sites is necessary. Carn Liath is just one of a series of brochs, located near the southern fringe of the greatest density of distribution of these structures.

Increasing evidence is being found for how prehistoric architecture, including that of broch towers, closely reflected the inhabitants view of the world (cosmology). Religious belief was not divorced from the domestic sphere, and we still have much to learn here. Carn Liath's most interesting structural features are the deep chambers in the interior, which resemble the "wells" found in several other brochs and which have been proposed as having some ritual significance, rather than simply being utilitarian water-sources. If this analogy is accepted, the fact that the sandy subsoil means that Carn Liath's floor chambers could not have held or accessed water, might support this narrative. There were very similar floor-set chambers at the nearby Kintradwell broch²⁵, with short stone stairs leading down into them²⁶.

Also of interest is the small chamber just outside the broch's entrance, which has been described as a "dog-kennel". Such chambers are found on several other broch sites, and might have served many purposes, such as housing outdoor equipment, dogs or even perhaps pigs – a handy refuse-disposal unit for kitchen waste from the broch. The wealth of small details on broch sites gives scope for creative re-imagining of Iron Age life.

The Bronze Age burial and the possibly-contemporary circular wooden structure, as well as the possible circular wooden structure directly below the broch, offer a depth of historical perspective and suggest that this site, with its sweeping coastal views, was one of local importance for almost two millennia. The construction of a broch on such a site might contribute equally to narratives of continued local lineages or the supplanting of those lineages by a new order which deliberately re-purposed the important sites of the preceding hierarchy.

2.4 Architectural and artistic values

The details of broch architecture have been much studied and discussed (see Appendix 4 for an extended account). Carn Liath sits towards the middle of the

²⁵ <https://canmore.org.uk/site/6964/kintradwell>

²⁶ Joass 1890

spectrum of brochs in terms of its dimensions and is of near-circular plan – to that extent it is a fairly typical broch. In general, Carn Liath bears close similarities in plan to other nearby brochs, notably Kintradwell.

Carn Liath differs from the majority of solid-based brochs in apparently having no chambers within the basal level of the wall other than a “guard chamber” opening off the entrance passage – while not unknown, such an absence is unusual amongst Sutherland and Caithness brochs. It is, of course, possible that the later inserted wall may conceal the entrances to chambers, or that they have been obscured by early consolidation efforts.

The extension of the passage from the broch entrance to, and through, the outer bank reflects the similar arrangement at **Gurness** in Orkney, although at Carn Liath which lacks Gurness’s deep ditches, it is less grand in scale. The character of the entrance as it passes through the outer bank might be of interest in this regard, but may have been damaged during early excavations.

Apart from the small cell immediately outside the entrance to the broch, the structures surrounding the broch are not sufficiently clearly defined to offer much comment. The apparent sub-rectangular forms of their grass-covered remains invites comparison with sites such as the Wag of Forse in Caithness, and serves as a reminder that elongated rectangular plans need not, as was once believed, mark Norse or medieval influence.

2.41 Design

The ground plan of Carn Liath is near-circular, which might lend support to the argument of brochs all being built to a standardised plan. Against this, however, is the apparent absence of any chambers opening off the broch interior at ground floor level. The fact that the stair is entered at ground level rather than at a slightly higher level is a common feature in east Sutherland and southern Caithness, and this illustrates an interesting regional contrast to Orkney and Shetland where the intra-mural stair normally rises from a level one or two metres above the ground. Brochs seem to display regional styles, though the significance of this is not clear²⁷.

2.42 Construction

The broch is constructed of large blocks of coarse buff and red sandstone and conglomerate, available from outcrops not far inland, and also along the foreshore downhill from the broch. This stone weathers to a soft grey – in Gaelic grey is *liath*, hence the site’s name. Much of the stone appears to be slightly rounded, which might suggest the use of blocks which had already been split from bedrock by natural processes. There are smaller blocks and pinning stones, and these have replaced, probably extensively, during consolidation. Unlike many brochs, there is no sign at Carn Liath of a slightly projecting foundation level of larger blocks.

²⁷ MacKie 1965 (and later publications) explores broch “styles” and metrics in depth

2.43 Artists' representations

No early depictions of Carn Liath are known, with the first published plan appearing in MacLagan's synthesis of 1875²⁸ (included in Appendix 2) and a more detailed plan and section appearing in Joass's report of 1890, depicting the site as it appeared soon after excavation (and possibly drawn at much the same time as MacLagan's plan).

Carn Liath is poorly served by later drawings, with a relatively low definition plan made by RCAHMS in 1909²⁹. Thereafter, Corcoran left an unpublished master plan from his work in 1972, but the schematic plan published by Love in 1989 seems to be the only one to have appeared in print, well over a century after Joass.

No instances have come to note of the use of Carn Liath as the inspiration for creative artworks. Dunrobin Castle seems to have been the local focus for almost all such effort.

2.5 Landscape and aesthetic values

Carn Liath is an attractive site, as is the short approach on foot – at least, once the busy A9 road has been safely crossed. The site occupies a rise with a wide outlook over grassy fields across the Moray Firth, the far shore of which can be seen in clear weather.

The site is also photogenic from the air, and oblique aerial views of various dates have been published and are held in HES collections (both ex-RCAHMS and ex-HS collections). Appendix 2 contains an example.

2.6 Natural heritage values

The land immediately around Carn Liath is not designated for the protection of species or habitats, but the whole of the Moray Firth below the low-water mark forms a Special Area of Conservation for its sub-tidal sandbanks and for the Bottlenose Dolphin *Tursiops truncatus*³⁰.

Visitors to the site pass along a short track between fenced field edges. A variety of typical farmland birds are usually audible or visible, for example skylarks *Alaudia arvensis*. Common buzzards *Buteo buteo* are frequently seen overhead. The only mammals regularly seen on site are rabbits *Oryctolagus cuniculus*.

²⁸ MacLagan 1875

²⁹ RCAHMS 1911

³⁰ SNH website (accessed 23 August 2019)

2.7 Contemporary/use values

Much of the value of Carn Liath for contemporary communities seems to lie in its pleasant site and surroundings. It is valued by local residents as an element of the area's rich heritage.

The site is visible from the main A9 main with ample parking provision on both northbound and southbound sides of this road. On-site interpretation is provided by simple interpretation boards, and the route to the site from the carpark, which lies to the north side of the A9 road, is way-marked by metal direction posts.

Visitor numbers are not recorded, however there are many Trip Advisor reviews. These are overwhelmingly positive: all mention the ease of access, views, the impressiveness of the remains and sense of connection to past lives. Most also note the issue of crossing the main A9 safely. The broch is a recommended stop on North Coast 500 routes

Images of the site have occasionally been used in specialist archaeological guides and reference works, but it does not feature prominently in general guidebooks.

Although the site is well-known locally, it does not (as do some other brochs) function as a visual "heritage" symbol for the local community. That role seems to be fulfilled by Dunrobin Castle.

3 Major gaps in understanding

There are a wide range of unanswered questions surrounding brochs in general, despite two centuries of excavation, study and theorising (see Appendix 4).

Carn Liath has already contributed to the existing body of broch knowledge, but retains the potential to contribute further. That said, its history of repeatedly disturbance and consolidating means that it would not necessarily be the first choice of broch site to investigate in search of additional knowledge about brochs in general.

Nonetheless, Carn Liath retains some potential to address the following questions:

- When were brochs first constructed, and how did they relate to pre-existing architecture and settlement patterns? Here, the existence of a Bronze Age burial and also the likely pre-existence of a circular, wooden, post-built structure, mark Carn Liath out as exceptional. Relatively few brochs have provided definite evidence of earlier structures on site. However, that may be in large part due to the fact that most broch excavations have ended before the sub-broch levels have been reached. In short, many researchers *suspect* that brochs were often built on sites which were already locally significant, but physical evidence is mostly lacking.

- Was the broch built by or for incomers, or was it created by the existing holders of the site? Due to extensive excavation in and around the broch, this might be difficult to answer: evidence might take the form of distinct differences in the artefacts firmly associated with the broch as opposed to what came before. Simply identifying deposits of the appropriate date(s) would be challenging but perhaps not impossible.
- How does the broch structure at Carn Liath relate to the construction date and pre-construction history of other local brochs? This cannot be addressed without answers to the previous questions, and also dating evidence from more brochs. The presence of at least one late Roman-period artefact does not help here, as this item is not securely stratified, and might be a later casual loss rather than a broch-contemporary object.
- How well does what we see at Carn Liath today represent what was built? While the surrounding remains seem not to have been radically altered in the course of excavation and consolidation, there do appear to have been a number of significant changes to the stonework of the broch³¹, to the extent that the details of Carn Liath as it appears today does not offer a reliable guide to its original, or even pre-1870s, appearance. In particular, there is a distinct possibility that later structures within the broch may have been removed un-noted.
- What can be said about the social and territorial organisation of those who lived at Carn Liath? Much can be said, but little can be proved – Carn Liath, like most brochs, offers mute testimony rather than substantive evidence. Most researchers would support the existence of an elite within Iron Age society, who would have directed the activity of each group (including the building of brochs) and conducted relationships with neighbouring groups and perhaps further afield. It has been suggested that this evolved into a “chiefdom” type of society, perhaps analogous to later Highland clans, with a chief and a few senior individuals leading a “client group” bound by kinship ties, living in multiple locations across a substantial area of land.
- Was trade important in broch-period society? A few of the artefacts from Carn Liath show that it was possible to obtain non-local goods, either through trade or gift-exchange. The evidence for on-site working of the local Jurassic shale into personal adornments such as rings and armlets is interesting in itself, but there is insufficient comparative evidence from nearby broch sites to determine if this was a speciality of those who lived at Carn Liath, or a more ubiquitous activity along the neighbouring coastline.
- How did they survive day to day, in terms of subsistence? We know from excavations in various locations that farming was the main source of food and probably of wealth throughout this period, although Carn Liath itself has produced little evidence of such activity. There is some evidence to suggest that farming was more heavily based on ranch-style cattle raising

³¹ MacKie 2007, 638-9

in the earlier part of the Iron Age and gradually acquired a larger arable component as time went by, but this is by no means proven to be universal. Each site would have had its own particular mix of resources, largely determined by its location in the landscape.

More general questions remain, regarding:

- The appearance of the roof and upper levels of this and other brochs.
- The social organisation of those building and using the broch, and how they disposed of their dead.
- The nature and appearance of the contemporary landscape and vegetation surrounding the broch.
- A more precise chronology: excavation has determined the sequence of construction at the site, but no scientific dates currently exist.

4 Associated properties

4a Associated properties managed by HES

- Mousa (broch, Shetland)
- Clickimin (broch and associated remains, Shetland)
- Jarlshof (broch and associated remains, Shetland)
- Ness of Burgi (fort, Shetland)
- Gurness (broch and associated remains, Orkney)
- Midhowe (broch and associated remains, Orkney)
- Dun Carloway (broch, Western Isles)
- Dun Dornaigil (broch, Highland)
- Dun Beag (broch, Highland)
- Dun Telve (broch, Highland)
- Dun Troddan (broch, Highland)
- Edin's Hall (hillfort, broch and settlement, Scottish Borders)

4b Other associated sites

There are many brochs in East Sutherland and in Caithness, and a sizeable number of these were excavated in Victorian times. The local examples listed below are accessible to the public but not in State care: visitors should pay attention to signage and requests and observe the Scottish Outdoor Access Code.

- Backies broch – Carn Liath's nearest neighbour
- Kintradwell broch
- Dunbeath broch
- Ousedale broch

5 Keywords

Carn Liath, Broch; Iron Age; intra-mural stair; guard cell; entrance passage; floor chamber, Duke of Sutherland, Dunrobin.

Bibliography

Anderson, J 1883 *Scotland in Pagan Times (Volume 2: The Iron Age)*. Edinburgh.

Armit, I 1991 'The Atlantic Scottish Iron Age: five levels of chronology', *Proceedings of the Society of Antiquaries of Scotland* 121, 181-214.

Armit, I 1996 *The Archaeology of Skye and the Western Isles*. Edinburgh (EUP).

Armit, I 2003 *Towers in the North: The brochs of Scotland*. Stroud (Tempus).

Armit, I 2005a 'The Atlantic Roundhouse: a Beginner's Guide' in V Turner et al, 2005, 5-10.

Armit, I 2005b 'Land-Holding and Inheritance in the Atlantic Scottish Iron Age', in V Turner et al, 2005, 129-143.

Barber, JW 2018 References are to the Rhind Lecture series delivered to the Society of Antiquaries of Scotland in Edinburgh in July 2018 under the title *Drystone Technologies: Neolithic tensions and Iron Age compressions*. Videos available online at www.socantscot.org/resources/

Barrett, JC 1981 'Aspects of the Iron Age in Atlantic Scotland. A case study in the problems of archaeological interpretation', *Proceedings of the Society of Antiquaries of Scotland* 111, 205-19.

Childe, VG 1935 *The Prehistory of Scotland*. London.

Clarke, DV 1971 'Small finds in the Atlantic Province; problems of approach', *Scottish Archaeological Forum* 3, 22-54.

Curle, AO, 1909, *Private journal of a wandering Antiquary: Diary 3: August 2nd to October 6th, 1909*, Transcription available at: <https://scotlandsplaces.gov.uk/digital-volumes/rcahms-archives/curle-diaries/curle-diary-03>

Curle, AO, 1921 'The Broch of Dun Troddan, Gleann Beag, Glenelg, Inverness-shire', *Proceedings of the Society of Antiquaries of Scotland* 55, 83-94.

Dockrill, SJ 1998 'Northern Exposure: Phase 1 of the Old Scatness Excavations 1995-8', in R A Nicholson and S J Dockrill (eds) 1998, 59-80.

Dockrill, SJ, Bond, JM, Turner, VE, Brown, LD, Bashford, DJ, Cussans, JEM and Nicholson, RA 2015 *Excavations at Old Scatness, Shetland; Volume 2: The Broch and Iron Age Village*. Lerwick (Shetland Heritage Publications).

Dunwell, A 1999 'Edin's Hall fort, broch and settlement, Berwickshire (Scottish Borders): recent fieldwork and new perceptions', *Proceedings of the Society of Antiquaries of Scotland* 129, 303-57.

Fergusson, J 1877 'On the Norwegian origin of Scottish brochs', *Proceedings of the Society of Antiquaries of Scotland* 12, 630-69.

Fojut, N 1981 *A Guide to Prehistoric Shetland*. Lerwick (Shetland Times).

Fojut, N 1982a 'Towards a Geography of Shetland Brochs', *Glasgow Archaeological Journal* 9, 38-59. [Reprinted in V Turner et al, 2005, 144-165]

Fojut, N 1982b 'Is Mousa a broch?', *Proceedings of the Society of Antiquaries of Scotland* 111, 220-8.

Fojut, N 1998 'How did we end up here? Shetland Iron Age studies to 1995' in Nicholson and Dockrill (eds) 1998, 1-41.

Fojut, N 2005b 'Brochs and Timber Supply – A Necessity Born of Invention?', in V Turner et al, 2005, 190-201.

Graham, A 1947a, 'Some Observations on the Brochs', *Proceedings of the Society of Antiquaries of Scotland* 81, 48-99.

Graham, A 1947b Discussion. In Scott 1947, 35-6.

Hamilton, JRC 1956 *Excavations at Jarlshof, Shetland*. Edinburgh (HMSO)

Hamilton, JRC 1968 *Excavations at Clickhimin, Shetland*. Edinburgh (HMSO)

Hedges, JW 1987 Bu, *Gurness and the Brochs of Orkney, Part 1: Bu, Part 2: Gurness, Part 3: The Brochs of Orkney*. Oxford (BAR: British Series 163-5).

Hedges, JW and Bell, B 1980 'That tower of Scottish prehistory – the broch', *Antiquity* 54, 87-94.

Hingley, R 1992 'Society in Scotland from 700 BC to AD 200', *Proceedings of the Society of Antiquaries of Scotland* 122, 7-54.

Joass, J M 1890 'The Brochs or "Pictish Towers" of Cinn-Trolla, Carn-Liath, and Craig-Carril, in Sutherland, with Notes on other Northern Brochs', *Archaeologia Scotica* 5, 95-130.

Love, P 1989 'Recent excavations at Càrn Liath Broch, Golspie, Sutherland', *Glasgow Archaeological Journal* 15, 157-69.

Mackie, EW 1965 'The origin and development of the broch and wheelhouse building cultures of the Scottish Iron Age', *Proceedings of the Prehistoric Society* 31, 93-143.

Mackie, EW 1971 'English migrants and Scottish brochs', *Glasgow Archaeological Journal* 2, 39-71.

Mackie, EW 1992 'The Iron Age semibrochs of Atlantic Scotland: a case study in the problems of deductive reasoning', *Archaeological Journal* 148, 98-157.

Mackie, EW 2002b *The Roundhouses, Brochs and Wheelhouses of Atlantic Scotland c.700 BC-AD 500: architecture and material culture, Part 1 The Orkney and Shetland Isles*. Oxford (BAR Brit Ser 342).

Mackie, EW 2005 'Scottish brochs at the start of the new millennium', in Turner, V, et al (eds) 2005, 11-31.

Mackie, EW 2007 *The Roundhouses, Brochs and Wheelhouses of Atlantic Scotland c.700 BC-AD 500: architecture and material culture, Part 2 (II) The Northern and Southern Mainland and the Western Islands*. Oxford (BAR Brit Ser 444(II)). [Carn Liath is dealt with at pages 638-42 and 722-36.]

Mackie, EW 2008 'The broch cultures of Atlantic Scotland: Origins, high noon and decline. Part 1: Early Iron Age beginnings c.700-200 BC', *Oxford Journal of Archaeology* 27(3) 261-279.

Mackie, EW 2016 *Brochs and the Empire: The impact of Rome on Iron Age Scotland as seen in the Leckie broch excavations*. Oxford (Archaeopress).

Maclagan, C, 1875 *The Hill Forts Stone Circles and Others Structural Remains of Ancient Scotland*. Edinburgh (Edmonston and Douglas)

Main, L 1998 'Excavation of a timber round-house and broch at the Fairy Knowe, Buchlyvie, Stirlingshire, 1975-8', *Proceedings of the Society of Antiquaries of Scotland* 128, 293-417.

Nicholson RA and Dockrill SJ (eds) 1998 *Old Scatness Broch, Shetland: Retrospect and Prospect*. Bradford (University of Bradford / Shetland Amenity Trust / North Atlantic Biocultural Organisation).

Oram RD, Martin PF, McKean CA, Neighbour T and Cathcart A 2010 *Historic Fraserburgh: Archaeology and Development*. Edinburgh (Historic Scotland – The Scottish Burgh Survey).

O'Neill, BHStJ 1954 'The date and purpose of the brochs', in W D Simpson (ed) 1954.

Parker Pearson, M, Sharples N and Mulville, J 1996 'Brochs and Iron Age society: a reappraisal', *Antiquity* 70 (267), 57-67.

Parker Pearson, M and Sharples, N 1999 *Between Land and Sea: Excavations at Dun Vulcan, South Uist*. Sheffield (Sheffield Academic Press).

Pennant, T 1774 *A Tour in Scotland and Voyage to the Hebrides in 1772*. Warrington.

RCAHMS 1911 *Inventory of Monuments and Constructions in the County of Sutherland*. (HMSO).

RCAHMS 1946 *Inventory of Monuments in Orkney and Shetland*. (HMSO).

Ritchie, JNG 2005 'Brochs: a Long View', in V Turner et al, 2005, 1-4.

Romankiewicz, T 2011 *The Complex Roundhouses of the Scottish Iron Age. Volume I – Text and Illustrations*. Oxford. (=BAR Brit Ser 550 (I))

Romankiewicz, T 2016 'Land, Stone, Trees, Identity. Ambition: The Building Blocks of Brochs', *Archaeological Journal* 173, 1-29
<http://dx.doi.org/10.1080/00665983.2016.1110771>.

Scott Sir L 1947 'The problem of the brochs', *Proceedings of the Prehistoric Society* 13, 1-36.

Scott, Sir L 1948 'Gallo-British colonies: the aisled round-house culture in the north', *Proceedings of the Prehistoric Society* 14, 46-125.

Sharples, N 1998 *Scalloway: a broch, late Iron Age settlement and Medieval cemetery in Shetland*. Oxford (Oxbow Books: Oxbow Monograph 82).

Smith, B 2014 'How not to reconstruct the Iron Age in Shetland: modern interpretations of Clickhimin Broch', *Northern Studies* 47, 1-31.

Smith, B 2016 'Did the broch of Mousa have a roof? - and why not!' *New Shetlander* 276 (Simmer 2016), 4-17.

Stewart, J 1956 *An Outline of Shetland Archaeology*. Lerwick (Shetland Times). [Reprinted in 2008 with a Foreword by Val Turner. Lerwick (Shetland Amenity Trust).]

Stuart, J 1857 'Remarks on the Ancient Structures called Picts' Houses and Burghs, with especial reference to the Burgh of Mousa in Shetland', *Proceedings of the Society of Antiquaries of Scotland* 3, 187-195.

Turner, V, Nicholson, RA, Dockrill, SJ and Bond, JM (eds) 2005 *Tall stories? 2 Millennia of Brochs*, Lerwick (Shetland Amenity Trust).

Wise, T A 1881 'Notice of sculpturings on the lintel of the entrance to the broch of Carn Liath, near Dunrobin, Sutherlandshire', *Proceedings of the Society of Antiquaries of Scotland* 15, 1-15.

Worsaae, JJA 1852 *An Account of the Danes and Norwegians in England, Scotland and Ireland*. London (John Murray).

Worsaae, JJA 1934 *En Oldgrandskers Erindringer (1821-47)* (udgivet ved [edited by] Viktor Hermansen). Copenhagen.

Note: Footnotes throughout the text offer page numbers where appropriate. If no page number is given, this indicates that reference is being made to the general thrust of the publication cited rather than a specific point of detail.

Other Resources

Canmore ID: 6546

Site Number: NC80SE 4

NGR: NC 8704 0137

Scheduled Monument Description:

<http://portal.historicenvironment.scot/designation/SM90060>

Inventory of Garden & Designed Landscape Entry: Dunrobin Castle:

<http://portal.historicenvironment.scot/designation/GDL00160>

Carn Liath sketchfab model: <https://sketchfab.com/3d-models/cairn-liath-broch-nr-golspie-sutherland-8290a288c39c40628d9a25b614ce0b66>

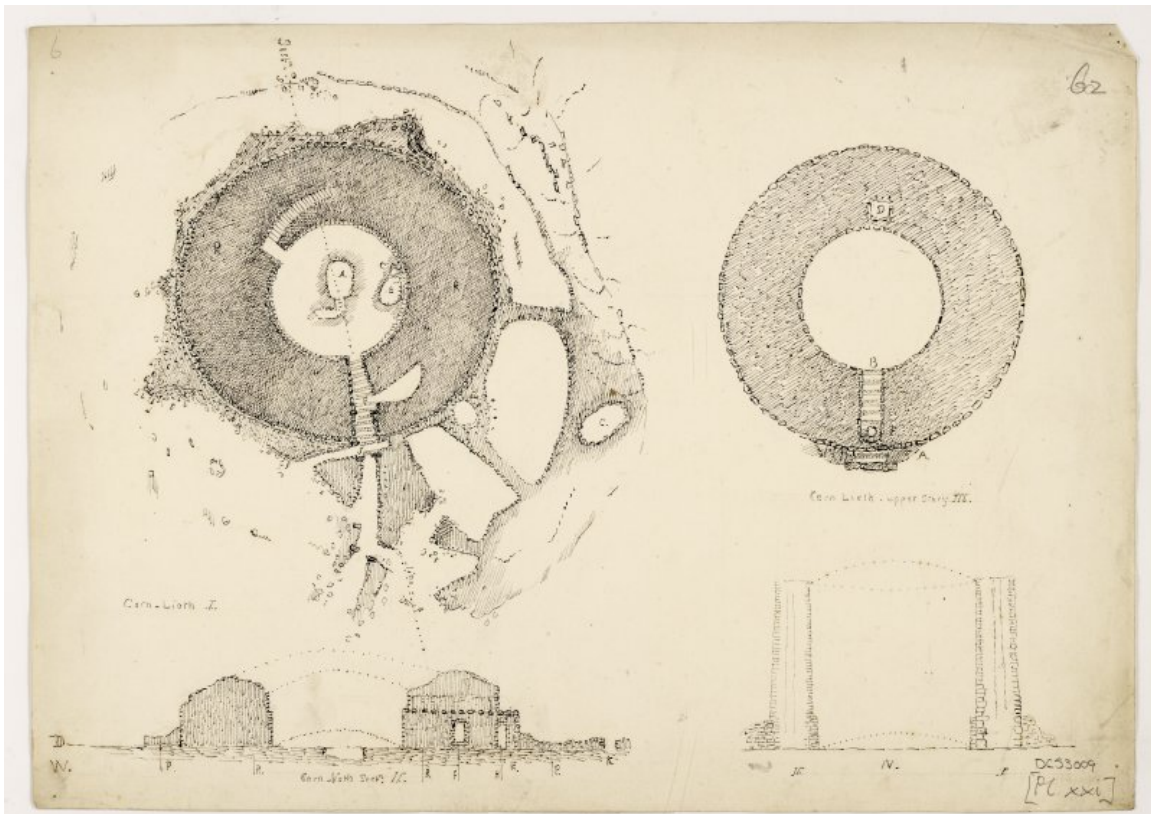
Details of artefacts from Carn Liath held within the National Museums of Scotland, can be accessed via: <https://www.nms.ac.uk/explore-our-collections/search-our-collections/>

Appendices

Appendix 1: Timeline

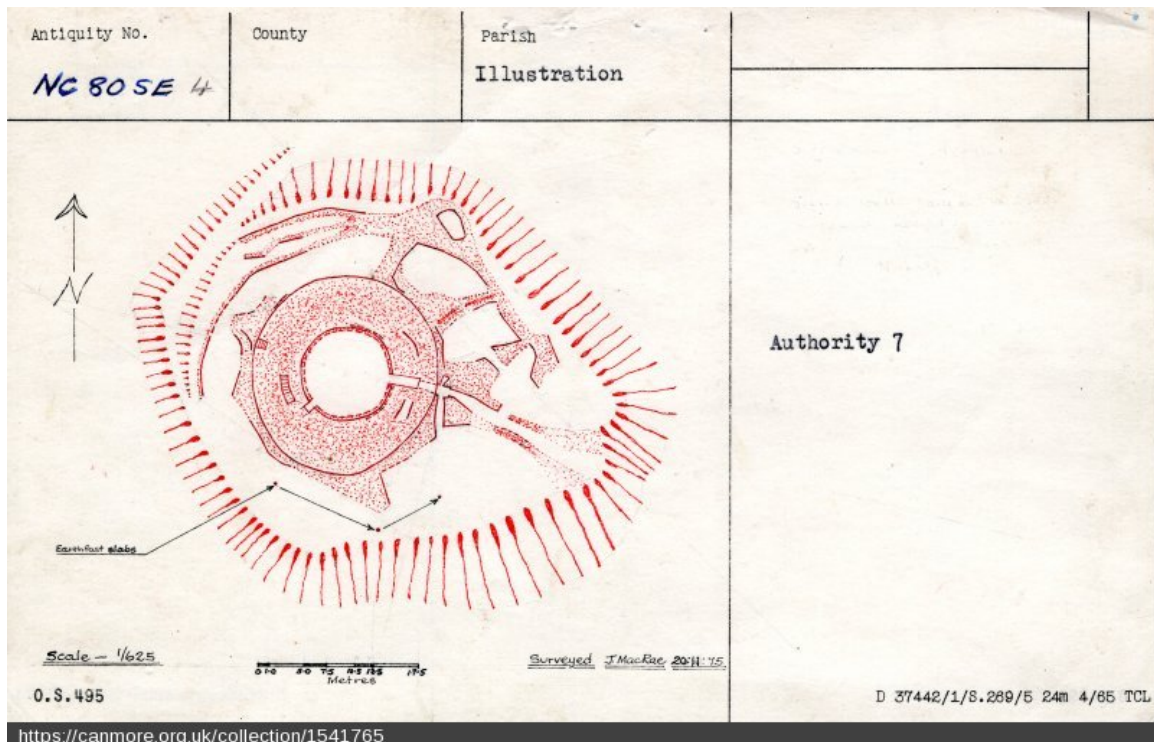
Bronze Age	Burial in stone cist with shale bead necklace and Food Vessel pottery.
Iron Age (mid) - 1	Construction of timber roundhouse (possibly 2nd century BC or earlier).
Iron Age (mid) - 2	Demolition of timber roundhouse and construction of broch. Outer rampart probably built soon after.
Iron Age (mid) - 3	Elaboration of entranceway through rampart towards broch, use of site for metal- and shale-working.
Iron Age (mid-late)	Construction of small structures between broch and rampart.
1769	Visit by Pennant.
1868	Excavated for the Duke of Sutherland, recorded later by Joass.
1909	Visited by RCAHMS, survey drawings published 1911.
1935	Site first Scheduled.
1971	Unauthorised dig by local school.
1972	Excavation of limited areas by Corcoran.
1975	Site taken into State care under a Guardianship agreement, and consolidated (no detailed records have been located). Metal signs erected.
1984 & 1986-7	Excavations by Love, followed by consolidation.
1987	Designation of Dunrobin Castle Garden and Designed Landscape. [While Carn Liath is situated within the designated area, it is not specifically mentioned within the description.]
1990s	Fence repair and new signage.

Appendix 2: Images



<https://canmore.org.uk/collection/1770028>

Plan and conjectural reconstruction published 1875 by Christian Maclagan



1975 plan by Ordnance Survey Archaeology Division – note traces of now-vanished chamber on wall-head near entrance

Historic Environment Scotland – Scottish Charity No. SC045925
Principal Office: Longmore House, Salisbury Place, Edinburgh EH9 1SH



Aerial view, from east-south-east



General view, from north-east, showing sweeping shoreline views



Artists impression of broch in use

Appendix 3: Carn Liath, Detailed Description

Note: text in [square brackets] = features which are not currently visible on site

Carn Liath lies on a small rise above the raised beach which runs for many kilometres along the Moray Firth coast. It has wide views along the coastline and, in clear weather, right across the Firth to Moray and Banffshire.

[The earliest known features on site were discovered during excavations in 1986-7. The remains of a Bronze Age burial, originally in a stone cist, included part of a Food Vessel and a necklace of shale beads. Possibly broadly contemporary with the burial were the remains of a substantial circular structure evidenced by post-holes. Another circular wooden structure lay below the broch but was not concentric with it, the broch walls apparently overlying parts of the circuit. This may have been of Bronze Age or earlier Iron Age date.

The site may have been scarped, or landscaped, by flattening the top, and steepening the sides of a natural knoll, after the Bronze Age burial and before the broch's construction³².]

The broch survives to about 3.6 metres high, and measures 21.1 metres in external diameter and 10.2 metres in internal diameter. A "guard chamber" opens off to the right of the narrow entrance passage, at a point just inward from a pair of upright stone slabs which probably formed the seating for a wooden door. Within the broch, a single entrance from the central space gives access to an intramural stone stair which rises clockwise to the surviving wall-head. There are no traces of upper galleries, although at least one is recorded in older descriptions, as is a rather curious elongated chamber directly above the entrance passage.

A scarcement ledge runs around the interior wall-face at about 2m from ground level. Around part of the inside of the inner wall-face additional walling, about 0.5 to 0.6 metres thick, has been constructed and survives to about 1.5m above ground level. To either side of the broch entrance passage, the scarcement and inner walling appear to merge. This may be a result of confusion during consolidation, although an 1846 drawing of Backies broch shows a very similar feature³³. There has certainly been extensive reconstruction of the wall-faces at Carn Liath, both soon after it was taken into State care and also in more recent years³⁴.

Within the central space of the broch, past excavations have revealed two deep chambers, a hearth, and also a partial ring of postholes: this latter feature appears to pre-date the broch. These features have been filled in for safety reasons – the soil below the broch is a very loose mixture of sand and gravel.

Outside the broch's entrance are a series of largely grass-covered features. An extension of the passage towards the south-east passes through the site's outer bank, and from the area immediately outside the broch entrance another

³² Love 1992

³³ MacKie 2007, 716

³⁴ MacKie 2007, 638-643

passageway leads to the south, where it opens out into the flat area within the outer rampart. A small stone-built structure immediately outside the broch entrance and lying to its north has been likened to a “dog-kennel” – such features occur in similar locations at several other broch sites, including **Gurness**. The area between the broch and the outer rampart is level to the south of the broch, whereas to the north and east of the broch it is very uneven, with grass-covered remains of several poorly-defined sub-rectangular structures, some of which may be an artefact of Victorian digging. Beyond these features, a broad, low rampart of irregular width surrounds the whole site: a gully leading up through it from the south-east links with the extended entrance passage, and probably represents the original entrance to the site. [On the edge of the platform on which the site sits, and also partway down the slope to the east, traces of stone walling have been detected in excavation, suggesting that the external appearance of the outer rampart was much more elaborate than it appears today.]

[Some of the finds from the 19th century excavations are displayed in the nearby Dunrobin Castle Museum (an independent visitor attraction, charging for access to castle, gardens and museum). The finds are discussed in more detail below above.]

Appendix 4: Brochs: theories and interpretations

a) Defining brochs

For the purpose of this and other similar documents, the term “broch” is used to refer to what some researchers have called “fully formed” or “tower” brochs. There is no way of knowing exactly how many such structures once stood to heights approaching Mousa’s 13 metres plus, only that the visible surviving remains of many sites do not rule this out.

Dryden first attempted to define brochs in 1872:

“A broch is a circular tower formed of wall 10 to 16f thick at the base, enclosing a court from 24 to 38f diameter, with one entrance from the outside into the court. The usual thickness of wall is about 15f, and the usual diameter of the court about 28f. All were in outline truncated cones – that is, the outside of the wall “batters” or inclines inwards. The wall is also decreased in thickness towards the top by set-offs inside. The chambers of the broch proper are in the thickness of the walls, but there are usually partitions in the court of later construction. The original height of these towers of course varied, and except Mousa, we have no broch more than 20f high, but Mousa is still 40f high and was somewhat more. No mortar was used in them, but probably the chinks were stopped with moss or mud just as in modern Shetland cottages.”³⁵

There have been a number of definitions over intervening years, of which, that by MacKie in 1965, refreshed in 2002, remains the most influential. MacKie offered a tight definition of brochs, to distinguish them from other drystone structures of broadly similar date. For MacKie, for a structure to be classed as

³⁵ Dryden 1872, 200

a broch required five essential characteristics which must all occur in combination: (1) a circular ground-plan, (2) a thick wall, (3) large size, (4) a ledge (or scarcement) on its inside wall face and (5) at least one “hollow wall feature” from a list of four: (5a) an upper gallery (that is, a hollow wall at a level higher than the ground level), (5b) a chamber over the entrance passage, (5c) a void or voids in the inner wall-face and (5d) an intra-mural stair at an upper level.

Mackie noted that some “classic” features of brochs, such as their narrow and well-built entrance passages, occur in other types of structure. He also excluded from broch-defining characteristics the possession of a hollow wall at the ground level only, and also the possession of a stair which starts at ground level unless it rises to a much higher level.

As Mackie noted, relatively few of the c.600 sites referred to as brochs can be shown to possess this set of features, and he proposed that “probable” brochs could be defined as possessing features (1) to (4) but not demonstrably possessing any of the hollow wall features, with possible brochs having “no diagnostic features exposed but which seem likely from their situation to be brochs”³⁶.

The features of Mackie’s “brochs” and “probable brochs” are known to be present at no more than 15 percent of the 600-plus suggested broch sites in Scotland, and there is no knowing how many of the remainder might, or might not, reveal such features on excavation. This means that Scotland is known to possess at least 80 brochs but could in fact possess many more, not to mention sites lost or destroyed over the centuries before antiquarian interest. Stepping back from technical structural definitions, it is common practice, where a broch has proved on excavation to be surrounded by a complex of smaller structures and sometimes also by outer walls and ditches, to refer to the entire site simply as a broch – Edin’s Hall falls into this category, where the broch acts as signifier for a larger and more complex site.

Brochs are unique to Scotland, and one of Scotland’s few “endemic” prehistoric architectural forms. Their greatest concentration is in Orkney, Shetland, Caithness and East Sutherland, with more examples scattered rather more thinly across the Western Isles, Skye and the adjacent mainland. Edin’s Hall is one of the few examples located outside the Highlands and Islands.

b) A brief account of broch studies

Brochs have been the subject of more research and discussion than perhaps any other type of ancient monument. It is necessary to review these antiquarian and archaeological debates in some detail, because the significance of Mousa (and other brochs in State care) lies to a considerable extent in how each site offers, or could offer, evidence in support of competing definitions of “broch-ness” and towards competing narratives about the origins, date, nature and purpose of these enigmatic sites. The outcome

³⁶ Mackie 2002, 1-2

of a huge amount of study appears to be that very few of the key questions about brochs have been resolved, while at the same time new and even less answerable questions have been stimulated. All narratives rely to some extent on assumptions, and the most which can be hoped is that these are made explicit.

The word “broch” was being used by antiquarians alongside “brough”, “burgh” and “Picts’ House / Castle” by the early 1800s, and the “broch” spelling was formally adopted by the Society of Antiquaries of Scotland in the early 1870s, though older usages lingered for a generation. Initially it signified a structure which was either, like Mousa, a tall-standing tower, or which had a lower height but showed sufficient structural detail for its similarity with surviving tall-standing examples to be asserted with confidence.

It is worth noting in passing that “broch” does not seem to have been in popular usage for this class of structure: the only pre-1800 use of “broch” was in relation to the town of Fraserburgh, where Scotland’s first planned “new town” was created in the late 1500s and early 1600s, and referred to as “Fraser’s broch” or “Fraser’s burgh”³⁷, suggesting that broch was a northern synonym for burgh. The nickname Broch is still in popular use today, especially in local newspapers, where it allows for a larger typeface and more striking headlines than does Fraserburgh³⁸. And in the Western Isles and wider Gaelic-speaking area, the term “broch” was not used locally, even though the Old Norse root “borg” appears as “barp”- and “borve” in many place-names. The word dùn, a generic Gaelic word for fort, was used exclusively for all man-made prehistoric sites which appeared to be of a defensive nature.

As archaeological research and fieldwork progressed, the number of “possible” broch sites has risen to about 600³⁹, although as time passed, the majority of sites so designated were usually no more than large grass-covered mounds of masonry of approximately the right dimensions, which in their physical appearance and siting appeared to informed observers less like a large burial cairn and more like a broch – a rather unsatisfactory approach, but one which persists in modern research.

A recent estimate is that only about 150 of 600+ “possible” broch sites show any details of built masonry at all, with about half of these, 70 or 80, either surviving as towers or showing sufficient structural evidence to suggest they could once have achieved such a height.⁴⁰ That said, when “possible” broch sites have been tested by full or partial excavation, or otherwise disturbed, they do prove more often than not to reveal features allowing them to be counted as brochs⁴¹. Additional “possible” sites continue to be added, and in

³⁷ Oram et al, 5

³⁸ One memorable headline from the Press and Journal, in 1980: “Broch man told lies to gain credit”

³⁹ Armit 2003

⁴⁰ Barber 2018

⁴¹ E.g. Cloddie Knowe, trial trenched in 1988 (MacKie 2002 p 82)

some cases demonstrated to be brochs⁴². In summary, Scotland has at least 80 brochs, but may have many more.

It has been accepted from the early days of serious study that few other brochs had ever stood quite as tall as **Mousa** and the other partially surviving towers such as **Duns Telve**, **Troddan** and **Carloway**, though views vary radically as to just how many were towers at all. Scott in 1947 argued that only a dozen or so tall towers had ever existed across Scotland, with the rest simple solidly built low-rise farmhouses⁴³. Graham immediately disputed this, based on data from Royal Commission surveys, and his view, that the majority of brochs were tall enough to be imposing, if not as lofty as Mousa, has tended to prevail since then⁴⁴.

Attempts to define “true” or “tower” brochs as distinct from a wider class of drystone forts and duns have tended to centre on the presence of specific constructional features: near-circular ground plan, hollow or galleried wall construction, single narrow entrance passage, staircase within the wall thickness, a wall thick enough to have supported a sufficient height to act as a defence, etcetera⁴⁵.

Although early commentators tended to agree that brochs were originally unroofed towers, over time, opinion has shifted to the extent that most commentators, while disagreeing about details, accept that brochs contained significant internal fittings, typically including one or more raised floors and some form of a roof, and that timber was the major component of these “now vanished” elements. However, such features are in all cases inferred, based on what makes best sense of surviving stone-built features, such as scarcement ledges. Initially, it was suggested that broch roofs were “obviously” annular, lean-to structures leaving the centre for the inner space open to the sky (for light and smoke to escape)⁴⁶. More recently, broch reconstructions have tended to feature conical roofs sitting on the wall-head or just below it, with the weight taken by stout posts⁴⁷. Fojut (sceptically) and most recently Romankiewicz (more optimistically) are among those who have recently published on possible roofing structures⁴⁸.

Physical evidence for such features is extremely rare amongst excavated broch sites, and even at the only two brochs where evidence of really substantial floor-set timber posts has been found, **Dun Troddan** (Highland)⁴⁹ and **Leckie** (Stirlingshire)⁵⁰, these cannot conclusively be confirmed as having

⁴² E.g. Channerwick, revealed in winter 2013/14 <http://ssharp.co.uk/shoredig-projects/channerwick-broch/> accessed 6 September 2018 (illustration also shows Mousa used as the archetype of a broch)

⁴³ Scott 1947

⁴⁴ Graham 1947a and 1947b

⁴⁵ MacKie 2002, 1-2

⁴⁶ Curle 1921, 90-92

⁴⁷ For example that by Alan Braby, widely reproduced, e.g. in Armit and Fojut 1998, 15

⁴⁸ Fojut 2005b, 194-6; Romankiewicz 2016, 17-19

⁴⁹ Curle 1921, 90-92

⁵⁰ MacKie 2007, 1312-3 (see also MacKie 2016 for more detailed account)

been constructed at the same time as the brochs⁵¹. The need for caution is emphasised by the substantial post-rings found at Buchlyvie (Stirlingshire)⁵² and Càrn Liath (Highland – Sutherland)⁵³ which in both cases can be shown to relate to pre-broch roundhouses⁵⁴.

If all brochs were indeed fitted out in timber, this would have interesting implications for wider relationships and poses the question of how quality timber for construction was obtained by those living in relatively treeless areas such as Shetland or the Western Isles.⁵⁵ The earlier view, that brochs as first constructed were not intended to be roofed, still has adherents, who offer an alternative view of brochs as a network of defensive lookout towers built in response to the threat of raiding or invasion. Smith has recently re-opened this debate by suggesting that Mousa and some other (although not all) brochs were never intended to be roofed⁵⁶.

c) Broch origins

The date and antecedents of brochs have been pushed progressively earlier. The idea that brochs were built by the Danes or Vikings⁵⁷ persisted for some decades, despite the outright rejection of this idea by Scandinavian antiquarians as early as 1852⁵⁸. The alternative view, that they were built by the native population as watch-towers against the Vikings, was also popular⁵⁹ and led to them being called “Picts’ House” or “Pictish Castle”. However, by the 1880s, it had become generally accepted that brochs were somewhat earlier, dating to what had come to be termed the Iron Age and constructed at a time when the Romans were actively expanding their Empire, further south⁶⁰.

As the discipline of archaeology developed, and in the absence of direct dating evidence, efforts were made to fit brochs into wider perspectives. The idea of a series of “cliff castles” along the west coast of Britain, originating in Cornwall and gradually spreading north as they increased in architectural sophistication and complexity, was proposed⁶¹, and led to the dominance of various “diffusionist” models, in which brochs were seen as the strongholds of an incoming elite⁶². Elaborate “family trees” of Iron Age fortification across western Europe were drawn up, culminating in the broch, and these carried some influence well into the 1980s.⁶³

⁵¹ Fojut 2005b, 192-3

⁵² Main 1989, 296-302

⁵³ Love 1989, 165

⁵⁴ In this respect, the conjectural plans offered by MacKie for Dun Carloway are perhaps unhelpful. MacKie 2007, 1204

⁵⁵ Fojut 2005b, 196-9

⁵⁶ Smith 2016, 15

⁵⁷ Fergusson 1877, 630-9

⁵⁸ Worsaae 1852, 233

⁵⁹ Stuart 1857, 191-2

⁶⁰ Anderson 1883

⁶¹ Childe 1935

⁶² Scott, 1948

⁶³ Hamilton 1968, 51

The discovery, in excavated broch sites, of some types of artefacts with similarities to those found in southern England and Brittany was held to support this idea, with any thought that their presence might have arisen through trade being rejected. Clarke and others warned that many of the artefact types cited were much more broadly distributed and in some cases near-ubiquitous⁶⁴ in the middle Iron Age, and could not be relied upon to demonstrate large-scale invasion. That said, most would accept that there were contacts between Iron Age communities living along the European north-western seaboard, so ideas might have been shared, and individuals may have moved from area to area.

The observation has been made that brochs are unlikely to have arisen locally in north and west Scotland because the preceding local Bronze Age seems poor, but this may well be a mis-reading of the evidence: a lack of monumental building does not necessarily imply an impoverished culture. The fundamental problems for the immigration/invasion hypothesis as an explanation for the appearance of brochs, are (a) why the arrival of people from an area which held no structures anything like brochs should lead to their construction in their new homeland, and (b) why the limited amount of “exotic” pottery which is held to mark their arrival in the area (supposedly at Clickimin) might not have been obtained by trade or by gift exchange. The idea that brochs were built by “warlike chieftains” to “overawe a subject population”, remained popular⁶⁵, although not with all commentators. Stewart in 1956 was typically concise in this respect with regard to his homeland: “Shetland at its best had two feudal castles, and all the local lairds of later times (very small fry *indeed*) *would not have added up to the fraction of her hundred brochs, so it is useless to think of a lord controlling a group of serfs... We have a form of life based on a group much larger than the family, and a communal effort to meet some unprecedented sort of danger.*”⁶⁶

The older, alternative view, that brochs were a unique local invention, began to be revived in the 1950s, notably in Shetland⁶⁷. Broad contemporaneity with the Roman presence was still supported, but now with the added idea of brochs as refuges against slave-raiding, possibly by the Romans or by war-bands selling slaves into the Roman Empire. The persistence of immigration, if not invasion, as a stimulus was maintained, with the invention of brochs, probably in Orkney, by a “mixed” population⁶⁸. At the same time, the idea was revived that brochs were built over a very short period and then abandoned or converted into non-defensive structures.⁶⁹

The period of broch construction was still assumed to be in the last century BC and the first century AD (largely on the basis of a few Roman artefacts found in and around brochs). This theory allowed for several centuries of experimentation to “perfect” the broch, wherever it first emerged in its ultimate

⁶⁴ Clarke 1971

⁶⁵ RCAHMS 1946 (visited/written 1930), 48-55

⁶⁶ Stewart 1956, 15

⁶⁷ O'Neill 1954

⁶⁸ Stewart 1956, 15-16

⁶⁹ Stewart 1956, 15

expression as a tower, although there was a tendency to push this date a little earlier, perhaps into the second or third century BC, with an increasing preference for local invention over external inspiration. There was general agreement that brochs as well-built as Mousa came late in any sequence of structures⁷⁰.

The search for the architectural antecedents of brochs produced two competing theories. A 'western origin' school saw brochs developing from simpler D-shaped enclosures with some broch features which occur in Skye and the neighbouring mainland, and which MacKie termed semi-brochs, via the "ground galleried" brochs of the west into the "solid-based" brochs of the north⁷¹. A competing northern origin school of opinion saw brochs arising in Orkney or Caithness (or even in Shetland, where a small number of so-called "blockhouse forts" contain broch-like features, such as wall-base cells, stairways and scarcement ledges)⁷². Dating evidence emerged in Orkney during the early 1980s for a few thick-walled roundhouses (such as that at Bu, near Stromness, dating to 600 – 500 BC) which some claimed as forerunners to brochs⁷³, although these possessed few, if any, of the classic defining features of brochs.⁷⁴ Nonetheless, this led some to believe that brochs might go back as early as 600 BC⁷⁵.

Until recently there have been few secure radiocarbon dates for the actual construction of brochs, since few excavators had dug under their massive walls. Almost all dates from broch sites related to deposits within and around them, and almost by definition later than the construction of the brochs on each site – and usually later by an unknowable length of time. This changed with the dating of Dun Vulcan (South Uist) from carbonised grain within the matrix of the wall. Taken with other material nearby, this suggested a construction date in the late 2nd or the 1st century BC. Slightly less securely, the construction of a broch at Upper Scalloway (Shetland) appeared to have taken place in the 1st century AD⁷⁶.

The radiocarbon dating of the construction of a fully-formed Shetland broch to the period 400 – 200 BC, at Old Scatness in southern Mainland⁷⁷, has forced a radical re-thinking of broch origins. The date, from well-stratified animal bone which was fresh at the time of its burial and lay directly under the well-built primary wall of the broch, has confirmed the growing suspicions that brochs were a considerably earlier development than had generally been supposed, at least in the north.

This has not entirely banished an attachment to the idea of immigration as a stimulus for changes in society which led to the appearance of brochs,

⁷⁰ Fojut 1981, 226-7

⁷¹ MacKie 1992: also MacKie 2007, 1094,

⁷² Lamb 1980, Fojut 1981

⁷³ Hedges and Bell 1980, Hedges 1987

⁷⁴ Armit 1990 p 195

⁷⁵ Fojut 1981, p 34

⁷⁶ Parker Pearson et al 1996; Sharples 1998

⁷⁷ Dockrill et al 2015, 168-171

although its continuing adherents now place the hypothetical arrival of the supposed highly skilled incomers into northern Scotland much earlier, perhaps even at the start of the local Iron Age (around 700 – 600 BC), the new date MacKie has suggested the arrival of the supposed high-status southern immigrants to Shetland⁷⁸.

The arguments for this are problematic in the extreme, due to the disturbed nature of the structures and deposits at Clickimin, which Hamilton largely failed to take into account⁷⁹. At Clickimin, key pottery forms with internally fluted rims and sometimes black burnished exteriors, were held by both Hamilton and MacKie to mark the arrival of southern immigrants well before the broch was constructed. It was suggested as early as 1980 that these particular forms of pottery appear not before, but in fact well after, the building of the broch at Clickimin and probably elsewhere in Shetland⁸⁰.

This interpretation has now gained strong support from the extensive excavations at Old Scatness, where these pottery characteristics consistently appear from the 1st century BC onwards – long after the construction of the broch. A similar date has been ascribed to comparable pottery at Dun Vulcan in South Uist. This change – which may or may not mark the arrival of incoming settlers – is therefore no longer relevant in terms of dating the first appearance of brochs, either in Shetland or in the Western Isles.

MacKie's recent suggestion that brochs were invented first in the north, possibly even in Shetland, and then later reinvented in the west⁸¹ seems improbable, and the scenario suggested by Parker Pearson and collaborators more likely⁸², with the broch tower invented in the north and only spreading to (or being adopted in) the west considerably later. This is consistent with the fact that in the west brochs are fewer in number and occur interspersed with other small stone forts which were unlikely to have stood as tall. The dating evidence from Clachtoll broch in West Sutherland, currently (2018) under investigation, should shed light on this, occupying as it does what might be seen as a step on the journey from north to west (or vice versa).

Reinforced by the new dating evidence, and following detailed architectural and engineering analysis, plus his own work at Thrumster broch and other sites in Caithness, Barber has suggested that, in the north at least, "classic", "fully-formed" or "tower" brochs such as Mousa may in fact all be of relatively early date and built over a short span of time short duration ("perhaps only a single, say 35 year, generation...in the early fourth century BC"⁸³), often being reduced in height not long after their construction and in some cases incorporated as the cores of more extensive settlements. This latter phase of

⁷⁸ MacKie 2008

⁷⁹ Smith, 2014, 4

⁸⁰ Fojut 1989, especially 29-31 (first discussed in unpublished PhD thesis 1980)

⁸¹ MacKie 2008, 272

⁸² Parker Pearson et al 1996, 58-62

⁸³ John Barber pers. comm. August 2018

conversion Barber sees, with many caveats, as being already underway in Caithness by 200 BC and continuing perhaps until AD 200⁸⁴.

So, while the date of origin for some brochs has been pushed earlier, there remains good evidence that some were still being built around the turn of the millennia in Shetland, and possibly built for the first time then in the west. There is also some evidence which may suggest direct contact with the 1st – 2nd century AD Roman occupying forces in central Scotland on the part of the inhabitants of Leckie in Stirlingshire, one of the “outlying” brochs which have always proved problematic to fit into the mainstream of broch theories. These have tended to be regarded as among the very last brochs to be built, and the broch at Leckie appeared to have been recently built at the time of the suggested Roman contact⁸⁵. Edin’s Hall falls into this grouping geographically, but has not so far produced demonstrably Roman artefactual material.

The wide span of dates now available suggests that the narrative which best fits the evidence is that the broch was a successful structural form which was first developed in the north, where it was quickly built in sizeable numbers. Brochs continued to be built in the north in appropriate circumstances over several centuries, and the architectural form was adopted further afield in later centuries. The artefactual evidence from Dun Vulcan does not suggest the Western Isles were colonised in force from the north, being instead more consistent with limited contact. The idea that Shetland may have been taken over by Orcadian broch-builders, as floated by Stewart in 1956, similarly lacks artefactual support. But this returns us to the core of the problem; that we still have next to no excavated evidence for Iron Age culture at the point of broch building, but only from later centuries.

That is probably as much interpretation as the available evidence can currently support, and debate will continue as to exactly what the “appropriate circumstances” were which made building a broch a suitable response.

- d) How special are brochs, and what was their purpose?
Many writers, including MacKie⁸⁶ and more recently Barber⁸⁷, have emphasised the combination of architectural features which they felt pointed towards what Barber has termed “canonicity” – the intention of the builders of each broch to conform to a model which was clearly defined closely resembled other such towers so far as geology would allow. MacKie posited a “professional” architect cadre⁸⁸ while Barber has recently pointed to the engineering knowledge involved in constructing so close to the physical limits of buildability⁸⁹.

⁸⁴ Barber 2018

⁸⁵ MacKie 2007, 1314-5 (See MacKie 2016 for more detailed discussion)

⁸⁶ MacKie 1965

⁸⁷ Barber 2018

⁸⁸ MacKie 1965

⁸⁹ Barber 2018

Others have seen brochs simply as one end of a much wider spectrum of enclosed drystone structures which were all intended to serve the same broad purpose, presumed to be that of a defensible and impressive dwelling⁹⁰. Armit developed the idea of the “Simple” and “Complex Atlantic Roundhouses” to emphasise similarities within a larger class of approximately circular structures⁹¹, while Romankiewicz has since taken this further to include all thick-walled structures, regardless of plan form, which contained intra-mural spaces and could have been roofed⁹², though to refer to such a wide range of structures as brochs seems unhelpful⁹³.

These contrasting views are interwoven with debate and with assumptions about how brochs “worked” in practical and social terms: about whether they represented the communal homes of whole communities or only of landlords or chieftains; whether they were defensive at all, or solely intended to demonstrate status⁹⁴, and also about how and when the tower form emerged: possibly early and as a brilliant stroke of creative genius, or possibly late and as the product of a gradual process of experimentation. (Although, as Barber has recently observed, the frequent use of the term “evolution” is inappropriate in a Darwinian sense – ideas may evolve but structures cannot.)⁹⁵

e) Brochs and Iron Age society

A further source of continuing debate has been the nature of contemporary society, ranging from early visions of a near-feudal society with immigrant overlords and their armed warriors living in brochs and levying rent and other support from subservient native, peasant farmers⁹⁶, through one of embattled local communities seeking to defend themselves against raiders or invaders⁹⁷, to one of peaceable, hierarchical farming communities building brochs not for defence at all, but as a symbol of their possession of the land, their prestige, and safe storage of accumulated wealth in the form of surplus grain⁹⁸. Several commentators have observed that many brochs occupy locations where large-scale arable agriculture seems unlikely to have been any more viable in the Iron Age than it would be today⁹⁹ and the assumption of grain surplus is not certain.

Almost all of the dated evidence for life in and around brochs relates to their occupation in primary and subsequent forms, and not to their construction, and this is likely to remain the case. We have no way of knowing whether society at the precise time brochs were built was similar to that in subsequent centuries, from which most of our excavated evidence derives.

⁹⁰ Barrett 1981, 207-17

⁹¹ Armit 1991

⁹² Romankiewicz 2011

⁹³ Romankiewicz 2016

⁹⁴ Armit 2005b

⁹⁵ Barber 2018

⁹⁶ Scott 1947, 1948

⁹⁷ O'Neill

⁹⁸ Hingley 1992, 19; Dockrill 1998, 493-7 et passim; Armit 1996, 129-130

⁹⁹ Smith 2014

The explanation for the regional distribution pattern of brochs probably lies in the nature of Iron Age ‘tribal’ groupings, but there is insufficient evidence to provide a satisfactory explanation. The types of artefact found in broch excavations also occur on non-broch sites and also beyond the so-called “Broch Province”, and brochs do not appear in some adjacent areas where physical conditions suggest they might, for example, in mid and south Argyll or Arran. In short, brochs do not align with a single distinctive “material culture”. Stuart in 1857 expressed things pithily: “there must have been something peculiar in the circumstances of the inhabitants to have given rise to these peculiar erections.”¹⁰⁰ We are still far from understanding what this peculiarity might have been.

It seems likely that each broch represents the work of a substantial community, larger than a single extended family, which controlled a distinct area of land (and perhaps sea) and that the broch represented a visible token of their possession, willingness to defend that holding, and the social status of the group or at least its leaders. People must also have continued to make their living from the land and sea, so access to resources would have been a constant concern. However, how their society was organised is not self-evident, and the unanswered question remains: what combination of circumstances led to the building of a broch?

So far as can be ascertained from excavated evidence, Iron Age society at the time of the brochs appears to have been relatively “flat”; composed of largely self-sufficient groups, which over time became associated into wider regional groupings that might loosely be termed “chiefdoms”. These various groups doubtless interacted, both productively (trade, social exchange and agreed marriage) and negatively (raiding to steal livestock and perhaps to take prisoners, and even to take over territory). Brochs presumably provided enough defensibility to offer a degree of deterrence against the less desirable forms of interaction which might be expected locally, though they would not have withstood prolonged siege warfare – which in itself says much about how the builders perceived their wider world.

It is possible to imagine economic models for communities living in and around brochs, and while this might have been possible in the more favoured parts of Orkney or Caithness (both of which exported grain in late medieval times), neither the Western Isles or Shetland seem likely to have been able to support a subsistence economy founded principally on the cultivation of grain, though what grain could be produced would have been a valuable resource. Reliance on pastoralism and on the use of coastal and marine resources would have balanced such an economy more broadly, especially if exchange or barter operated between nearby communities with access to different resource bases¹⁰¹.

¹⁰⁰ Stuart 1857, 192

¹⁰¹ Fojut 1982a

However, the feasibility of theoretical economic models is inter-twined with the particular model of social structure which is assumed. Primitive communalism, client-elite relationships, inter-group collectivities (very close to a chiefdom society), a proto-feudal or even a full-blown feudal system have all been suggested at various times. Each would have made subtly, sometimes radically, different demands upon the resources available. The sole indisputable fact remains that each broch must have been built by a locally-available workforce, sustained by locally-available resources for at least as long as it took to build.

Once built, brochs may well have served a variety of functions, or at least acted as bases for a mix of activities which varied widely from site to site and from time to time. Some brochs went on to become the cores of more extensive settlements, while others seem to have been abandoned not long after they were constructed. Many brochs undoubtedly served as farmhouses in later years, but whether any brochs were built primarily as farmhouses is likely to remain an open question. It is hard to escape the impression, especially when standing next to a broch such as Mousa or Dun Carloway, that brochs were originally defensive, if only in that they were intended to offer outward vantage, impress the viewer and suggest the invulnerability of their possessors, and that thoughts of agrarian domesticity were not paramount in their builders' minds. On the other hand, the broch at Edin's Hall gives much more of an impression of having been influenced by broch architecture but remaining rooted in a different tradition of very large wooden roundhouses – though if Edin's Hall's "broch" was roofed, which has been doubted, it would have been one of the largest roundhouses ever identified in northern Britain.

f) Conclusion

In conclusion, despite two centuries of study, most of the basic facts about brochs, beyond physical measurements of surviving structures, remain conjectural, with interpretations usually based upon a very small sample of evidence, selectively interpreted, fitted to "off-the-shelf" social models. The revision of explanatory narratives will continue as new evidence emerges and as old evidence is reviewed: every few years brings another brave attempt to present a unified and coherent account of the issues discussed here^{102 103 104} only to see each effort, rather than unifying the field of study, simply add fresh fuel to debate.

It remains true, as Stewart sagely remarked in 1956, that "it is easier to guess why the broch came into being than how"¹⁰⁵. But neither question has yet been answered conclusively.

¹⁰² Hedges and Bell 1980

¹⁰³ Armit 2003

¹⁰⁴ Most recently, Romankiewicz 2016.

¹⁰⁵ Stewart 1956, 21