ORKNEY

Prehistoric sites and standing buildings in their landscape setting:

A reconnaissance

Figure 1 “The iles of Orknay” Caithness and Orkney Islands map (Van den Keere, c.1627)

Carol Gurnham

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INTRODUCTION

The aim of the journey to the Orkney islands 22-28 July 2017 (Figure 1, Figure 2) was to visit a number of Orkney’s prehistoric sites and to gain an appreciation of how these sites sit within the landscape and in relation to each other, a further aim was to visit examples of brochs from the perspective of standing buildings archaeology, and to investigate possible areas of research.

The timing of the trip also enabled visits to the archaeological excavations which were taking place at The Ness of Brodgar on Mainland, and at Swandro Bay on Rousay.

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ITINERARY

Travel was by car from Gloucestershire, then by ferry from Scrabster to Stromness over calm waters in the sunshine. The tiny car ferry crossing from Tingwall on Mainland to Rousay was in equally good weather. Travel around South Ronaldsay and Burray was by car, via the Churchill Barriers. Accommodation was in Stenness, which meant that several sites, including The Ness of Brodgar, Stones of Stenness, Ring of Brodgar, Barnhouse Village and Maeshowe, were within easy walking distance, which enabled repeat visits at different times of day and in different weather conditions.

Figure 2 National Geographic “Neolithic Orkney” map. National Geographic’s Sources: Nick Card, Archaeology Institute, University of the Highlands and Islands; Caroline Wickham-Jones, Department of Archaeology, University of Aberdeen; Royal Commission on the Ancient and Historical Monuments of Scotland (Cookson, 2014)
Construction of sites would have been relative to sea levels at that time, thus the sites’ current locations in relation to freshwater and seawater differ, and others have been inundated by the sea (Figure 3).

![Mesolithic Orkney](left). Sea levels c.10,000ya may have been 20 metres below current levels. Neolithic Orkney (right), Sea levels c.5,500ya, were c.1 metre below current levels (Wickham-Jones, 2016).

### 2.1 Mainland

#### 2.1.1 Maeshowe and the Barnhouse Stone

A visit to Maeshowe chambered tomb (Figure 4) included a guided tour of the interior, enabling observation of the architectural details and construction, and of the graffitti which includes the largest collection of 12th Century Viking/Norse runes (approx. 33) outside of Scandinavia (Parker, 2014, pp. 111-112; Historic Scotland, 2017, p. 18). The passageway construction incorporates large stone slabs weighing as much as three tonnes, and of comparable size to the standing Stones of Stenness (Historic Scotland, 2017, p. 12). The interior is of drystone slab construction laid ‘on bed’, with a corbelled roof, and four large standing stones which are not structural are built into pillars in the central chamber flanking the entrance passageway and the entrance to the end chamber. The midwinter setting sun over Hoy shines through the passageway (Historic Scotland, 2017, p. 14) between these two pairs of standing stones and into the small end chamber. These stones, possibly repurposed standing stones, may serve as markers for sun alignment (Historic Scotland, 2017, p. 13). Another hypothesis could be that they form a continuation of an older practice of erecting standing stones, incorporated into a newer architectural style of burial chamber.
2.1.2 The Stones of Stenness and the Watchstone

The stones of Stenness (c3100BC) (Figure 5, Figure 6, Figure 9, Figure 10), originally 12 standing stones within an earlier henge, are situated within view of numerous sites in this area including the Lochs of Stenness and Harray, Ring of Brodgar and surrounding cairns, and Barnhouse Village, and are near the causeway to the Ness of Brodgar. Some of the stones were re-erected in the early 19th Century (Figure 7), and an ‘altar’ slab erected in 1906 (Figure 8) was destroyed in 1972 (Wickham-Jones, 1998, p. 42).
Figure 5 The Stones of Stenness, right, with Loch of Stenness and seals in foreground, and the Loch of Harray just visible left of centre beyond the causeway of the Ness of Brodgar (Photo author’s own, July 2017)

Figure 6 The Stones of Stenness (Photo A Gurnham, July 2017)
Figure 7 A c.19th Century postcard showing Stones of Stenness with fallen stone in foreground (Valentines Series)

Figure 8 An early to mid-20th Century postcard of Stones of Stenness showing the fallen stone re-erected, on the left, and an added ‘altar stone’, which has since been destroyed (Postcard Printed in England)
Figure 9 Stones of Stenness (Photo author’s own, July 2017)
Figure 10 The Stones of Stenness at sunset, facing west (Photo author’s own, July 2017)

Figure 11 The Watchstone (originally one of a pair) by the ‘causeway’ to the Ness of Brodgar, facing west. Archaeological excavation site at Ness of Brodgar centre in distance (Photo author’s own, July 2017)
2.1.3 The Ness of Brodgar Archaeological Excavation

The Ness of Brodgar Archaeological Excavation has been directed for about 14 years now by Nick Card of University of the Highlands and Islands Archaeology Institute, and Ness of Brodgar Trust. A dig tour with Elaine Clarke, on 26 July 2017 included Trench T, into a midden facing the Loch of Stenness (Figure 12) – this is a terraced trench following the line of the slope towards the loch in order to establish the depth of the archaeology and its extent in that direction. There is evidence in changes of soil colour for numerous large features or pits, and Structure 27 containing a 4 metre recumbent slab in situ, possibly a repurposed standing stone, used as ‘skirting’ to support wall slabs (orthostats) (Card, et al., 2017, pp. 32-33). The purpose of the ‘stalled’ features (piers) of structures 8 and 12 appeared to be of as yet uncertain purpose. Suggestions include supports for the roof and/or segregation of internal space (Card, et al., 2017, pp. 24-25). These features also bear some resemblance to those of stalled cairns such as that visited at Midhowe on Rousay – so comparison of proportions and measurements would be interesting to establish, as would the derivation of the standing stone in Structure 27 in relation to the Stenness Stones. Magnetometry was being carried out on an area to the west of the current trenches to assess the presence of buried features, and could provide potential trench locations for future excavation seasons. The one metre lower sea level means the Ness would have been wider during the Neolithic (Figure 3), and its entrance is marked by the Watchstone (Figure 11) (Wickham-Jones, 2016).

Figure 12 Archaeological excavation taking place on The Ness of Brodgar, showing Trench T (centre) on the slope facing the Loch of Stenness; the Loch of Stenness is in the foreground. The ‘main’ dig-site (Trench P) is just visible on the left of the picture (Photo author’s own, July 2017)
Bones (mostly shin bones) from c.400 cattle had been deposited in a single event c.2450BC in the passageway surrounding structure 10 nicknamed “The Cathedral” due to its adaptation into a cross-shaped room (Figure 13, Figure 14). The deposition appears to suggest a feast coinciding with the time the structure went out of use (Card, et al., 2017, pp. 26-27).
Neolithic architecture and stone construction at the Ness of Brodgar includes local flagstones laid to courses, thin worked flags used as roof tiles (eg Structure 8), flagstones laid as paving (eg Structure 10), stone piers and recesses (eg Structure 8) (Card, et al., 2017). Much of the Orkney islands are formed from ‘flagstone’ beds (part laminated dolomitic siltstones, shales and sandstones) (Mykura, 1976, pp. 72-78) providing readily available building material in the form of natural large rectangular and lozenge-shaped slabs where it splits along bedding planes. Some spectacular exposed in situ examples of the flagstone beds were visible at the Brough of Birsay on Mainland Orkney, and near Midhowe Broch on Rousay (Figure 15, Figure 16):

*Figure 15 Example of Upper Stromness Flags (Middle Old Red Sandstone) of huge proportions, in situ, forming part of the natural tidal causeway at Brough of Birsay, Mainland, which provided a ready building material. These generally weather to an ochreous colour (Mykura, 1976, p. 78) (Photo author’s own, July 2017)*
Figure 16 Example of natural beds of Rousay Flags in situ near Midhowe Broch and Midhowe Chambered Cairn, Rousay. used for building material. These usually weather to a grey colour (Mykura, 1976, p. 78) (photo A Gurnham, July 2017)

2.1.4 The Ring of Brodgar

The Ring of Brodgar has views over the Lochs of Stenness and Harray and is surrounded by Salt Knowe, Plumcake Mound, Fresh Knowe, and South Knowe cairns (Figure 17, Figure 18, Figure 19).

Figure 17 The Ring of Bradgar, centre, just below horizon, viewed across the Loch of Stenness (Photo author’s own, July 2017)
Figure 18 Ring of Brodgar looking towards Loch of Harray, with its henge ditch in shadow diagonally across centre of picture, and Fresh Knowe (burial mound) mid-distance just left of centre (Photo author’s own, July 2017)

Figure 19 Ring of Brodgar just before sunset, facing west (Photo author’s own, July 2017)
2.1.5 Barnhouse Village

Barnhouse Village, Loch of Harray has views over the Stones of Stenness and the ring of Brodgar (Figure 20, Figure 21).

Figure 20 Barnhouse Village, Loch of Harray overlooking the Ness of Brodgar (centre horizon) and Ring of Brodgar, and the Loch of Stenness beyond (Photo author’s own)

Figure 21 Barnhouse Village, foreground, Looking towards the Stones of Stenness centre near horizon (photo author’s own, July 2017)
2.1.6 Unstan Chambered Cairn

Unstan chambered cairn, overlooks the Loch of Stenness with views towards the Ring Brodgar, the Ness of Brodgar and the Stones of Stenness (Figure 22). Unstan is the type-site for Unstan Ware, a style of round bottomed pottery bowl found as grave goods in burials during excavations here in 1884 (Wickham-Jones, 1998, p. 48).

Figure 22 Unstan chambered cairn (with modern white roof), the standing stones built into the wall to the right, form stalls (photo A Gurnham, July 2017)
2.1.7 Skara Brae

Skara Brae (Figure 23) was continuously inhabited from c 3100-2500BC and originally next to an inland loch, which due to coastal erosion now forms a bay open to the sea. It had good access to marine resources, fresh water, and stone for building material, and is contemporary with Maeshowe, the Ring of Brodgar and the Stones of Stenness. The archaeologist Gordon Childe worked on and consolidated the site 1928-1930 (Historic Scotland, 2017, p. 44). Skaill House, also visited, is a 17th Century mansion, located 200 metres from Skara Brae.

![Skara Brae, a neolithic village on Mainland, located by a loch (now a bay) (Photo author’s own, July 2017)](image)
2.1.8 The Broch of Gurness

Brochs are large circular drystone dwellings in the form of a tower with double skin walls. The structural function of the walls, and the practical function of steps, and stone flag floors within the wall cavities has been extensively catalogued and investigated by T Romankiewicz in her publications “The complex Roundhouses of the Scottish Iron Age” Volumes I and II (Romankiewicz, 2011; Romankiewicz, 2011) however, their functions and purposes do not yet appear to be fully understood (Figure 24, Figure 25, Figure 26).

Figure 24 The Broch of Gurness, Mainland, situated with views over to the island of Rousay and its coast along which are situated the sites of Sandro Bay, Knowe of Yarso, Blackhammer cairn, and Taversoe Tuick two storey cairn (Photo author’s own, July 2017)

Figure 25 Broch of Gurness Reconstruction drawing, showing double skin walls (Romankiewicz, 2011, p. 78)
2.1.9 The Brough of Birsay

The Brough of Birsay, on a tidal island with steep cliffs on three sides overlooking the Atlantic Ocean, has the remains of a Pictish settlement and a Norse centre of Christianity (Wickham-Jones, 1998, p. 100). Its location may suggest it had been chosen for defensive reasons. It was reached on foot via a tidal causeway over some impressive examples of in situ Upper Stromness flagstones, which were used as building materials here and locally (Figure 15, Figure 27).
2.1.10 Cuween Hill Cairn and Wideford Hill

A visit to Cuween Hill cairn (c3000-2400BC) demonstrated its panoramic views over the islands of Holm of Grimbister and Damsay (Figure 28), and it would almost certainly have had views to the adjacent Wideford Hill cairn, which at the time of visiting was shrouded in cloud. The interior of Cuween was of similar architectural shape and construction to the central chamber of Maeshowe, of large flags, laid on bed, forming the sides and corbelled roof; the photo of the interior is a little out of focus as the author crawled inside without the aid of a torch (Figure 29, Figure 30). A visit to the top of Wideford Hill was also attempted, but thick cloud and strong winds meant it was not possible to locate the cairn, also a Maeshowe-type.
Figure 28  View from top of Cuween Hill Cairn, looking out across to Holm of Grimbister and Damsay islands to the North East (Photo author’s own, July 2017)

Figure 29 Cuween Hill Cairn, interior of central chamber showing the corbelling of the walls on the left and right to form a corbelled roof (a type of vaulted roof) (Photo author’s own, July 2017)
2.1.11 Kirkwall

St Magnus Cathedral, Bishops Palace, Earl’s Palace, and The Orkney Museum were visited in Kirkwall. The museum holds some particularly fine examples of Orcadian pottery, stone bowls, and implements, including a steatite burial urn excavated at Lingafold, Sandwick in 1994 (Figure 31) (Downes, 1995).
2.2 Burray and South Ronaldsay

A drive around the Islands of Burray and South Ronaldsay helped with an appreciation of the Orkney islands’ settings. These were accessed via the Churchill Barriers (causeways) (Figure 32), and included the parishes of St Andrews, Deerness and Holm, and a stop at the village of St Margaret’s Hope, South Ronaldsay.

![Figure 32 The Churchill barriers (causeways) can be seen left of centre, linking the islands of Mainland, Burray and South Ronaldsay](image)

2.3 Rousay

2.3.1 Knowe of Swandro Coastal Archaeology Trust excavation

A visit to the Knowe of Swandro: Swandro-Orkney Coastal Archaeology Trust excavation (Figure 33), and a dig tour was reached along the storm beach from Midhowe, past the remains of St Mary’s Church and Skaill Farm. This site lies within sight of the Broch of Gurness which is on Mainland. The visit on 27 July was on the last day of the dig, so several of the trenches had already been backfilled using plastic sheeting, heavy duty sandbags and lots of protective stone. This is a rescue archaeology dig due to the encroaching sea, of a Neolithic chambered tomb, and iron age round houses, and this year has revealed further structures including a tomb passageway, a “Pictish Smithy” with evidence of metalworking in the form of hammerscale which is currently being analysed, and a large stone anvil; they’ve also found a giant rectangular stone tank lined with clay (possibly the largest ever found), which may be an industrial tank for fish or connected to metalworking; and a Roman coin (nummas AD348-35 Constans), suggesting some contact with the Mediterranean; another exciting find was early cat skeletons (which are yet to be verified) which are rare in Orkney, and which may indicate a Viking presence and help to date periods of use of the site (Swandro archaeology team tour-guide 27 July 2017) (Swandro-Orkney Coastal Archaeology Trust, 2017). Further excavation seasons and research are planned for this site.
Figure 33 Swandro-Orkney Archaeological Trust excavation, Rousay. The Neolithic and iron age site looks across the water to the Broch of Gurness on Mainland (just out of view on the horizon to the left). This photo is taken at high tide in summer, winter high tides and storms can wash over the currently exposed archaeology (Photo author’s own, July 2017)
2.3.2 Midhowe stalled cairn, and Midhowe Broch

Midhowe cairn and broch overlook Eynhallow and Mainland, and the shore provides plentiful building stone (Figure 34, Figure 35, Figure 36, Figure 37, Figure 38).

*Figure 34 Midhowe stalled Cairn (beneath white protective structure) and Midhowe broch to its right, overlooking Eynhallow island, and Mainland island in the distance (Photo author’s own, July 2017)*

*Figure 35 Plentiful building material to hand: Rousay flagstones form the shore in front of Midhowe, Rousay, and one of several small inlets at the shore (photographed at high tide, summer) (Photo author’s own, July 2017)*
Figure 36 Midhowe Broch, Rousay, interior showing recesses/accesses to double wall cavity, and line of gallery/platform in wall (Photo author’s own, July 2017)

Figure 37 Midhowe Broch, Rousay reconstruction drawing showing double skin walls (Romankiewicz, 2011)
2.3.3 Blackhammer stalled cairn

Blackhammer on Rousay overlooks Mainland and the Broch of Gurness (Figure 39), and is a smaller version of a Midhowe type cairn (Figure 40).
2.3.4 Taversoe Tuick

Taversoe Tuick is a two-storey cairn c.3rd millennium BC, the upper and lower tombs with separate entrances, and of different designs, the upper comprising two roughly circular compartments, with floors of huge flag or capping stones, and the lower tomb containing four rectangular shelved compartments (Wickham-Jones, 1998, p. 57) (Figure 41). The tomb affords views over Wyre and Mainland (Figure 42).
Figure 41 The upper chamber of the Taversoe Tuick two-storey cairn (Photo A Gurnham, July 2017)

Figure 42 Taversoe Tuick two-storey cairn, Rousay, overlooking Wyre and Mainland (Photo author’s own, July 2017)
2.3.5  Loch of Wasbister, Burrian, Rousay

The Loch of Wasbister contains examples of crannogs (man-made islands) (Figure 43) onto which roundhouses would have been built, another example in Orkney is at Voy, Loch of Stenness. It appears that relatively little research and excavation has been carried out on crannogs so far (Wickham-Jones, 1998, p. 83), so these would likely provide an area for further research.

Figure 43 Crannogs (man-made islands for a roundhouse), Loch of Wasbister, by Skaviskaill Bay, Burrian, Rousay (Photo author’s own, July 2017)

3  CONCLUSION

Standing Buildings Archaeology is sometimes referred to as ‘above ground’ archaeology, although it could equally be applied to excavated sites where ‘standing buildings’ or remnants thereof have been buried over time by such processes as natural deposition, erosion, clearance, repurposing or later phases of rebuilding. Excavations this season at the Ness of Brodgar and Swandro, for example, have uncovered some fascinating and intriguing structures, ripe for research and investigation into their purposes and changes in functions over time, their building construction methods, and their architectural design.

Visiting the archaeological excavations also provided an opportunity to meet and ask questions of members of the dig teams, and, due to fortuitous timing, the site Director, Nick Card, at The Ness of Brodgar.

This reconnaissance has highlighted for me many possibilities for further research in the area of standing buildings and their landscapes settings, but primarily it has served to confirm my interest in standing buildings archaeology, and fuelled my desire to carry out research and gain experience of interpreting structures, from the earliest surviving structures, to those of the present day.

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