HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

Property in Care (PIC) ID:	PIC288
Designations:	Scheduled Monument (SM90110)
Taken into State care:	1887 (Guardianship)
Last Reviewed:	2021 (2025 update to include Empire connections)

STATEMENT OF SIGNIFICANCE

DUN CARLOWAY

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Cover image: Exterior view of Dun Carloway. © Donald Macleod.

Historic Environment Scotland – Scottish Charity No. SC045925
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STATEMENT OF SIGNIFICANCE

DUN CARLOWAY

Contents

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1. SUMMARY

1.1 Introduction

Dun Carloway (in Gaelic, Dùn Chàrlabhaigh or An Dùn Mòr) is an Iron Age monument on the Isle of Lewis. It is the tallest surviving example of a broch in the Western Isles and among the tallest in Scotland. It was taken into State care in 1887 under a Guardianship agreement.

The broch stands on a rocky knoll above a small loch, with views towards Loch Roag, an inlet of the Atlantic.

The site is unstaffed, and accessible throughout the year; it is reached along a short gravel path from a parking area at Doune, just south of the township of Carloway. There is a small visitor centre, which is open seasonally.[1]

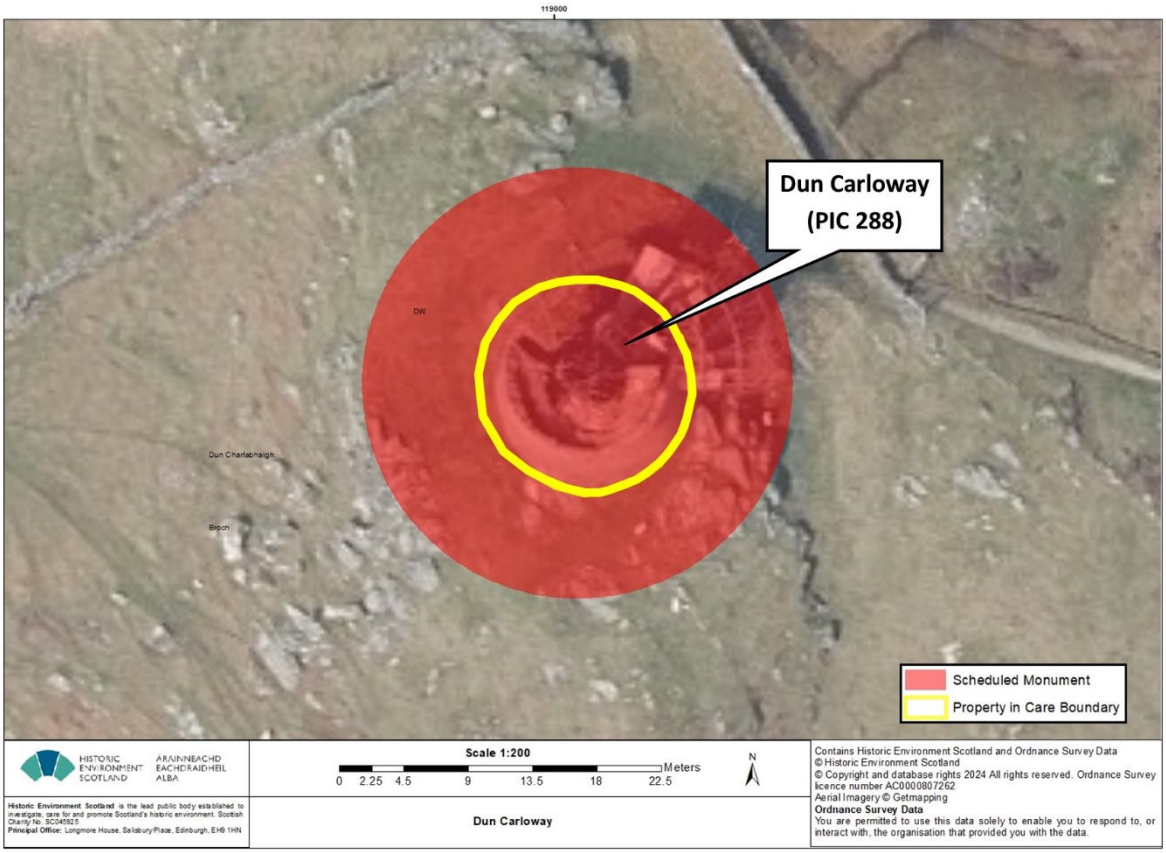

Figure 1: Scheduled area and Property in Care Boundary at Dun Carloway, for illustrative purposes only.

[1] The Broch Visitor Centre is operated by Urras nan Tursachan (The Standing Stones Trust), please check opening hours via their website: www.callanishvisitorcentre.co.uk

Figure 2: Dun Carloway close near-vertical aerial view showing hollow wall construction. © Historic Environment Scotland.

1.2 Statement of Significance

Dun Carloway is of national importance as the best-preserved example of a broch in the Western Isles, and among the tallest in Scotland as a whole. Brochs are typified by a circular ground plan with massive drystone walls capable of rising to tower-like heights – in the case of Dun Carloway, around nine metres. Intra-mural passages or 'galleries', stairways and chambers also characterise brochs.

Brochs are unique to Scotland and are massive drystone towers with a circular ground plan, of late Iron Age date. Brochs began to be constructed (on current evidence) at a date between 400 and 200 BC.

No direct dating evidence has emerged so far to date Dun Carloway's construction, although a date in the final two centuries BC seems most likely. Unlike many brochs, it does not appear to have undergone extensive structural modification, although there is evidence for its use in the middle of the first millennium AD; later use was probably sporadic.

Key aspects of the site's significance include the following:

- The remarkable dovetailing of built masonry with the irregular bedrock on which the broch sits is impressive but hard to explain. The site would not have been an easy one on which to construct, and

it would have been possible to create a more stable base by siting the foundations just a few metres to the south and east. That this was not done seems to imply that it was important to the builders that the broch's seaward face should rise sheer from the underlying rock. Its siting on the very edge of a steep slope is remarkably similar to that of **Dun Dornaigil**[2] (Highland).

- Its contribution to the field of broch-studies and the Iron Age. For instance, its context, siting and relationship to other archaeological and landscape features can be compared to other broch sites. The degree to 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, and in particular comparisons between the role of brochs in the west as compared with the north.
- Its unusual ground plan: the part of the circuit to the right of its narrow entrance passage appears to be constructed with a near-continuous ground-level gallery running around within the wall thickness, while the opposite portion is constructed with a solid masonry wall base at ground level, containing a single oval chamber. This has led to suggestions that Dun Carloway is an intermediate between the two main classes of broch: solid-based (mainly found in the northern Scottish mainland and the Northern Isles) and ground-galleried (mainly found in the western mainland and the Hebrides), but it may simply be a response to the difficult topography of the site.
- The importance of the remains as they survive, and the potential for further exploration to add useful evidence bearing on its construction, occupation and modification over time (including in recent times). The fact that the broch does not appear to have undergone significant structural alteration might suggest that the site was not favourable for longer-term settlement, which in turn may have a bearing on the original purpose for which brochs were intended – something which is still the subject of much debate.
- The broch's use in later centuries, despite lack of visible secondary structures. About AD 500, it appears to have been used as a pottery-making workshop.
- Its importance to many contemporary communities. Dun Carloway evokes strong feelings of attachment, belonging and custodianship, especially among local communities. It is a great source of pride and provides an iconic image for the district.

[2] Throughout the text, site names in **bold** are managed by Historic Environment Scotland and are publicly accessible. Access information can be found at: www.historicenvironment.scot/visit-a-place/

- Its place in oral tradition: the broch features in one of a series of oral tales about the quarrelsome chieftain Donald Cam MacAulay (c.1560 – c. 1640) allowing a connection to be made with these narratives and giving some indication of the state of the broch and how it was viewed five centuries ago.
- The dramatic and picturesque image of the site: while dramatic locations are not unusual among brochs, Dun Carloway ranks high, alongside **Mousa** (Shetland) in terms of photogenic character.
- Its value as a heritage visitor attraction. Alongside **Arnol Blackhouse**, **Calanais** and other sites in Lewis, it acts as a tourist draw and contributes to the identity of the area as a destination with exceptionally interesting heritage. It is also one of the earliest properties to be formally taken into State care (in 1887).

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 include a Detailed Description of Dun Carloway at Appendix 2, and an overview of Brochs – Theories and Interpretations at Appendix 3. Appendix 4, a Report on the Social Values of the site undertaken as part of a doctoral research project, is available on request from CRTenquiries@hes.scot.

2. ASSESSMENT OF VALUES

2.1 Background

2.1.1 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. For the purpose of this document, the term 'broch' is used to refer to what some researchers have called 'fully formed' or 'tower' brochs. 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, single narrow entrance passage, staircase within the wall thickness, stacked voids, tower form). Dating evidence is scarce and most reliable dates relate to periods of occupation rather than of construction. However, recent radiocarbon dates from sites in South Uist and Shetland (sampled within walls or under the structure) indicate construction before 100 BC, and between 200 and 400 BC respectively.[3]

[3] Parker Pearson and Sharples 1999, 355; Dockrill *et al* 2015, 59-60.

Brochs are a building type unique to Scotland; their remains occur most frequently in the north and west, rarely in the south. It is not known how many brochs were built, so 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 sites currently identified 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 3.

One particular point worth noting here is that the distribution, location and frequency of brochs varies markedly between different regions. The Western Isles contains a relatively small number of brochs and many other stone-built fortifications of less regular plan. (Orkney and Shetland, by comparison, have many more brochs and hardly any non-broch Iron Age sites of similar scale.) This must have implications for how brochs were intended to function, and also their social context.

Figure 3: Dun Carloway in its landscape setting. © Donald Macleod.

2.1.2 Descriptive overview

Dun Carloway is located on a rocky knoll overlooking a small freshwater loch. From the top of the broch, it would have been possible to look towards Loch Carloway, a sheltered inlet long used as a harbour. The landscape is one of rocky outcrops interspersed with croft-houses set among patches of rushy grazing land, formerly cultivated.

The broch's name means 'the fort at Carloway', that being the name of the district: Carloway is ultimately of Old Norse derivation. It is sometimes referred to as *An Dùn Mòr*, 'the big fort'.

The broch is a drystone tower of near-circular plan. Its walls survive to over nine metres tall for a small part of its circuit. This places it amongst Scotland's tallest-standing brochs. The external face is markedly battered (slopes inward as it rises) while the internal face rises vertically. The stonework of the external wall has been carefully constructed to interlock with the irregular rock outcrop on which the broch stands, and which protrudes into the broch's interior space.

A single, narrow doorway gives access to an entrance passage, off which is an oval chamber in the thickness of the wall. The entrance passage opens into the broch's circular interior, which measures about seven metres across. At the foot of the vertical internal wall are three lintelled doorways. One gives access to an oval chamber while the other two both give access to an elongated space which is interrupted by a stone stair rising clockwise to a landing about two metres up. Bedrock protrudes into the north-western part of the broch's floor.

Only the eastern portion of the broch's walls now stand above head-height, and the continuation of the internal stairway has been lost. Above the ground level, evidence survives for five continuous galleries within the thickness of the wall. Each gallery floor formed the ceiling of the gallery below, and is made of long slabs, which also serve to tie together the inner and outer skins of the wall. A vertical, elongated aperture in the internal wall-face, spanned by lintels, would have allowed light and air into the galleries.

2.1.3 Antiquarian study and associations

Dun Carloway was not singled out for mention in early descriptions: neither Dean Munro (1549) nor Martin (1695) refers to it.[4] Neither Pennant's Tour, nor that of Johnston and Boswell reached Lewis.

The earliest reference to Dun Carloway to have appeared in print seems to be in a letter written from London by Colin Mackenzie,[5] describing a visit to the broch.[6] This letter was probably written in 1782, and the visit may have taken place the preceding year, in 1781:

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[4] Thomas (1890, 386) suggests that a site described by Martin near Bragar is Dun Carloway, misplaced. However, a description closely matching that given by Martin is assigned to the broch at Bragar in the New Statistical Account (NSA) entry for the parish of Barvas, 145. That broch is still there, and the remains are substantial enough to support the idea that this site still stood three stories high in the early 19th century. The Bragar site is described in Thomas (1890, 374) as Dun Bhragair and is also known as Loch an Dùna (for example, in MacKie 2007, 1102).

[5] Mackenzie, a native of Stornoway, went out to India in 1783 and later rose to become Surveyor General of India, never returning.

[6] McKenzie (the Mackenzie spelling is now more normally used) 1792, 287–8.

> … at Carloway, one side of which is entire; but, as the other side appears to have been forcibly and abruptly torn down, it is impossible to examine the upper parts of it. I climbed up over the ruins that had fallen, and over the only entry it had from without, which was only four feet square. On the side facing the area within, are several window-like openings, giving some light to the winding staircases… as the wall grows gradually narrower, I cannot comprehend how people could get to the top…

In the 1797 First Statistical Account of Scotland, the parish Minister of Uig described Dun Carloway as 'perhaps the most entire of any of the kind in Scotland' – a slightly inflated claim, but forgivable given the limited circulation of antiquarian texts at that date, and also that the broch may then have stood a little taller.

Captain F.W.L. Thomas visited Dun Carloway in 1861 and measured it carefully. It stood to a similar height to today, although with rather more of the upper wall standing tall on its southern arc. Thomas cleared out the entrance passage. The upper masonry was clearly quite fragile at that time, particularly a level of very irregular masonry which Thomas's drawings show sitting above what survives today in the arc which contains the entrance – and which puzzlingly appears more evident than in the drawing which accompanied Mackenzie's letter when it was published in 1792. Thomas's description and drawings of Dun Carloway were presented posthumously to the Society of Antiquaries of Scotland in 1890: he died in 1885.[7]

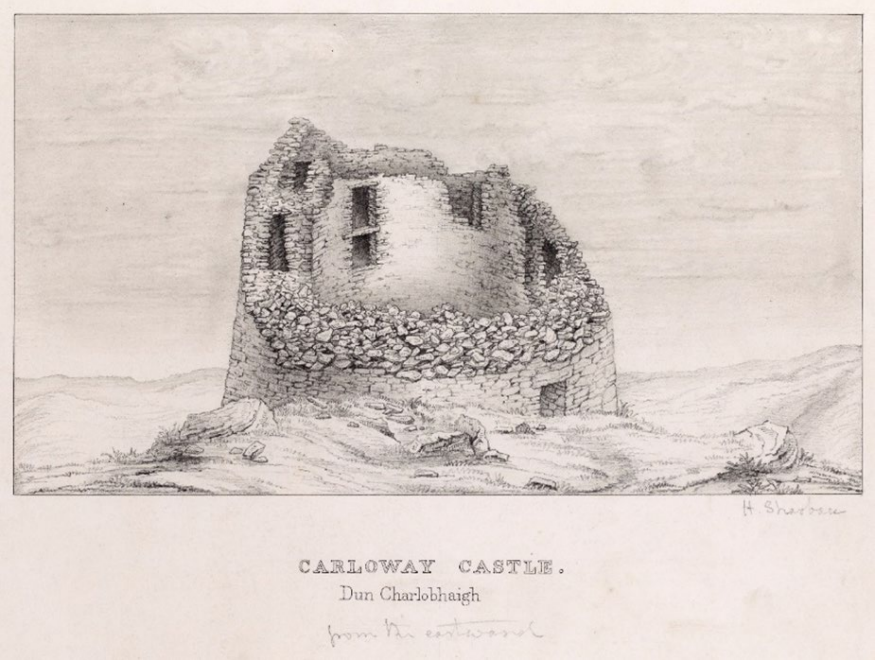

Figure 4: Drawing by H. Sharbau c. 1865 – used to illustrate F.W.L. Thomas 1890. © Courtesy of HES (Society of Antiquaries of Scotland Collection).

[7] Thomas 1890.

Thomas was also responsible for a lengthy account of the traditions of the Macaulays of Lewis, published in 1880, in which the story of the scaling of the broch wall earlier recounted by Mackenzie is included among the tales of derring-do attributed to Donald Cam Macaulay.[8]

The site was taken into State care through a guardianship agreement with the landowner in 1887. As such, it was one of the earlier properties to come into State care following the Ancient Monuments Act of 1882, though not quite the earliest as it was not one of the two dozen Scottish monuments named in the original schedule to that Act. The first Schedule did, however, include the brochs of **Mousa, Clickimin, Dun Telve, DunTroddan** and Dun Dornadilla also known as **Dun Dornaigil**.

2.1.4 Clearance and structural consolidation

Between 1887 and 1921, the broch was largely cleared of fallen stone by workmen of the Office of Works. It was presumably at this time that the tumbled and possibly later upper walling above the entrance, shown by Thomas, was removed. This allowed consolidation of the inner and outer wall-faces and involved extensive rebuilding of the most precarious portions of the walling. No surviving record of these works has been found.

Finds made during these works were presented to the Society of Antiquaries of Scotland in February 1909. These comprised two quern-stones, a perforated oblong of micaceous schist [perhaps a whetstone?], nine large cylindrical water-worn pebbles showing signs of wear at each end and probably representing hammer-stone or pounders, and seven smaller pebbles with signs of similar wear.[9]

The broch was not fully emptied at this time; the Royal Commission's drawings and plan of 1921 show that neither the entrance to the oval chamber on the northern arc nor that to the stair-foot and adjacent chambers had been cleared at that date. Indeed, it was thought by Thomas and by the Royal Commission that there was a low, narrow connection between the elongated chamber on the southern arc and the guard chamber, but this later proved not to have been the case. A second chamber on the north arc was suggested by the Commission, but later proved not to exist. The genuine northern chamber was not fully cleared until 1971–2, in advance of consolidation of a collapsing section of wall.[10]

There are no records of any further excavation or artefactual finds until the 1972 excavation in the northern wall chamber.[11] This recovered several hundred broken sherds of pottery as well as a large fragment of a rotary quern. Comparison of the pottery to that from other Hebridean sites suggested a date in the period from the 5th to the 7th century AD, perhaps

[8] Thomas 1880.
[9] Report of Council Proceedings in volume 43 of the Society's Proceedings, for 1909, 145.
[10] Tabraham 1977, 156 (*contra* RCAHMS 1928).
[11] Tabraham 1977.

towards the earlier end of that timespan. The pottery was embedded in a series of layers of peaty ash, and the excavator suggested that this chamber had been in use as a workshop at a date long after the broch's primary construction and use. The finds are in the National Museum of Scotland collection.

Figure 5: Photograph showing former blackhouses below broch – possibly taken in 1950s. © Crown Copyright.

Following the initial clearance and consolidation of the site, after 1887 but before 1921, for which records have not been identified, there have been ongoing repairs and maintenance, some of which also appear to have taken place without systematic recording. It is clear that the taller sections of wall have been heavily repaired, especially the exposed outer ends of both the external and internal walls, which now probably bear only a superficial resemblance to what came into State care in 1887. It was only from c.1960 onwards that systematic detailed records and photographs of consolidation works were kept.

The entire structure was recorded by laser scanning combined with high-quality photographic coverage as part of the Rae Project, in order to provide an objective digital record which underpins future consolidation work.[12]

[12] A 3D model of the site can be accessed on Sketchfab: Dun Carloway by Historic Environment Scotland (sketchfab.com).

2.2 Evidential values

The evidential value of Dun Carloway is exceptionally high for what its constructional details, physical fabric, location and setting can tell us about the Iron Age and later periods; and for its potential to yield further information through ongoing research.

Dun Carloway is a member of a small, scattered group of examples of broch towers whose walls survive close to their original height for all or part of their circuit. The others are Dun Dornaigil, Dun Telve and Dun Troddan, and Mousa. Only Mousa survives to full height for the entire circuit. The four tall-but-not-complete examples all differ from Mousa in that the galleries within the wall thickness narrow markedly towards the top of the structure, so that they could not have functioned as passageways or even as storage spaces. Dun Carloway, like the other three comparators, has lost the higher levels of its internal stairway in the partial collapse. This means there is no way of knowing if the intra-mural stair reached their wall-head, as at Mousa. If it did, then part of the upper wall would have required to be broader than the surviving section; it is not impossible that this was the case, and that an asymmetrical wall section was one source of later instability, and its subsequent collapse at all four sites not coincidental. If it did not, and post-construction access to the wall-head was important to the builders of tower brochs, this might offer support for the existence of internal wooden galleries at a high level within these brochs, from which a wooden ladder might have completed the ascent. These are matters of hypothesis and likely to remain so.

The sequence of clearing, excavation and repeated repair are described in some detail below: it is evident that Dun Carloway has undergone significant change, even in recent times. Yet its overall scale and mass and its prominent landscape setting remains unaffected. Insofar as it has been reconstructed *as a monument*, it is clear that the character of the stonework has been changed by the insertion of small stone pinnings between the larger blocks, and even some of the larger blocks have been replaced where the tough but brittle Lewisian gneiss has sheared. Designed to be visible as later interventions, the net effect of the pinnings is to make Dun Carloway look more like brochs constructed in more amenable kinds of stone: it has to a degree been made to appear more 'Orcadian' in character. It is worth noting the fact that early descriptions make a point of the looseness of the blocky masonry: 'the joints are, of course, very wide, and daylight comes freely through even the bottom of the tower'.[13] It may even be that interstices were originally packed with moss or with clay, and not with small stone, though it is unlikely that convincing evidence survives either way.

[13] Thomas 1890, 383.

Probably the primary importance lies in what the site, in its excavated and consolidated state, demonstrates about the plan and form of brochs; this is discussed in section 2.4 Architectural Values. It also offers the potential for further excavation and other investigative techniques which could provide additional knowledge about its Iron Age and later context.

While much was destroyed in the post-1887 excavations, undisturbed Iron Age deposits are likely to survive in restricted areas, as was demonstrated in the 1978 excavations. While Dun Carloway may still contain limited deposits capable of illuminating the economic and social aspects of life in the broch, accessing these would require removal of part of the consolidated structure, which would be a questionable strategy given that such deposits might well be preserved in a very patchy manner and would pose problems of interpretation. More promising might be the area immediately outside the broch, where the uneven bedrock may contain pockets of deposits. Linking these to the history of the broch would be problematic, but they might offer an insight into changing environmental conditions and nearby land-use over time.[14]

Within the area in State care, the areas of greatest archaeological potential are likely to be:

- Outside the broch, in dips in the bedrock; such deposits are unlikely to be extensive. Existing techniques could be used, for example geophysical survey or simple manual probing may suffice to identify or rule out potential.
- Within the floors of wall-base chambers. As these chambers would presumably have been cleared out regularly, any deposits here are likely to represent the last use of these areas.
- Beneath the wall of the broch, which appears to be of large stones forming a basal course or plinth, but without any foundation trench. While accessing the area below the wall foot would be very challenging, it is not impossible that evidence for construction-contemporary activity might be preserved there and could add to the very small corpus of broch construction dates.

Developing scientific techniques may in time offer new ways of examining the structure. It would be particularly interesting to know the cross-sectional make-up of the wall, particularly in the solid-walled portion. Given the work in 1978, it is unlikely but not impossible that other wall-base cells may have been concealed in antiquity or in early consolidation.

There have been a number of recent excavations at broch sites in the Western Isles, but only one, at Dun Vulan in South Uist, has produced evidence regarding the date of construction of a broch – in this case most

[14] Outside the area in State care, the bed of nearby Loch an Dùin might also contain useful sediments for this purpose.

probably in the second century BC.[15] One strand of expert opinion suggests that all the brochs in any given region may have been constructed over a relatively short period, in which case a similar date might tentatively be ascribed to Dun Carloway.

The location of the broch can also offer some evidence towards understanding its original purpose. It is set away from the coast, although clearly visible to anyone approaching by sea. Being at some distance from the nearest anchorage or safe landing place is a common siting characteristic of brochs, in the Western Isles and elsewhere. It sits higher than, and overlooks, the best land locally available, and adjacent to moorland offering rough grazing. Most Western Isles brochs similarly sit above the best arable land, rather than within it, as would be the case in Caithness and largely so in Orkney. There is a small spring nearby, but no well has been found within the broch itself.

Dun Carloway is inter-visible with another broch or dun, on a small island in a loch to the south, but the combination of topography and paucity of (surviving) broch sites militate against the idea of a chain of intervisible brochs, as has been argued elsewhere, especially for Shetland.[16]

2.3 Historical values

The primary historical importance of Dun Carloway, and other brochs, is their ability to demonstrate Iron Age society and ways of living. They are such striking and singular structures that it remains a constant frustration that, despite an abundance of theory and interpretation (see Appendix 3), 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.

Therefore, our understanding of the nature of the society and circumstance that gave rise to Dun Carloway is largely conjectural. So far as can be gleaned from excavated finds, the material culture of brochs does not stand out from the generality of finds in other Iron Age sites, whether located in areas where brochs were common, or not. The social structure appears fairly ‘flat’ and composed of largely self-sufficient regional groups, which might loosely be termed ‘chiefdoms’, covering areas which would have included several brochs and as well as other sites of habitation.

[15] Parker Pearson and Sharples 1999, 30–45 (Note: in its introduction (page 3) this source wrongly attributes the pottery found by Tabraham at Dun Carloway, describing it as medieval.)
[16] Smith 2016.

Recent work analysing the resources needed for broch construction indicate that each broch represents the work over a short period of time of a substantial workforce, probably somewhat larger than a single extended family or local community might afford.[17] This might accord with the idea that brochs represented a visible token of possession of land, of willingness to defend that holding, and also of the social status of the group who built it, or at least of its leaders. However, brochs in the Western Isles, as in Shetland, are often located in places which are not especially favoured with agricultural land, nor even direct access to marine resources. This suggests that some brochs may never have been intended to function as centres of settlement or control for single 'estates', and that some at least may have been intended to serve other purposes, perhaps in the defence of territories much larger than a single local area of settlement.

It is generally agreed that brochs (and similar though less regular enclosed constructions) were created in a social context in which two factors were significant: defensibility and impressiveness. Dun Carloway certainly appears impressive to modern eyes, and while certainly defensible, it does not appear to have been constructed to withstand a prolonged siege.

Stuart expressed things pithily in 1857 when considering the stimulus behind the building of brochs: 'there must have been something peculiar in the circumstances of the inhabitants to have given rise to these peculiar erections.'[18] We are still far from understanding what this peculiarity might have been. It is entirely possible that there was some short-lived phenomenon which led to the rapid building of many brochs over a relatively short period of time, only for them to become redundant thereafter.

Lastly, and not negligibly, Dun Carloway is a dot on the map of known brochs, and the distribution patterns to which it contributes – in relation to other sites of similar date and to the wider landscape – have considerable potential to contribute to explanatory narratives which seek to understand the nature and function of brochs and the society in which they were built.

2.3.1 Historic associational values

A special aspect of Dun Carloway's historical value lies in its intangible associations with oral tradition. Dun Carloway is popularly associated with the historical figure Donald Cam MacAulay, who lived from approximately 1560 to 1640 (a remarkable lifespan for one often referred to as a 'renegade'). The MacAulays held the area of Uig, to the south-west of Carloway, and were long engaged in cattle raiding and general conflict

[17] Barber 2018.
[18] Stuart 1857, 192.

with the Morisons of Ness. The MacAulays were usually backed by the more powerful MacLeods; the Morisons by the Mackenzies.[19]

There are several versions of the particular tale associated with Dun Carloway, but in all of them the Morrisons had been cattle-stealing in Uig while the MacAulay men were away at the Flannan Isles. On their return, the MacAulays pursue the Morisons, who are slowed down by their newly-acquired cattle. The Morisons take refuge in the broch. The MacAulays silence the guard outside the door and then one of their number climbs the outer wall of the broch and either tears down the upper fabric or throws down burning heather, and smokes out the Morisons, who are dispatched by the waiting defenders.

These references tell us that the broch was defensible and was seen as a suitable place to defend in the late 16th century. More subtly, they suggest that the broch was not permanently inhabited at that time (or else that any inhabitants were readily displaced by a well-armed party of cattle-raiders).

Two somewhat different versions of the tale appear in the archaeological literature, and the differences in detail are of some interest.

The older version recounted by Mackenzie, writing around 1781–2, runs thus:

> … tradition relates that the fort being attacked by the natives, and the only small entrance being shut up, they found it impossible to penetrate into it, till one of them thought of fixing several *ducks* in the narrow crevices between the stones, and thus ascended to the top, where he and his associates proceeded to pull it down, till the garrison, which had no other defence, surrendered.[20]

[The word *ducks* may be a misreading or typesetting error, but would seem to refer to *dooks/douks* – wooden pegs inserted between joins in masonry, which be a perfectly reasonable explanation.]

The version recounted by Thomas, in part taken down around 1861 from a 75-year-old MacAulay, who claimed himself to be a 6th-generation descendant of Donald Cam MacAulay, is nearly identical to that given in the New Statistical Account, written in the late 1830s and published in 1845.[21] This version is much more dramatic in tone and betrays significant differences to that of Mackenzie: the scaling of the broch is attributed to Donald Cam MacAulay by name, and his climbing aids are now two *dirks*, or short knives – also quite feasible, but noisier than wooden pegs, if stealth was of the essence. In addition, the broch is presented as having been conical, capped by a single stone which could be removed. Thomas

[19] It should be noted that the spelling of names remained fluid until the later 1800s. Thus, Mackenzie appears earlier as M'Kenzie and McKenzie, while Morrison appears earlier as Morison and Morisone – the form Morison is still in use, though relatively rare.
[20] Mackenzie 1792, 288.
[21] NSA, Ross, entry by Rev. Robert Finlayson for the parish of Lochs, 163.

comments that this erroneous view was a widespread belief in the islands.[22]

Interestingly, Thomas's 1890 paper does refer elsewhere to *douks* in the sense of wooden pegs[23] so he was clearly aware of the distinction between *dirks* and *douks*: it is possible that he was tactfully signalling an alternative and less dramatic interpretation than the more recent version which he was quoting. Nonetheless, both accounts agree in one important respect: there were sufficiently numerous and generous spaces in the outer stonework to make climbing the broch's outer face relatively easy.

There is clearly more research to be done, ideally by a Gaelic speaker, into the variant versions of the story of the attack on Dun Carloway – are the *dirks* perhaps an invention of the first half of the nineteenth century, after Scott had established the vogue for romantic re-telling of historic events? At what date did Donald Cam MacAulay become associated with the tale? Or is it possible that the traditions of Donald Cam and the dirks are original, and that Colin Mackenzie, already in London and scenting his way to fame and fortune abroad, already being somewhat dismissive of the traditions of his homeland?

One general point which arises from this account is that there is a pattern of some brochs in the Western Isles being re-occupied in medieval and early modern times, sometimes with associated oral traditions and family histories: Dun an Sticer in North Uist being a good and easily accessible example.[24] This appears not to have occurred in other areas, where any use of broch sites at such a late date takes the form of buildings set upon the mounds, rather than dug down into them.

2.3.2 British Empire connections

Recent research into the relationships between the Properties in Care of Scottish Ministers and the British Empire[25] has highlighted that Dun Carloway has 'property' empire connections.[26]

The Humberston Mackenzies acquired the Seaforth estate in 1780, purchasing it from a cousin. The estate was heavily in debt in the 1780s, and was ultimately kept afloat by the East India Company settling Thomas Fredrick's (d.1783) Indian estate for £23,000 in 1789. His brother Francis

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[22] Thomas 1880, 411, repeated in Thomas 1890, 387–8 (which conflates elements from different sources without full attribution).
[23] Thomas 1890, 383.
[24] Armit 2003, 138–9.
[25] Full report can be downloaded from HES website: Surveying and Analysing Connections between Properties in Care and the British Empire, c. 1600-1997 (historicenvironment.scot)
[26] 'Property' connection describes land or buildings owned by either an established propertied family which participated in the Empire, or a recently enriched family which, through involvement in colonial activities, acquired the means to secure property. See Mullen *et al* 2024, 30-31 for a full definition of typology.

(from 1797 Lord Seaforth) had inherited the estate and invested in local infrastructure. However he does not appear to have taken much direct interest in the monuments on the island. Although he had Empire connections through estates in the Caribbean and South America, where he owned enslaved people, the wealth from this does not appear to have been invested directly in ancient monuments in any way.[27]

Sir James Nicolas Sutherland Matheson, 1st Baronet (1796–1878) purchased Lewis in 1844. He had made money through a lucrative career in India, the China trades and Hong Kong. In 1832 he co-founded Jardine, Matheson and Company which became a leading company in the opium trade. Unlike his predecessors, the Mackenzies, Matheson carried out significant tenant Clearances from the Lewis estates and spent considerable sums on 'improvements', including the development of roads. These were funded by empire-derived wealth.[28]

It is unclear how directly Matheson influenced this site, though he is known to have directly prevented further damage to a similar site elsewhere on Lewis. He also did not cause damage to Dun Carloway while pursuing his policies of Clearing the population. His widow, Dame Mary Jane, offered the site into state care.[29]

2.4 Architectural and artistic values

The details of broch architecture have been much studied and discussed (see Appendix 3 for an extended account) and it is generally Mousa which forms the template against which other brochs are compared, although it is not entirely typical in some details. Of the other tall surviving brochs, Dun Carloway is most like Mousa in its dimensions, being of relatively small diameter with relatively thick walls. Duns Telve and Troddan are slightly more generous in plan dimensions, but even they are relatively thick-walled. This may suggest no more than the obvious: that more solidly built walls are more likely to have endured than those built less solidly. Or it may suggest that more solidly built brochs were originally taller than the average.

The origin and emergence of the broch, with its distinctive architectural features, have long provoked strongly polarised debate, principally between those who argue for a long, gradual process of experimentation across a wide range of structural types culminating in tower brochs such as Dun Carloway and Mousa (in which case these might be very late examples) and those who argue for the appearance of the broch tower as

[27] Mullen *et al* 2024, 56-57.
[28] Mullen *et ai* 2024, 57.
[29] Mullen *et al* 2024, 58-59.

an act of creative inspiration (in which case Mousa and perhaps Dun Carloway might be early examples).

The features which brochs share with other types of structure, such as blockhouses (in Shetland) and galleried duns (in western Scotland) have been explained by some as ancestral stages towards the broch tower, while others regard them as later borrowings from the broch architecture.

Therefore, the relative construction dates of all of these different classes of structure are a key gap in knowledge: much more data is needed from more sites. That said, both northern and western schools of thought concur that, once perfected, the broch phenomenon spread rapidly, with brochs swiftly being erected in most suitable locations within their regional landscapes.

2.4.1 Design

Both the ground plan and the elevation of Dun Carloway are of great importance for the study of the development and layout of brochs. The ground plan contains features both of the solid-based broch form (found most commonly in the north) and the ground-galleried form (more frequent in the west). It has been suggested that Dun Carloway marks a confluence of these two styles, and MacKie has explicitly termed it a 'transitional' broch.[30] Researchers who think brochs developed over time towards more solid and taller forms have used these facts to argue that Dun Carloway, along with Mousa and the other tall, surviving brochs, were among the last brochs to be built.

Structurally, Dun Carloway has a more marked batter than most brochs; the outer wall sloping inwards at an angle of nearly one in five. This may be a response to the difficult building material: the blocky Lewisian gneiss does not lend itself so well to elegant drystone construction as do the flaggy sandstones of Orkney and southern Shetland.

The lack of (surviving) interior additions is of interest and seems to suggest that the broch was not in use as a high-status residence for any great length of time. Even though its interior remained accessible, and the chambers were occasionally used for pottery-making and perhaps other craft activities.

[30] MacKie 2007, 1094.

Figure 6: Dun Carloway from the west side showing entrance and inner wall face. © Donald Macleod.

2.4.2 Construction

The broch is constructed in roughly-quarried blocks of Lewisian gneiss, which is not the easiest of building materials. This stone is hard to shape and is also prone to failure under stress: many of the lintels have been replaced in the century and a half since it came into State care.

The gradual settlement of the structure has led to some bulging of the outer wall face and to the failure of many individual blocks of stone, especially but not exclusively lintels and tie-stones. While replacement of these and the near-complete rebuilding of parts of the upper walls have slowed down the process of slow-motion collapse, further failures do continue to develop, and the structure is closely monitored so that action can be taken well before any potentially catastrophic failure. The extensive insertion of small stone pinnings has significantly changed the character of the stonework: there is no evidence that these were a feature of the broch as built.

Bearing in mind the difficult raw material, Dun Carloway demonstrates the excellent techniques of drystone construction available to its Iron Age builders. From an engineering perspective it is reckoned to be near the limits of buildability for the material and design. Recent studies have identified some of the engineering complexities and solutions in broch structures which have led to a greater appreciation of their importance as architecture.[31]

[31] Barber 2018.

2.4.3 Artists' representations

The earliest image of Dun Carloway appears to be that commissioned to accompany Mackenzie's account when it was published in 1792 and would seem to date from between 1782 and 1792.

Thomas visited in 1861 and later, and commissioned images including a very informative 'unwrapped' diagram illustrating the gallery levels. These seem to have been prepared in the late 1870s or early 1880s, although they were not published until 1890, after Thomas's death.[32]

More recently, an image prepared by Alan Braby in the early 1990s deserves particular mention. This has achieved a wide currency and has been used in several publications about brochs in general.[33] The drawing shows an idealised cross-section of an inhabited broch, based on Dun Carloway (although using the 1921 RCAHMS plan rather than the corrected one published in 1972 by Tabraham[34]). It shows details of the stone construction and also of the hypothetical wooden structures which may have occupied the broch's central space. This image is probably the most widely known artistic representation of any broch and has formed a reference point for most recent reconstruction drawings. Such 'inhabited' reconstructions have been criticised by some for their excessively domestic 'feel'.[35]

Photographic images of the broch have been used widely as cover images, in particular on archaeological reference works but also on general guidebooks to the Islands. Two contrasting perspectives are favoured: the tallest side of the broch seen from below the rocky eminence on which it stands (conveying an impression of rugged strength) and, most widely used of all, the view from the hillside, at a level just higher than the broch, looking out across the landscape to the south-west.

[32] Thomas 1880, 411 – '…I have drawings and descriptions of Dun Carloway preparing for publication…'.
[33] Starting with Armit 1996, 126.
[34] MacKie 2007, 1203.
[35] For example, Smith 2016.

Figure 7: Dun Carloway showing Harris hills in distance. © Crown Copyright HES.

2.5 Landscape and aesthetic values

Dun Carloway sits on an elevated site, on the very edge of a short but steep rocky slope partway down a hillside of irregular outcrops interspersed with peaty moorland. The broch overlooks an area surrounding a small freshwater loch, where patches of formerly cultivated ground, now reverted to rushy grassland, have been created through many centuries of labour. The roofless walls of a number of blackhouses mark the former dwellings of crofters: the last blackhouse in this area appears to have been in use into the early 1960s. More modern dwellings now dot the landscape. The Atlantic can be seen, in the form of the large inlet called East Loch Roag, off which opens Loch Carloway, which has long served as the main harbour for the area. Beyond Loch Roag lie the low rocky hills of the island of Great Bernera, and beyond this again can be seen the hills of Uig (the ancestral home of the MacAulays who feature large in Dun Carloway's oral tradition).

The broch's location suggests that it was built to guard or to keep watch over the surrounding land, though whether it ever served as a communal refuge, the residence of a local chieftain or the stronghold of a powerful incomer cannot be determined: theories about the social function of brochs

are numerous and offer conflicting scenarios. The awkward-to-access siting of Dun Carloway does not suggest a primary purpose as a peaceful agricultural farmstead.

While just out of sight at ground level, Loch Carloway would probably have been visible from the summit of the broch: the phenomenon of brochs being sited where a height of eight or ten metres would offer a much wider view from the wall-head than from ground level has been noted elsewhere, particularly in Shetland, where Mousa provides the most familiar example. If this is any more than coincidence, it may support the suggestion that brochs such as Dun Carloway were built to act as lookout or signal points.

2.6 Natural heritage values

The area around Dun Carloway is not designated for the protection of species or habitats.[36]

Visitors to the site do, however, have a much better than average chance of sighting eagles – both golden eagle and sea eagle – views are usually distant but occasionally, especially in winter, these impressive birds hunt around the hillside and shoreline close to the broch.

2.7 Contemporary/use values

For contemporary communities, much of the value of Dun Carloway lies in its iconic, much-reproduced image, its function as a symbol of the district of Carloway, and its value as a tourist site. It is clear that many people have a strong attachment to the place. The following assessment is based on independent research, carried out in 2019 as part of a doctoral research project,[37] and the impressions and understanding that HES staff have built up of the various values that Dun Carloway Broch has for visitors, local communities and communities of interest.

2.7.1 Social value research

The doctoral research project identified a number of different communities of interest, identity and geography, here listed alphabetically:

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[36] NatureScot website (accessed 21 May 2024).

[37] The research project aimed to trial methods of assessing social value at a variety of heritage sites: Dun Carloway was one of seven case studies. The full Site Report from this study is available online at Stirling Online Research Repository (STORRE) - Wrestling with Social Value Case Study Report: Dun Carloway Broch, Isle of Lewis (dspace.stir.ac.uk) or on request from HES by emailing CRTenquiries@hes.scot. This was a rapid assessment using a co-designed approach that was further facilitated by the Carloway Estate Trust who kindly allowed the researcher access to one of its community meetings. Specific research activities included: semi-structured interviews (5); community events (1); participatory mapping (8). These activities were complemented by a review of documents and online resources, and visits to the site.

- Artists/photographers
- Crafters
- Crofters
- Local children
- Local residents, for example in Carloway and Doune Carloway
- Local tour guides
- Members of the Community Estate Trust[38]

The list is not exhaustive, for instance people with longstanding family or other connections to the site may not be resident but feel a strong attachment to the site.

The research project identified strong personal relationships and connections to the site. These centred around strong feelings of attachment and belonging: for those brought up in the area, powerful memories of playing around the site as children; of it 'always being there' as a constant in the landscape. The ability to interact with the monument and explore the surrounding area is integral to the experience of the site.

The broch was seen as part of a living, working landscape, associated with a long history of occupation and connection with the present-day local culture. This association is underlined by the ruins of blackhouses on the slope below the broch and the on-going crofting of the surrounding land. There is great pride in the monument, with feelings of care and custodianship expressed towards it, and a wish to share the experience of the place with visitors.

Quiet solitary time for reflection with the broch was also valued, as was its role as artistic or creative inspiration.

2.7.2 Visitor values

Accessing the broch involves a short walk, including climbing some steps, from the public parking area. Above the parking area stands a compact, circular-plan, thatched block containing a small visitor centre and toilets.[39] It takes its design inspiration from the broch and was designed by Michael Leybourne of Comhairle nan Eilan Siar, for Urras nan Tursachan, the local heritage trust. It opened in 1998 and has been described thus:

[38] The site is owned by a community landowner, the Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh).
[39] The Broch Visitor Centre is currently (2021) operated by Urras nan Tursachan (The Standing Stones Trust), please check opening hours via their website: www.callanishvisitorcentre.co.uk

> Pleasingly contextual visitors' centre, fitting snugly into the hillside, its curving, turf-topped drystone walls expressing the robustness of the broch.[40]

Most visitors to the broch also call at the **Calanais Standing Stones** just a few miles to the south: the visitor centre there (also by Michael Leybourne) provides more extensive facilities. Additionally, the visitor circuit usually includes **The Blackhouse**, **Arnol**. The cumulative effect of these three attractions is that visitors could spend the better part of a day in the area, with the journey to and between sites offering a range of contrasting landscapes, and the opportunity to see rural life as it proceeds today: peat cuttings and stacks, loom-sheds and even bolts of tweed awaiting collection at road-ends. The pull of Lewis for tourists has recently been given additional impetus as the setting of a series of best-selling detective novels by Peter May, several of which reference heritage sites.

HES on-site interpretation is provided by interpretation panels. Further information available from the visitor centre includes a colour guide booklet, originally produced by the local trust, Urras nan Tursachan.[41] Online reviews are generally very positive, mentioning the fantastic views and the amazing quality and endurance of the construction. Currently (2021) there is restricted access to the site for conservation reasons.

3. MAJOR GAPS IN UNDERSTANDING

A wide range of unanswered questions surround brochs in general, despite two centuries of excavation, study and theorising (see Appendix 3).

This section briefly lists these questions from the specific viewpoint of Dun Carloway, and seeks to assess how far the site itself might make future contributions towards answering them:

- When was the broch built and did it replace earlier structures on its site? It is possible that dating evidence may lie buried below the massive wall-base: accessing, or even assessing the potential for this would involve disturbance to the historic fabric. Likewise, the same areas might conceal evidence of pre-broch structures but there is no surface trace of any.
- How does this relate to the construction date and pre-construction history of other brochs? This cannot be addressed without answers to the previous question, and also dating evidence from more brochs. A number of other brochs have produced evidence for pre-broch activity, including massive wooden roundhouses (Càrn Liath in east Sutherland and Buchlyvie in Stirlingshire) and also for the

[40] Miers 2008.
[41] Armit and Fojut 1998.

construction of brochs on much earlier remains, including a Neolithic chambered tomb (Howe of Howe, near Stromness, Orkney).

- Is Dun Carloway a good example of a 'typical' broch, in so far as such a thing exists? In the spectrum of broch sizes, it is one of the few examples at the massive end. In engineering terms this means that it may have been built taller than was normal for brochs. However, as 75% of supposed broch sites have not been investigated in any way, others matching its unusual dimensions may yet be discovered.
- Why did Dun Carloway survive so well when most other brochs did not? As noted above, it has a more massive wall for its diameter than any other known broch. Setting aside the abilities of the builders of different brochs, this means that it is likely to have been more solidly built than most brochs, which may have contributed both to its height and to its survival. However, if it weren't for conservation interventions from 1887 onwards, it would not have survived until the present day, due to serious structural failures. It may also be significant that unlike some other brochs, Dun Carloway did not go on to form the core of a long-lived later settlement. Brochs which did, such as Jarlshof in Shetland and Gurness in Orkney, show clear signs of being reduced in height, perhaps to make their increasingly unstable structures safer to build around and live within. Dun Carloway's relatively poor agricultural potential may have been one factor contributing to this lack of later rebuilding and thus to its preservation.
- Was Dun Carloway built by (and for) long-resident local inhabitants or recent incomers? This cannot be definitively answered on the basis of existing evidence. Most current opinions would favour the physical work of constructing brochs being done by local populations, but opinions differ as to who might have been in charge of the building projects. Views on this latter point have included: an elite who invaded in force (from Orkney or even from south-west Britain), an immigrant elite who came in smaller numbers but brought new ideas which changed local, or an emergent local elite seeking to increase territorial control or responding to some external threat, who either invented the broch idea or borrowed it from elsewhere in the north. Evidence may emerge, from new excavations or analysis of artefacts, to support one or other of these ideas more strongly, but this is not likely to come from Dun Carloway itself.
- Were specialist architects involved? The first brochs, wherever they were built, must by definition have been constructed by people who had never built a broch before. While the inhabitants of Lewis, living in a largely treeless landscape, were undoubtedly skilled drystone builders, something as large as a broch may have been beyond their conceptual if not practical grasp. However, once the idea of a broch

had been formed, and the first 'proof of concept' examples built, constructing one might have been within the practical reach of a group of competent drystone builders. So, perhaps an architectural flash of brilliance which then, in modern parlance, 'went viral'. Roving 'consulting' architects have been suggested, but might not have been necessary, and indeed the evidence for partial collapse in several brochs might support local copying rather than skilled design. This question is unlikely to be answered definitively.

- What can be said about the social and territorial organisation of those who had Dun Carloway built? A great deal can be said, but little can be proved. Most would support the existence of an elite within Iron Age society, who would have directed the activity of each group and conducted relationships with neighbouring groups and perhaps further afield. A 'chiefdom' model seems to fit best, 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. There seems to be no evidence for a more stratified society akin to medieval feudalism. While (in theory) each broch might represent an isolated independent group, it is perhaps more likely that groups worked together, perhaps sharing leadership in times of crisis.
- And how did they survive day to day, in terms of subsistence? Since the wishes of the builders are not accessible, only inferences can be offered. If one thinks of the broch as the centre of an 'estate', it is possible to construct an 'economic model' based on assumed 'territories'. But such models beg the question, posed above, of what the broch builders originally intended. We cannot be certain that the original intention was to live in brochs full-time: perhaps full-time occupation was something which came later, and then only at *some* brochs, not at *all*.
- What factors stimulated the building of brochs like Dun Carloway: what were brochs actually for? Although we can say what happened to brochs – how they were used after they had been constructed – we cannot know what was in the minds of the builders. All we can do is look at the structures and their locations and surmise. It is by no means certain that every broch was built to serve an identical set of purposes. At the two extremes of many explanations which have been offered are (at the 'soft' end) the gradual emergence of a society in which leading individuals gradually exerted more and more control over resources and gained in status, competing with their neighbours in displays of monumental building, until the broch became the 'must-have accessory' of its day and (at the hard end) a quasi-military and highly organised response to an urgent threat (or the perception of such a threat), either by long-resident islanders or by newly-arrived conquerors determined not to be displaced by late-

comers. The ‘soft’ and the ‘hard’ are far from irreconcilable: manipulation of public attitudes through fear of some real or imagined external threat is seen throughout history as one means by which an elite can gain and exert control over its fractious client populace.

- What do the ‘biographies’ of brochs tell us about changes in society over time? Dun Carloway, along with many other brochs constructed on exposed and awkward sites, may suggest a degree of ‘over-reach’, perhaps at a time of great stress. Their subsequent abandonment, and the apparent concentration of later Iron Age settlement on sites better endowed for agriculture and exploitation of natural resources, might be argued as a relaxation, a gradual adjustment to normality after such a period of crisis.
- What can we say about environmental change and land use during the period when brochs were constructed and used? Dun Carloway has some potential to offer some evidence on this topic, from deposits which may survive within, below and around the broch, as well as below the small loch nearby (which is outwith the Guardianship area).

Additionally, as a structure which attracted early antiquarian attention and was later to become one of the earliest Scheduled Monuments and Properties in Care in Scotland, Dun Carloway has the potential to offer evidence towards more recent questions, including:

- Does Dun Carloway help to illustrate how conservation philosophy and practice have developed over time, especially for drystone prehistoric constructions? Undoubtedly: like a number of other brochs, most notably Mousa, Dun Carloway has a record of changing practice, each generation working to the best of current standards only to be criticised by following generations. Thus, the ‘heroic’ early consolidation and the later rebuilding of details, the raking out of material between the masonry and the insertion of mortar and small pinning stones: all actions justified in their time and largely regretted later. Yet they may have saved the structure for us to enjoy, we cannot know what would have happened otherwise. The so-called modern approach, that of minimal intervention, is in fact very long-established: it is more that the definition of what constitutes ‘minimal’ has developed over time.
- Is more information available regarding the initial scheduling of Dun Carloway and the background to its being taken into Care; records of early works and excavations/clearance – are there images or documents which could help piece together this history?
- Does Dun Carloway help to illustrate changing patterns of archaeological theory? In the early days of broch theorising, and

again from the 1930s, diffusionist models of social change were in vogue. Attempts to derive brochs from the superficially similar Bronze Age *nuraghe* of Sardinia helped to introduce both classes of monument to a much wider audience. How can we develop a better understanding of the intangible values of the site, its place in story and tradition and its value to contemporary communities?

4. ASSOCIATED PROPERTIES

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)
- Càrn Liath (broch, Highland)
- Dun Dornaigil (broch, Highland)
- Dun Beag (broch, Highland)
- Dun Telve (broch, Highland)
- Dun Troddan (broch, Highland)
- Edin's Hall (broch and associated remains, Scottish Borders)

Other associated sites

A small number of other broch sites can be visited in Lewis, though none is laid out for visitors. The best examples are:

- Dun Borve, Borve
- Dun Loch an Duin, Shader
- Dun Loch an Dùna, Bragar
- Dun Bharabhat, Great Bernera
- Dun Bharabhat, Cnip
- Loch na Berie, Cnip

5. KEYWORDS

Broch; Iron Age; Lewis; Solid-based; Intra-mural stair; Batter; Guard cell; Entrance passage; Inter-visibility; Clan Morison, Clan MacAulay

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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.

APPENDICES

APPENDIX 1: TIMELINE

Date	Event
Iron Age (mid)	Construction of broch, possibly in 2nd century BC.
Iron Age (mid-late)	Broch out of use, probably by no later 2nd century AD.
Iron Age (late)	North wall chamber in use as a pottery workshop, probably 5th to 7th centuries AD.
Early modern	Legend of attack of MacAulays on cattle-stealing Morrisons, including the scaling of Dun Carloway to smoke out the defenders. If correctly associated with Donald Cam MacAulay, this would probably be around the turn of the 16th and 17th centuries.
1781–2	First illustration and description (published 1792).
1861	First detailed drawings and description (published 1890).
1882	Dun Carloway is scheduled (as the term was originally understood), being named on the Schedule to the Ancient Monuments Protection Act which was passed on 18 August 1882.
1887	State care: under a Guardianship agreement, the State (Office of Works) takes on all responsibility for maintaining the broch and for providing access and interpretation, though title to the land remains with the proprietor.
19th/20th century	Between 1887 and 1921, Office of Works undertakes clearance of the broch, undertakes consolidation work including rebuilding of upper parts of the outer wall. No detailed records have been located.
1921	RCAHMS investigators visit and prepare measured drawings – not published until 1928.
1971–2	Second systemic programme of consolidation, involving rebuilding of the broken outer ends of the upper walls and minor rebuilding with the insertion of small stone pinnings in large areas of the inner and outer wall-faces.
1998	(Off site) access route improved and new visitor centre constructed.

APPENDIX 2: DUN CARLOWAY, DETAILED DESCRIPTION

Dun Carloway is located on a rocky knoll on the side of a south-facing hill, which slopes down to the freshwater Loch an Dùin on the Isle of Lewis. From the top of the broch, it would have been possible to look over a low shoulder towards Loch Carloway, a sheltered inlet of the Atlantic which has long been used as a safe harbour. The immediate landscape is a rugged one, of rocky outcrops interspersed with croft houses set among patches of rushy grazing land. The latter bears traces of former cultivation and was still in regular arable use into the 1980s.

The broch's name simply means 'the fort at Carloway', that being the name of the district: Carloway is ultimately of Old Norse derivation. Its alternative name, An Dùn Mòr, means 'the big fort', which might suggest it was one of several fortified sites locally, one of which survives on an islet in the loch less than 1km to the south. Alternatively, it may simply reflect the broch's impressive survival and prominent siting.

The broch is a drystone-built tower of approximately circular plan, with an average external diameter at ground level of 14.3 metres and walls varying from 2.9m to 3.8m across. The internal plan is a near-perfect circle, whereas the outer plan diverges from the truly circular, being thickest on the northern side and narrowest on the southern side, which is slightly unexpected, given that the southern side is that immediately adjacent to the rocky slope below, so might be expected to have been built more robustly.

Dun Carloway still stands 9.2 metres tall. This appears to be very close to its original height. While well short of **Mousa** (in Shetland) at 13.2 metres, this still places it amongst the tallest-standing brochs. The broch's external face is markedly battered (slopes inward as it rises) while the internal face rises vertically. On the southern side of the exterior wall-face, the stonework has been carefully constructed to interlock with the irregular rock outcrop on which the broch stands.

A single, narrow doorway on the west-north-west side of the broch gives access to an entrance passage, from the right-hand side of which an oval chamber, or 'guard cell', is entered through a low, lintelled doorway. The entrance passage opens into the broch's circular interior, which measures about 7 metres across. At the foot of the vertical internal wall, three lintelled doorways give access to three intra-mural spaces: on the north-east, an oval chamber which may originally have been corbelled but now stands open; on the east-south-east, an elongated chamber which gives access to a stone stair rising clockwise to a landing 2 metres up; and on the south-west, through a very low doorway, a continuation of the previous elongated chamber, which almost reaches to the back of the guard-cell. The southern half of the broch's wall at ground-floor level thus features an almost continuous internal gallery, interrupted only by the stairway and by

the narrow division between the guard cell and the long chamber. Bedrock protrudes into the north-western part of the broch's floor: at one time the inner wall-face spanned the top of the bedrock intrusion by means of a long flat slab, which was easily mistaken for a lintel, and earlier plans suggested a possible doorway at this point. The 'lintel' has since been removed, possibly to avoid this confusion.

Only the eastern part of the broch's wall now stands above head-height, and the continuation of the internal stairway within the wall thickness has been lost. Above the ground level, evidence survives for five upper galleries within the thickness of the wall. Each gallery floor formed the ceiling of the gallery below, and is made of long slabs, which also serve to tie together the inner and outer skins of the wall. The upper galleries are narrow and rough-faced internally: except for the lowest two levels, there would not have been ready access to the space within the wall thickness. To the left of the stair-foot doorway a vertical, elongated aperture spanned by lintels at gallery floor levels (also referred to as a 'stacked void') would have allowed light and air into the galleries: there is evidence in older depictions of a second such aperture, which would have coincided with the level landing at the head of the surviving stairway. This feature seems to have been lost during pre-1921 consolidation work. It might have offered access to a raised floor, which would have rested on a ledge, or scarcement, which runs around the interior wall-face, about 2.5 metres above ground level. The inner wall-face is stepped slightly back above this level.

There is no visible trace of any internal structures on the floor of the broch's central space. A well, and/or remains of stone or timber sub-divisions might have reasonably been expected, but there is no record or indication of any such.[42] The floor of the main inner space is near to bedrock in most places, but the 1972 investigation of the northern intra-mural chamber revealed that the walls of the broch had partly been built over a ground surface which still bore a layer of peat.[43] This seems hard to explain as it could hardly have contributed to structural stability.

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[42] MacKie 2007, 1094–1100 and 1191–1204 provides a very detailed and useful **description** including discussion of the evidence for changes to the structure since the earliest descriptions. Note however that MacKie's **discussion** does have certain issues. Although he states that Thomas was unaware of Mackenzie's account, Thomas does quote Mackenzie verbatim (page 387 of Thomas 1890). MacKie presents a conjectural set of plans for the lowest three gallery levels of Dun Carloway as they might have been when constructed (MacKie 2007, 1204). This shows the northern wall-based cell as having been roofed by lintels rather than corbelled, and while likely, this is not actually evidenced in older descriptions. MacKie's conjectural plan also shows a ring of timber posts set in the broch's floor, however there is currently no evidence from Dun Carloway for such a feature. While an internal wooden structure is something which most researchers infer would have been a feature of brochs when first constructed, surviving evidence is scanty.
[43] Tabraham 1972, 156.

APPENDIX 3: 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.[44]

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, five essential characteristics are required for a structure to be classed as a broch 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'

[44] Dryden 1872, 200.

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'.[45]

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. For example, the Broch of Mousa is a (more or less) solitary broch, whereas the Broch of Gurness comprises a broch surrounded by an extensive settlement and set within large ditches.

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, a few further south on the west coast and a handful of outlying examples in central, south-west and south-east Scotland.

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 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

[45] MacKie 2002, 1–2.

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',[46] 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 Fraserburgh.[47] 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 600,[48] 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.[49] 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 brochs.[50] Additional 'possible' sites continue to be added, and in some cases demonstrated to be brochs.[51] 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

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[46] Oram *et al*, 5.
[47] One memorable headline from the Press and Journal, in 1980: 'Broch man told lies to gain credit'.
[48] Armit 2003.
[49] Barber 2018.
[50] For example, Cloddie Knowe, trial trenched in 1988 (MacKie 2002, 82).
[51] For example, Channerwick, revealed in winter 2013/14 SCAPE Trust - Channerwick Broch, Shetland (scapetrust.org) accessed 6 September 2018 (illustration also shows **Mousa** used as the archetype of a broch).

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 farmhouses.[52] 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 then.[53]

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, etcetera.[54]

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).[55] 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 posts.[56] Fojut (sceptically) and most recently Romankiewicz (more optimistically) are among those who have recently published on possible roofing structures.[57]

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)[58] and Leckie (Stirlingshire),[59] these cannot conclusively be confirmed as having been constructed at the same time as the brochs.[60] The need for caution is emphasised by the substantial post-rings found at

[52] Scott 1947.
[53] Graham 1947a and 1947b.
[54] MacKie 2002, 1–2.
[55] Curle 1921, 90–92.
[56] For example, that by Alan Braby, widely reproduced, for example, in Armit and Fojut 1998, 15.
[57] Fojut 2005b, 194–6; Romankiewicz 2016, 17–19.
[58] Curle 1921, 90–92.
[59] MacKie 2007, 1312–3 (see also MacKie 2016 for more detailed account).
[60] Fojut 2005b, 192–3.

Buchlyvie (Stirlingshire)[61] and Càrn Liath (Highland – Sutherland)[62] which in both cases can be shown to relate to pre-broch roundhouses.[63]

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.[64] 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 roofed.[65]

c) Broch origin

The date and antecedents of brochs have been pushed progressively earlier. The idea that brochs were built by the Danes or Vikings[66] persisted for some decades, despite the outright rejection of this idea by Scandinavian antiquarians as early as 1852.[67] The alternative, that they were built by the native population as watchtowers against the Vikings, was also popular[68] 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 south.[69]

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 proposed,[70] and led to the dominance of various 'diffusionist' models, in which brochs were seen as the strongholds of an incoming elite.[71] 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.[72]

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[61] Main 1989, 296–302.
[62] Love 1989, 165.
[63] In this respect, the conjectural plans offered by MacKie for Dun Carloway are perhaps unhelpful. MacKie 2007, 1204.
[64] Fojut 2005b, 196–9.
[65] Smith 2016, 15.
[66] Fergusson 1877, 630–9.
[67] Worsaae 1852, 233.
[68] Stuart 1857, 191–2.
[69] Anderson 1883.
[70] Childe 1935.
[71] Scott 1948.
[72] 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-ubiquitous in the middle Iron Age and could not be relied upon to demonstrate large-scale invasion.[73] 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 misreading 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 popular,[74] 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.[75]

The older, alternative view, that brochs were a unique local invention, began to be revived in the 1950s, notably in Shetland.[76] 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' population.[77] At the same time, the idea was revived that brochs were built over a very

[73] Clarke 1971.
[74] RCAHMS 1946 (visited/written 1930), 48–55.
[75] Stewart 1956, 15.
[76] O'Neill 1954.
[77] Stewart 1956, 15–16.

short period and then abandoned or converted into non-defensive structures.[78]

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 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 structures.[79]

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 north.[80] 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).[81] 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 brochs,[82] although these possessed few, if any, of the classic defining features of brochs.[83] Nonetheless, this led some to believe that brochs might go back as early as 600 BC.[84]

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 Vulan (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 AD.[85]

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[78] Stewart 1956, 15.
[79] Fojut 1981, 226–7.
[80] MacKie 1992; also MacKie 2007, 1094.
[81] Lamb 1980; Fojut 1981.
[82] Hedges and Bell 1980, Hedges 1987.
[83] Armit 1990, 195.
[84] Fojut 1981, 34.
[85] Parker Pearson *et al* 1996; Sharples 1998.

The radiocarbon dating of the construction of a fully-formed Shetland broch to the period 400 – 200 BC, at Old Scatness in southern Mainland,[86] 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, 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 Shetland.[87]

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 account.[88] 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 Shetland.[89]

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 Vulan 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 west[90] seems improbable, and the scenario suggested by Parker Pearson and collaborators more likely,[91] 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,

[86] Dockrill *et al* 2015, 168–171.
[87] MacKie 2008.
[88] Smith 2014, 4.
[89] Fojut 1989, especially 29–31 (first discussed in unpublished PhD thesis 1980).
[90] MacKie 2008, 272.
[91] Parker Pearson *et al* 1996, 58–62.

currently[92] 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 ('perhaps only a single, say 35 year, generation…in the early fourth century BC'[93]), 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 conversion Barber sees, with many caveats, as being already underway in Caithness by 200 BC and continuing perhaps until AD 200.[94]

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 contact.[95]

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 Vulan 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.

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[92] At the time of writing in 2018.
[93] John Barber personal comment August 2018.
[94] Barber 2018.
[95] MacKie 2007, 1314–5 (See MacKie 2016 for more detailed discussion).

d) How special are brochs, and what was their purpose?

Many writers, including MacKie[96] and more recently Barber,[97] 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 cadre[98] while Barber has recently pointed to the engineering knowledge involved in constructing so close to the physical limits of buildability.[99]

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 dwelling.[100] Armit developed the idea of the 'Simple' and 'Complex Atlantic Roundhouses' to emphasise similarities within a larger class of approximately circular structures,[101] 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 roofed,[102] though to refer to such a wide range of structures as brochs seems unhelpful.[103]

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 status,[104] 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.)[105]

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

[96] MacKie 1965.
[97] Barber 2018.
[98] MacKie 1965.
[99] Barber 2018.
[100] Barrett 1981, 207–17.
[101] Armit 1991.
[102] Romankiewicz 2011.
[103] Romankiewicz 2016.
[104] Armit 2005b.
[105] Barber 2018.

levying rent and other support from subservient native, peasant farmers,[106] through one of embattled local communities seeking to defend themselves against raiders or invaders,[107] 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 grain.[108] 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 today[109] 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.

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.'[110] 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

[106] Scott 1947, 1948.
[107] O'Neill.
[108] Hingley 1992, 19; Dockrill 1998, 493–7 *et passim*; Armit 1996, 129–130.
[109] Smith 2014.
[110] Stuart 1857, 192.

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 nor 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 bases.[111]

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'

[111] Fojut 1982a.

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[112] 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'.[113] But neither question has yet been answered conclusively.

APPENDIX 4: A REPORT ON SOCIAL VALUES

This is a case study report produced as part of the doctoral research project *Wrestling with Social Value: An examination of methods and approaches for assessing Social Value in Heritage Management and Conservation* undertaken by Elizabeth Robson, University of Stirling. The report is available on request from CRTenquiries@hes.scot.

[112] Hedges and Bell 1980; Armit 2003 and most recently, Romankiewicz 2016.
[113] Stewart 1956, 21.