

Iron Working, Feasting and Social Identity at Mine Howe, Orkney

Kath Page

The study of metalworking practices in Iron Age Scotland can give insight not only into local and regional economies, but also into the social and political hierarchies of those communities. Little is known about the individual status of metalworkers, however, the location of metalworking sites and the depositional practices associated with them may provide clues about how they were regarded, as Hunter (2015:225) states “we can often understand the process, but not the people behind it”.

Within an archaeological context, identity can relate to gender, status, or ethnicity, however, defining the identity of a person from prehistory is difficult to ascertain without the assistance of historical accounts (Díaz-Andreu and Lucy 2005:1,15). Therefore, identity is often endowed upon individuals from prehistory based on their gender and the material culture associated with them in death (Hurcombe 2007:103). The assumptions of gender-based identities means there is an androcentric view of prehistory, particularly in relation to metalworking that needs to be readdressed. Archaeologists must rethink social identities and challenge assumptions that constrain our understanding of past societies (Skogstrand 2011:58, Matsuda 2016:45, Hunter 2015:225).



Figure 1 - Spear butt mould from Mine Howe. Image: Towrie 2003a.

The introduction of metalworking into Scotland around 2150BC, would have had a profound effect on communities and marked a change in the local economies of settlements across the region (Knight 2020, Webley *et al* 2020:1). The introduction and establishment of localised craftworking of nonferrous metals during the Bronze Age set the backdrop for the exchange of prestigious and desirable objects. These items created an economy of portable materials that saw increased movement of people and ideas, both nationally and internationally (Webley *et al* 2020:2). The role of the metalworker therefore, underpinned the authority of the local elite, ensuring the supply of prestige goods and weapons (Figure 1) (Giles 2007:397). Over time, the elaborate ornamentation and specialisation of objects reflected the increasing social complexities of late Bronze Age and early Iron Age communities (Kuijpers 2018:563). The increasing importance of this craft meant that metalworkers were instrumental in creating new social identities and hierarchies, so ensuring that these

highly prized objects were the cornerstones of political and ritual life during the Iron Age (Giles 2007:398).



Figure 2: Excavations at Culduthel revealed 19 Iron Age roundhouses, 16 were dwellings and 3 were industrial structures containing iron working areas, a bowl furnace and grain drying structure. Image: Murray 2008.

Settlement in early Iron Age Scotland comprised of collections of farmsteads and roundhouses, such as at Culduthel in Invernesshire (Figure 2). These communities undertook small scale agricultural and industrial enterprises that were governed by kinship relationships that enabled access to wider networks for trade and exchange (Armit 2002:15, Giles 2007:396). Prehistoric metalworking was a “technology of advancement” fulfilling socio-political, ritual, and economic functions, enabling hierarchies and forging loyalties between regional chiefdoms (Joy 2011:206). The significances of metalworking and the changes it brought to prehistoric communities may have been marked by the changes in depositional practices witnessed in the archaeological record of the late Bronze Age and early Iron Age (Champion *et al* 2001:27). This structured deposition of objects and of animal and human remains is reflective of the ritualised behaviours enacted as a response to changing social

practices, temporalities, and status during the Scottish Iron Age (Waddington *et al* 2019:84,90).

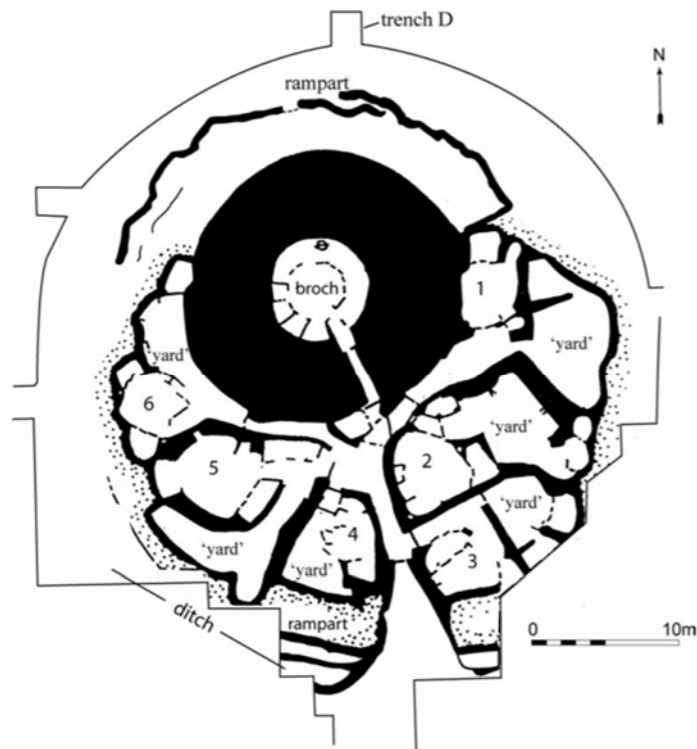


Figure 3: Middle Iron Age phase of Howe Orkney. House 1 identified as a metal working area, set inside the broch village but located away from the main areas of settlement.
Image: Waddington 2014.

Evidence for domestic metalworking activities at settlement sites is common across Scotland, implying that this craft was incorporated into daily life alongside arable and pastoral farming (Cressey and Anderson 2011:37). Whilst furnacing may have been seasonal, dependent on the availability of fuel resources, smithing could have taken place throughout the year (Giles 2007:398). Metalworking sites of the early Scottish Iron Age were generally located within farmsteads, and later, towards the middle of the Atlantic Iron Age, within broch villages, indicating that metalworking formed part of a regionalised agricultural economy (Champion 2001:12). At both types of settlement site, such as Birnie in Moray and at Howe in Orkney (see Figure 3), the

production of metal objects was located in structures within the villages, but away from the main settlement areas (Waddington 2014:73).

The construction of brochs during the Middle Iron Age appears to evidence the emergence of new socio-political ideas, the strengthening of local economies and the establishment of a new elite (Dockrill 2002:159). Material and symbolic wealth and status could be inferred onto a community by the number of animal resources available, particularly cattle, but the presence of metalworking would have also increased a settlements importance, both economically and politically (Champion *et al* 2001:12). Metalworking, therefore, would have provided this emerging hierarchy with the opportunity to accrue portable wealth and forge their own identity (Harding 2002:191). However, whilst the presence of specialised and highly skilled metalworkers within a community would have been beneficial, nothing is known of their relationship with the community or the elite, but archaeological evidence suggests that skilled metalworkers were endowed with their own special status (Kuijpers 2018:563).



Figure 4: Enamelled brooch demonstrating the level of skill of the craft workers at Mine Howe.
Image: Towrie 2003b

The choice of location for metalworking activities would have been based on practical considerations, but changing social, ritual, and political concerns would have also played a part in those decisions (Dolan 2016:31). The importance that metalworking held within Iron Age societies meant that whoever regulated these activities ultimately had control over the community, Dolan (2016:43) suggests that smelting and smithing were undertaken in different locations to prevent metalworkers from completely controlling this process. The control of knowledge and resources by people other than the established elite may have exempted metalworkers from the same social authority enforced at settlements (Ibid). This threat to the hierarchy may have resulted in the need to establish production sites away from the main areas of settlement (James 1999:91). However, this separation may also be representative of the status and the symbolism endowed on metalworkers and evidence from the faunal bone assemblage from Mine Howe may support this conclusion (Giles 2007:397).



Figure 5: Mine Howe, on the Orkney Mainland 10 miles from Kirkwall. Image: Canmore 2000.

Discovered in 1946, Mine Howe is a glacial mound containing a manmade stone staircase that descends to a “well” like feature set inside a corbelled chamber (Card *et al* 2006:6). Excavations between 2000-2005 revealed that this monument was situated within a ditched enclosure and was associated with an iron smelting furnace and a large sub-circular feature. This structure was identified as a workshop that produced both ferrous and non-ferrous metal objects dating from c100BC-180AD (Ibid:6, Harrison 2005:14). Archaeological survey and subsequent excavation of the surrounding landscape found no evidence of domestic settlement associated with Mine Howe¹ (Harrison 2005:18, Card and Downes 2001:71).



Figure 6: Map of Mine Howe and entrance way to Mine Howe chamber and mound excavations. Images: Card *et al* 2005a and Towrie 2003c

The construction of Mine Howe some distance away from domestic settlements may imply that during the Orcadian Middle Iron Age, agricultural economies were

¹ Investigations by Petrie in 1878 suggested a broch, referred to as Langskaill, was located at Round Howe, 300m to the Southwest of Mine Howe. Excavations in 2001 suggests this was not a settlement site and not contemporary with Mine Howe (Card and Downes 2003:16). However, artefacts recovered from Breck Farm, 200m to the Northwest, are suggestive that this area may have been a domestic site contemporary with Mine Howe, but this cannot be confirmed without excavation (Card 2020).

experiencing a surplus of resources as farmsteads were increasingly incorporated into a network of kinship-controlled landholdings (Oosthuizen 2016:385, 386). Excavation data suggests that within the context of the Scottish Iron Age, domestic settlements operated a mixed economy approach to food production (Guttman *et al* 2008:800, Armit and Ralston 2003:189, Tipping *et al* 2008:2380). Analysis of sites such as Old Scatness in Shetland and Birnie in Moray, indicate settlements had areas for crop cultivation, grazing and access to wild food resources at the coastal or woodland margins, however, at Mine Howe, evidence for pastoral or arable farming has not been identified (Guttman *et al* 2008:800, Hunter 2011:122, Hunter and Carruthers 2012b). Mine Howe is situated on an elevated feature in a glacial landscape surrounded by low-lying marshy land, which may account for the lack of evidence for farming (Card *et al* 2000:49).



Figure 7 – Aerial Image of the glacial landscape surrounding Mine Howe that creates a natural amphitheatre (c), St Andrew's cemetery (r) and Long Howe behind. Image: RCAHMS (2009).

The bioarchaeological artefacts recovered from Mine Howe and the lack of domestic and agricultural activities on the site, may indicate that Mine Howe served as a central place for the redistribution of resources in the area (Mainland and McKenzie Forthcoming:1). Evidence from North Atlantic broch sites such as Old Scatness, Shetland and Howe, Orkney, suggest that during the Middle Iron Age, this region of Scotland was able to produce a grain surplus (Dockrill and Bond 2014:44). Arable surplus could also suggest pastoral abundance, and faunal bone assemblages from Howe and Old Scatness provide evidence for intensive cattle dairying throughout the region which supports this theory and would be indicative of a surplus of meat, butter, and cheese (Ibid, Ballin-Smith 1994:90).

Faunal analysis of bone assemblages at Iron Age sites across Scotland suggest that pig, sheep, and cattle were the dominant species for consumption (Armit 2004:85, Haselgrove 2009:152). However, evidence from sites on the Atlantic fringes, including Mine Howe, suggests red deer, seal, whale, and domestic and wild fowl were also common sources of food (Campbell 2009:187, Mainland and McKenzie forthcoming:5,10). At Mine Howe over 40,000 fragments of mammal bone were excavated from across the site, including the workshop and from three trenches inserted into the ditch (Figure 8) (Mainland and McKenzie forthcoming:2, Harrison 2005:8). The earliest phases of the ditch (1-4) were contemporary with the internal stair structure within the mound, dated to c190BC-AD30 (Card *et al* 2005:4). Here the bone assemblages were dominated by sheep and cattle, whereas the later phases (5-7) evidence red deer, pig, and fox, as well as cattle and sheep, comprising mainly of skulls and feet. The final phases of the ditch (8-9) are associated with the decommissioning of the site between 75AD-200AD (Ibid:5). Analysis of the bone

deposits from these phases evidence “stratigraphically distinct” assemblages of mostly sheep and cattle carcasses, but also of fish, shellfish and swan indicating a change in feasting behaviour (Ibid:4,5).



Figure 8: Mine Howe ditch under excavation to an eventual depth of 4m. Image: Towrie 2003d.

The bone assemblages recovered from the workshop show that fish, particularly saithe, was being cooked and dried from the earliest phases of the structure (E1-2). The bones from young cattle also dominate these early contexts, whereas those of red deer and sheep were more abundant towards the later phases of the workshop (E3-5) (Ibid:7). Like the ditch, the final phases of the workshop (E6-8), evidences the consumption of a wide range of fish species, both marine and freshwater. Analysis

shows consumption of trout, salmon, wrasse, and eel, although not in large concentrations (Mainland and McKenzie forthcoming:5, 6).

It has generally been considered that there was an absence of fish consumption during the British Iron Age. However, recent archaeological studies in Atlantic Scotland have evidenced fishing and the consumption of marine resources, particularly in the context of special sites and ritualised practices (Rainsford and Roberts 2013:34, 43, Dobney and Ervynck 2007:403, 406, 410). A recent example from The Cairns broch in South Ronaldsay, Orkney, was the discovery of a human jaw deposited inside a whale vertebra as part of a decommissioning ritual. Isotopic analysis of the jaw detected high levels of marine proteins, suggesting the individual consumed a high fish diet prior to death which may be reflective of their status within the community (Carruthers 2016).



Figure 9: Excavating the Workshop floor at Minehowe Image: Towrie 2003e

Historically red deer have held a special status for communities stretching from the Orcadian Neolithic to the Pictish and Norse periods, and the hunting of these animals played a huge cultural and symbolic role within these societies (Waddington 2014:83, Clarke *et al* 2017:77). Although red deer and fox are no longer found in the Orkney Islands, during the Iron Age they appear to have been associated with feasting and subterranean features (Summers 2011:115, 122, Mainland and McKenzie forthcoming:14). The faunal assemblages of red deer at Mine Howe, similar to that found at Howe, is suggestive of structured deposition related to fertility and renewal (Waddington 2014:82, Mainland and McKenzie forthcoming:8, Jones and Mulville 2018:341). The inclusion of red deer in feasting activities at Mine Howe therefore is not unusual, but does further enhance the significance of the site, its people and the activities associated with it. A study by Campbell (2009:184) suggests that deposition practices of certain animals was related to the transformation stages of the life of that animal, so dictating how it would be prepared after death. The fertility associations with red deer and the shedding of antler is indicative of this.



Figure 10 - Artist impression of Mine Howe and related ditch feature. Image: Towrie 2020f

Prehistoric feasting events involved commensal activities that held social, political, and ritual significance for the community and wider society. During the Scottish Iron Age there was an association between large scale seasonal gatherings for craft production and feasting (Rowley-Conwy 2018:231,232). This coming together would allow a pooling of labour and expertise, access to industrial supplies and enable the redistribution of food and other resources (Tullett and Harrison 2008:153,155).

Analysis of the Mine Howe faunal assemblages from phases 1-5, suggest animals were slaughtered in late spring or early summer and their placement within the ditch appears to indicate that feasting was concerned with egalitarian allegiance building. This is evidenced by their deposition in prominent positions by the entranceway to the mound (Figure 10), to “provoke memory, social adhesion and promote identity” (Mainland and McKenzie forthcoming:18).

However, feasting during the Scottish Iron Age was also an expression of the political power and wealth of the local elite (Madgwick 2015:329,336). The animal deposits in the later phases of the ditch evidence a change in the function of feasting and the status of those in attendance. The inclusion of pigs and atypical mammals within the assemblage of the upper ditch (phases 6-8) is suggestive of conspicuous consumption and “promotional feasting” (Mainland and McKenzie forthcoming:18). This can be evidenced by the discovery of unprocessed, semi articulated animal carcasses, presumably left unburied, in these upper contexts. In the final phases of the life of Mine Howe (8-9), the purpose of feasting and the status of those in attendance appears to change again (Ibid). The deposition of whole carcasses and/or skulls within the ditch feature close to the entranceway to Mine Howe and the

inclusion of atypical foods such as fox, swan and diverse fish species is suggestive of competitive, or diacritical feasting. (Hayden 1998:129).

The purpose of diacritical feasting at Mine Howe may have been to reinforce hierarchies within the local community at a time of change or uncertainty (Hayden 1998:129). These feasts were restricted to influential individuals or those with special status who were viewed as a threat to the established elite and would include unusual or rare food to emphasize their power and position (Ibid, Dietler 1998:91). However, the faunal bone evidence from Mine Howe may not just be suggestive of competition outside of the Mine Howe environs but could also indicate donor/recipient and subordinate/superiority relationships within the Mine Howe community (Dietler 1998:92). Competitive feasting on the “symbolic capital” of atypical consumables (Bourdieu 1977:296), is an informal expression of political power and would require some form of reciprocation or indebtedness from those attending the feast (Dietler 1998:92). The changes in feasting practices that are evident in phases 6-8 at Mine Howe correspond to a period of destruction, alteration and reconstruction of the workshop area which is contemporaneous with the introduction of ironworking on the site (Card *et al* 2004:38,39). Could the elite’s response to this new technology explain the difference in feasting ritual and status at Mine Howe?



Figure 11 – Mine Howe woman excavated from beneath the workshop. Image: Towrie 2003g

The remodelling of the workshop included the ritual inhumation of a woman directly beneath the furnace conceivably as a decommissioning/foundation deposit (Figure 11). Her position was such, that whoever was operating the bellows had to crouch directly over her skull (Card *et al* 200b:6). The significance of this burial and the changes in feasting ritual may further support the hypothesis that the status of the metalworkers changed with the introduction of iron, not only within the community, but also with the established elite. The resulting diversification of the objects manufactured at Mine Howe, supports Needham's (2017:151) theory that there was a hierarchy of importance that reflected the status of the objects being produced with the status of the metalworkers making them.



Figure 12 - Excavation of the furnace. Image: Towrie 2003h

Excavation of the workshop revealed that the early phases (1-4) were dominated by the production of nonferrous metalworking, supported by the discovery of moulds and crucibles containing copper and nonferrous metal residue (McDonald forthcoming:2). Analysis of the later deposits from phases 5/6 onwards, indicate that around the beginning of the first millennium AD, both the smelting and smithing of iron commenced at Mine Howe (Ibid:8,9). What this suggests is that the introduction of ironworking at Mine Howe signalled a change not just for the status of the site, but also of the metalworkers. The production of high-status, highly prized objects, such as enamelled brooches, swords, and spear butts, correlates with the period of workshop refurbishment and the inhumation of the woman, suggesting that the changes in feasting activities were also a response to this (Card *et al* 2002:4,11, Mainland and McKenzie forthcoming:18).

Prehistoric metalworkers held a symbolic status within their community and the evidence from the feasting ceremonies at Mine Howe suggest changes to that status over time was a response to the introduction of ironworking during the first millennium AD. The presumption of diacritical feasting would also imply that this change in status may have led to tension with the ruling elites resulting in the need for a culture of indebtedness to maintain the status quo. Why Mine Howe was eventually decommissioned is unclear, but the final phase of the site suggests the ditches were infilled and the workshop left to decay despite some metalworking continuing (Card *et al* 2002:13). Although the site was eventually abandoned sometime after 200AD, it is clear that the symbolic status once held by Iron Age metalworkers was bestowed onto the Pictish artisans who followed.

Kath Page - @orkat3 Twitter

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