
Chapter 6

Rooted in water: the Scottish island-dwelling tradition

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The human affinity for living along the margins of watery places – seas, rivers, lakes and wetlands – can be regarded as a near-universal trait with a long pedigree. This bold statement is hardly a revelation, as water sustains human life – along with countless other organisms upon which our lives depend. It is therefore not surprising that the abundant freshwater lochs located throughout much of Scotland served as focal points for human activity throughout the ages, whether for survival or security, serenity or status. Yet rather than being content simply to live *near* watery places, many former inhabitants of Scotland chose to live *on* the water. This tradition is readily visible through the remains of over 500 artificial or modified natural islets whose collective chronologies span a period of over five millennia. Neighbouring Ireland also contains numerous occupied islets of a slightly later nature whose main floruit of use appears to be during the Early Christian Period, though recent field-work is steadily rolling back this horizon (O’Sullivan 2009), while one crannog is currently known to exist in Wales at Llangorse lake; reputedly the legacy of an Irish settler in the ninth century AD (Redknap & Lane 1999, 377).

Briefly, there are a few caveats to digest. Today, Scottish island dwellings are most commonly known by just one of their various medieval monikers as *crannogs*, while numerous terminologies for island dwellings in all their various guises exist – an issue which has muddied the classificatory waters in Scotland (Henderson 1998, 235–40, Harding 2000, 301, Lenfert 2011, 4–6, 2012, 47–71, 2013, 125–7). This has inadvertently led to a divide between the study of Hebridean and mainland crannog use – effectively a singular concept typically expressed primarily in stone rather than timber. In this regard, the analysis of islet use in Scotland is often a contradictory affair. There are few wholesale observations which can be

applied to the overall tradition beyond the shared concept of living on a small islet, while conversely, variation abounds.

Context is often key with crannog discussions. I believe a biography of island dwellings in Scotland is particularly well-suited for discussions on memory and reuse, and therefore *not* particularly well-suited for highly focussed discussions on specific periods. In doing so, one risks losing sight of an inherent part of this rich tradition, namely longevity and persistence. In this sense, a narrative of Iron Age islet use plays an integral role within a Medieval or Post-Medieval narrative, one which sees the much later reoccupation of prehistoric islets which reproduces the same concept – living on water. This underlying theme of reuse and reoccupation provides fertile soil for a number of discussions, not all of which can be addressed in the available space, but alluded to below. These topics include the formation and creation of memory through oral or invented traditions, threads of continuity and change, what monumentality is or is not, and finally, the transposition or projection of legitimacy through the occupation of ancient places.

Presence in the landscape

Current research indicates there are some 571 known or suspected examples of occupied islets in Scotland, ranging from Shetland in the north to Dumfries and Galloway in the south (Lenfert 2012). The majority – at least 347 – are believed to be primarily artificial, i.e. crannogs. Crannogs were laboriously constructed in a number of ways, usually by simply creating a robust mound of stones on shallow loch shelves to form a small island – a technique primarily seen in northern Scotland and the Hebrides, or alternatively, by driving a ring of timber piles into a suitably shallow area of loch bed and filling the interior with peat, brush

or stone, until an islet large enough to provide structural support emerged – a technique most commonly witnessed in more northeastern and southern areas of Scotland (Henderson 1998, 231).

Therefore, in a very real sense, crannogs are a direct reflection of their immediate environment *at the time of construction*, which relied upon readily available materials in the surrounding environment. As a result, these artificial islets range in composition from nascent examples of Neolithic Hebridean crannogs, a current rarity in the archaeological record (Lenfert 2013, 129), to peat-covered mounds of stone built after the wind-swept Western Isles became largely treeless, a lengthy event which began in the Mesolithic and culminated around the late Neolithic/Early Bronze Age transition (Tipping 1994, 23, Fossitt 1996, 171). On the Scottish mainland, the construction of crannogs also mirrors their environment, typically comprising dense agglomerations of timber and brush, rich in organic materials, in those areas which retained sufficient timber resources.

Today, mainland crannogs are deceptive in their appearance – generally nothing more than small, heavily vegetated islets in the picturesque lochs of Scotland, which typically garner little attention from tourists, boaters or fishermen. Underwater inspection in cold, low visibility conditions is often necessary to confirm their artificial nature, which is typically confirmed by the presence of worked timber piles or a tell-tale foundation of irregular boulders small enough to be deposited by human action, while the occasional drought or loch drainage scheme has allowed for sporadic chance identifications without the need for diving. However, it is quite a different story in the Western Isles where prominent drystone architecture visually dominates the archaeological record, alerting us to past activity on islets through a number of intricate and certainly monumental forms: Atlantic roundhouses, including brochs, duns and cellular structures such as wheelhouses, and later, robust, rectilinear Medieval structures.

Access to island dwellings is archaeologically visible through the remains of stone, and less frequently, timber causeways, or the presence of logboats. As recent fieldwork by the author demonstrates, numerous island dwellings are situated in waters shallow enough to provide direct access by simply wading, a habit made easier by simply lifting the traditional highland dress – the belted plaid (not the kilt), commonly worn throughout much of Scotland until at least the early eighteenth century. Conversely, a number of later island dwellings are situated far from shore in deeper water – necessitating the use of boats for access. Overall, this legacy of islet use in Scotland

has arguably manifested itself as one of the longest-surviving and most unique settlement traditions in European history.

A 'wide-angle view' of islet use in Scotland

From an archaeological perspective, one of the most immediately recognizable characteristics of island dwellings is their extensive, if not unrivalled, chronology. Scottish crannogs were variously constructed, renewed or reoccupied over some five and a half millennia, from the Neolithic to as late as the eighteenth century, yet this scenario is certainly not one of complete continuity, at least in the current archaeological record. Scottish island dwellings made a Neolithic début in the Western Isles of Scotland at sites such as the crannog of Eilean Dòmhnuiill (Armit 2003a), the natural or modified islet of Eilean an Tighe (Scott 1950) and the apparent Neolithic stone and timber crannog at Loch Àirigh na Lic (Dixon & Topping 1986, 191) during a period when static settlement forms and agriculture became widely established. Given the limited depth of fieldwork carried out thus far on Hebridean islet sites, it is almost certain that additional Neolithic crannogs exist here – an area the author intends to revisit in the near future. In contrast, this poorly understood but apparent Neolithic appearance was followed by an extended hiatus in islet use during the Bronze Age, with the sole exception of limited islet occupation in Argyll at the beginning of the first millennium BC (Rennie & Newall 2001). Here, Melldalloch Island exists as a large natural island, and thus stands out as something of an anomaly in both chronology and setting. While future findings will no doubt alter this early chronology, in reality there are currently over 200 radiocarbon or tree-ring dates available from Scottish island dwellings (Lenfert 2012, 18–19). With this amount of data now available, the stark absence of Bronze Age activity during all but the very end of the Late Bronze Age suggests islets during this period were simply not occupied on an appreciable scale.

It is on the periphery of the Early Iron Age (c. 800–700 BC) that island dwellings are first constructed on an appreciable scale in Scotland, making the leap in both time and space from the Western Isles. By the mid- to late first millennium BC, crannog use reached a floruit, appearing across much of Western Scotland, and to a lesser extent, eastern areas linked by water routes. These later prehistoric sites appear in the archaeological record as largely unassuming homesteads – it is their unique location that holds an air of monumentality, rather than the limited material assemblages which speak more of domesticity than defence, though concerns of ritual matters appear to

have been present as well (below). The island dwelling tradition was largely unaffected by the limited Roman presence, particularly in areas of direct contact such as Dumfries and Galloway. It persists throughout much of the first millennium AD, after which it all but vanishes in the current archaeological record during the Norse Period (c. AD 800–1266), only to re-emerge yet again during the Medieval and Post-Medieval Periods, as a form of settlement increasingly associated with royalty, clansmen and tacksmen. This later use of islets is witnessed by a growing number of written references in the form of charters, official documents and first-hand accounts which tantalizingly allude in the briefest of entries to island dwellings as the setting for feasts, weddings, conflicts and truces – perhaps masking the presence of more commonplace island occupants at this time.

At the end of this saga, the island dwelling tradition ultimately witnessed a rapid demise in the mid- to late seventeenth century. This decline was brought on by a combination of factors, most notably an increasingly centralized government which was effective in dismantling what it accurately saw as an unruly, independent and troublesome clan system. In turn, these efforts toppled long-standing social hierarchies (Shelley 2009, 204), which indirectly led to ideological changes amongst younger members of the land-holding or ruling classes. Newer generations were more likely to be educated in England or on the Continent, or at least exposed to these cultural norms, and domestic desires turned towards constructing tower houses, or later, stately homes with large formal gardens, rather than artificial islands upon which to make their mark. Though the situation in Scotland was far from politically stable – the Jacobites loomed large upon the scene and the Risings of 1715 and 1745 were yet to come, later seventeenth-century life had taken on a considerably more settled tone with reduced internecine violence and raiding that often typified earlier eras. By this point in time, living on an islet went from being a widely accepted practice, which had successfully resisted countless centuries of change, to becoming what basically amounted to an antiquated oddity. The frequently harsh and rugged, yet easily romanticized notion of islet life – one spent hunting and fishing, feasting and heroically defending ancient lineages and traditions, it seems, had gradually given way to afternoon tea.

Living on water – revisited

Given the sweeping timescale for the construction and occupation of island dwellings, in addition to their sheer numbers, it is reasonable to assume at

least a certain percentage would see phases of reuse after their initial construction and occupation phase. In reality, this concept is more canonical than exceptional. Currently, with the only clear exception of the Post-Medieval site of Eadarloch (Ritchie 1942; Crone 2011, 36), *every* island dwelling excavated to date typically indicates one or more of the following characteristics: extensive periods of largely uninterrupted occupation, multiple occupation phases, or a sudden revitalization and reoccupation, often centuries after initial construction. Why does this reuse appear so systemic throughout the island dwelling tradition? Is it merely related to the opportunistic renewal of an already-existing site, or does memory and ancestry – however real or constructed – contribute to the decisions made by subsequent arrivals? Perhaps, above all, it typifies what has been referred to as 'the deliberate re-activation of an antique site' (O'Sullivan & Van De Noort 2007, 71).

Deconstructing defence

This question of 'why choose to live on an islet?' rightly forms one of the most fundamental topics within island dwelling studies. As with most debates in archaeology, the reality is that there are multiple, equally valid explanations for living on water. Defence is the most obvious and most commonly touted motive – a pragmatic, plausible notion which leads back to views held by early antiquarian investigators such as Stuart (1865) and Munro (1882). While any islet has inherently defensive characteristics by virtue of being surrounded by water, there are several factors which weaken this argument as the sole reason to build an island.

First, and perhaps most telling, artificial islands were often constructed in lochs where natural islands already existed, yet these 'ready-made' and therefore easily annexed islands often show no archaeological indications of use. This intriguing juxtaposition between unoccupied natural and artificial islets can be seen at Loch Lomond, for instance, where five crannogs were built near natural islands which lacked evidence of human activity (Baker & Dixon 1998, 23). Far from an isolated case, numerous examples of artificial islets built next to natural islets are also found in the Lake of Menteith (Henderson 1998), Loch Awe, Loch Garry and Loch Lundie (Blundell 1909), to name but a few examples. If defence was the overriding issue, using natural islets would free up labour and materials for the construction of robust defensive structures such as palisades, rather than diverting efforts towards the inherently painstaking task of building an island. Second, as fieldwork in the Western Isles has shown (Lenfert 2012, 253–8), it is frequently easier to wade out



Figure 6.1. Author standing on submerged causeway leading to Dun Ban, Grimsay. Causeways are present on many Hebridean crannog sites in particular, yet access is often problematic despite their presence (photo: Nataliya Danilova).

to many islets, rather than having to rely solely upon unstable, algae-covered causeways or boats for access. In fact, several islet sites inspected during this research are located in water less than 50 cm deep, while in contrast, navigating stone causeways was considerably more time-consuming, and indeed treacherous, that simply wading to islets through shallow water, though local knowledge of loch depth certainly plays a key role in this observation (Fig. 6.1).

Third, far from being secluded enclaves, island dwellings are highly conspicuous in their environment, often visible for a considerable distance. This attribute implies more about making one's presence known, rather than concealing it. Fourth, there is no clear archaeological evidence for violence on any appreciable scale taking place on Scottish crannogs until the later Medieval Period – it should be noted there are exceptions to this in Ireland, however, which appear to relate more to early Norse forays (O'Sullivan 2000). Fifth, and perhaps ironically, island dwellings are particularly vulnerable to any form of siege for the exact same reasons that underline any apparent defensive characteristics. As historical accounts indicate, there are several ways to make life unbearable

for islet occupants, ranging from simply waiting for the besieged occupants to deplete their limited stores of supplies, to more Machiavellian measures such as flooding islets by blocking loch outlets or equally dramatic examples of Post-Medieval cannonades from the foreshore – again in Ireland (O'Sullivan 2000, 41). Finally, protection of food stores from scavengers is another motive which overshadows a potential defensive motive. This holds particularly true in the context of prehistoric societies, at a time when now extinct predators such as lynx, bear and especially wolves would have been encountered with some frequency (Yalden 1999, 111; Lenfert 2012, 561). Finally, food stores on a crannog would be much easier to protect from rodent infestation – a more timeless threat which would have plagued both Neolithic and Medieval occupants alike.

Crannogs, prehistoric belief systems: ceramic and metalwork deposition

If we look beyond overtly physical virtues, towards early spiritual concerns or belief systems, we see additional motives for the prehistoric occupation of



Figure 6.2. Notable examples of largely intact prehistoric pottery recovered by the author from the lochbed surrounding Hebridean crannogs. Though absent from most mainland sites, typological ceramic forms in the Hebrides can help identify phases of occupation where no other chronological evidence exists.

islets which extend beyond the realm of the pragmatic. Based upon notable finds by the author of largely intact prehistoric vessels (Fig. 6.2) deposited around the submerged margins of crannogs in the Hebrides (Lenfert 2011, 17, 22–4, Lenfert *forthcoming*), evidence of intentional ceramic deposition on the loch bed adjacent to crannogs is now apparent in the island dwelling record, as these vessels appear to have been carefully placed upright or in one instance, (Lenfert 2011, 24) nested inside one another, rather than simply discarded into the loch.

In addition, extensive metalwork deposition, well-known in numerous prehistoric European contexts, further alludes to the belief that watery places held a specific significance in prehistory, perhaps later transposed upon themes in early Christianity. These Pagan belief systems deified natural elements, many strands of which were later adopted by Roman incomers. Rivers, lakes, pools and wells have long been associated with not only the essence of life or sources of healing, but also the otherworld (*cf* Green 1995), though much of this evidence is largely anecdotal in nature, primarily surviving through mention in either Greek or Roman sources. In this sense, a reverence for watery places, e.g.

Scottish lochs, raises the strong possibility of a ritual association with the construction and occupation of artificial islands, as opposed to solely natural islet use, as places *intentionally* surrounded by life-giving water, protected and blessed by virtue of their location and detachment from their earthly surroundings.

Furthermore, there exists a similar dynamic for the curious appearance of a number of well-preserved ards deposited in the sub-flooring on crannogs such as Milton Loch (Piggott 1953), Buiston (Munro 1882; Crone 2000), Oakbank (Dixon 2004) and Cults Loch (Cavers 2010). In this vein, it is therefore rather surprising that ritual metalwork deposition is not found in more secure association with island dwellings, although this may simply reflect a lack of excavation on the surrounding lochbed. Sites such as the 'Iochdar Complex', in the Western Isles (Lenfert 2012, 490), Dowalton Loch in the southwest and perhaps most importantly, Duddingston Loch (Stuart 1865) have produced evidence of metalwork deposition in association to known or suspected crannogs, yet in many cases, it is difficult to make a convincing correlation due to either the lack of provenance from antiquarian relict hunters or evidence for continuity between site occupation and

artefact deposition. Most crannog excavations have understandably focused upon the islets themselves, not systematic searches of the surrounding lochbed for submerged artefacts. The strongest evidence for metalwork deposition in relation to crannogs comes from neighbouring Ireland. An amnesty for archaeological relics in Ireland was called during the late 1980s. Underwater metal detectorists, in particular, revealed a large number of metal objects deposited near crannogs (O'Sullivan 1998, 42), further strengthening arguments for a correlation between crannogs and deposition associated with ritual activity.

Island dwellings and the concept of monumentality

Thus far, while defence (from both humans and animals) and ritual concerns appear to provide *partial* explanations for the prehistoric occupation of islets, several other factors play into this discussion, namely

monumentality. This theme holds particularly true in regards to Hebridean islet use, characterized by the presence of imposing Atlantic roundhouses represented by sites such as Dun an Sticer, Dun Cromore, Dun Torcuill and Dun Nighean Rìgh Lochlainn (Fig. 6.3), to name but a few of the better-known examples (cf Beveridge 1911; Armit 1996; Lenfert 2012). In this sense, most archaeologists would agree monumental architecture is typified by large man-made stone structures such as Scottish brochs or Sardinian *Nuraghi*, or earthworks such as Silbury Hill in England or Monk's Mound in North America. Therefore, it is reasonable to ask what outwardly monumental characteristics crannogs possess. Despite the technical skill and sheer labour associated with their construction, little evidence of the toil necessary to build them is readily apparent to outsiders who might rightly assume the island is not simply natural. Furthermore, within perhaps a decade of abandonment, vegetation would likely obscure any remaining walling present,



Figure 6.3. Examples of prominent 'monumental' islet architecture: (clockwise, from upper left) Dun Cromore, Lewis, Dun Nighean Rìgh Lochlainn and Dun Torcuill, North Uist.

providing the impression simply of a natural islet without visual clues as to its human past.

The answers to this lie more within contemporary site use, in the context of outward visibility and initial impressions upon neighbouring social groups. The ability to construct an island represents the creation of a lasting, highly visible feature in the landscape – one that is not readily discounted. Archaeological evidence from prehistoric crannogs (cf Munro 1882; Piggott 1953; Crone 2000; Dixon 2004) may lack much to associate them artefactually with royalty or high-status lifestyles, yet the available picture is one of often intense activity: a timber causeway leading to a thriving, smoky roundhouse set upon the water, perhaps with a log-boat moored alongside. There would have been the sights and sounds of families carrying out daily tasks, the grinding of grain on a quernstone, or the working of timbers accompanied by the smells of cooking, the butchering of livestock and the processing of animal hides. Infrequent visitors to a particular loch (perhaps during seasonal pastoral movements) would likely be left with quite an impression upon discovering that not only was there a new island in the loch, but that it now contained a bustling household. Experimental archaeology also plays a direct role in forming these perceptions.

Based upon the imagery above, crannogs would therefore possess monumental aspects on several levels: most directly, during the active life-cycle of the site, and less tangibly, after abandonment, as the focal point or setting for events subsumed into local memory. At this junction, oral traditions would become the primary channel through which the knowledge of past events and places on these enigmatic sites were transmitted down to successive generations. Meanwhile, the occasional or accidental recognition of 'forgotten' artificial islets through processes such as drought or the discovery of artefacts adds a new variable to sites which became 'lost' in local knowledge – including modified or invented histories to explain these peculiar places in the landscape.

Island dwelling use and reuse in the archaeological record

Below are several cases of reuse or lengthy occupation in the island dwelling record which provide insights into the differing patterns of reuse visible in the archaeological record. These traits include: intermittent use or long occupation spans, Medieval or Post-Medieval reoccupation of prehistoric islets and lastly, symbolism associated with the later use of crannogs as political centres of control. The methodology of dating islets in a Scottish context deserves some discussion here. First, the taphonomy of islet sites is particularly

challenging due to variations in loch levels, currents, wind and biological factors, not to mention subsidence of mound structures from any number of causes, most commonly unstable foundations. Attempting to date island dwellings by association based upon visual clues can be deceptive. A clear example is seen at Loch Tay, Perthshire, where two crannogs exist within c. 50 m of one another – Dall Farm North (still above the waterline) and Dall Farm South (completely submerged). Despite being submerged, and thus of greater *apparent* antiquity, Dall South instead returned an Early Historic radiocarbon date in contrast to a considerably older, Mid-Iron Age determination for the still-exposed Dall North site (Dixon 2005, 259). Thus, we see that assumptions regarding site-formation processes relative to adjacent sites cannot be relied upon for relative or sequential dating purposes.

From an artefactual standpoint, it has been noted that the material culture of Scotland is largely homogeneous throughout much of later prehistory (Henderson 2007, 171), making it difficult in some instances to date assemblages even broadly based on typologies alone. In addition, the material culture associated with mainland crannogs is largely undiagnostic and virtually aceramic until the mid-first millennium AD. Beyond Neolithic or later Hebridean islet use almost all prehistoric vessels and containers recovered from crannogs are crafted from wood, not ceramics. Again, islet sites in the Hebrides and Northern Isles stand out here as the primary exceptions – places which contain a visible ceramic tradition throughout later prehistory. Therefore, in mainland areas radiocarbon determinations, and to a lesser extent, dendrochronology, play a particularly vital role in chronological discussions of islet use and reuse, rather than reliable typological dating of artefacts.

Loch Olabhat, North Uist, Western Isles

Perhaps the most persistent example of artificial islet use occurs at the Neolithic site of Eilean Domhnuill in Loch Olabhat, North Uist. As with most sites on North Uist, it was first investigated by the keen antiquarian Erskine Beveridge, who noted the presence of several rectangular structures overlying earlier midden ash and quantities of patterned pottery (Beveridge 1911, 198). Little else transpired until the site was re-excavated by Ian Armit in the late 1980s who initially believed the site to be another example of Medieval use based upon the rectilinear foundations (Armit 1987; 1988; 1992a; 1996; 2003a). However, excavation revealed at least three successive Neolithic drystone houses whose foundations were largely contiguous and measured some 6 × 4 m internally (Armit 2003a, 94). Underwater

trial trenches revealed earlier strata which pre-date the structures, and it is surmised that a rapid sequence of flooding and rebuilding took place during the first of the substantial occupation phases represented at the site (Armit 2003a, 95).

The site appears to have witnessed a troubled history, perhaps a testimony to the dogged nature of the occupants who repeatedly returned here. Over multiple cycles, the islet appears to have been completely flooded, abandoned, and then – as it re-emerged from the waters – was rebuilt and occupied yet once more. In comparison to mainland Iron Age crannog assemblages, the Neolithic material culture from the site was prolific. Some 20,000 sherds of Unstan and Hebridean ware were recovered, along with carved stone balls, pumice fishing net floats and numerous saddle querns, while anaerobic conditions provided well-preserved organic layers, including evidence of wattle screens and faunal remains associated with food consumption. However, the notion of the islet as a ‘typical’ domestic site is challenged by Armit, who cites a lack of evidence for the working of materials or the keeping of livestock (e.g. no dung) on the site, along with the fact it was fastidiously maintained from c. 3650–2600 BC despite episodic flooding events. As Armit relates, ‘Whatever else the site was, Eilean Domhnuill was important and permanent’ (Armit 2003a, 98).

However, the story of islet use in Loch Olabhat does not end here. The site of Eilean Olabhat, only 200 m east of Eilean Domhnuill within the same loch, was also excavated by Armit and produced dates ranging from the mid-first millennium BC to the onset of the Norse Period, with even later evidence for late Medieval or Post-Medieval reuse (Armit 1988, 35; Armit *et al.* 2009). This former islet is now connected to the foreshore because of changing loch levels and the encroachment of blanket peats. It is considerably larger (c. 60 × 80 m) than its artificial neighbour Eilean Domhnuill (c. 23 m diameter) and is of natural origins although heavily modified with perimeter walling. The earliest construction phase is represented by a small circular stone structure measuring 4 × 5 m internally (Armit *et al.* 2009, 32), followed by three more archaeologically discernible phases of use, occurring not as continuous occupation but as largely discreet episodes. The first and second phases in the second half of the first millennium BC, and perhaps early centuries AD, appeared to have been episodic, not continual. A third phase is evident after a lengthy abandonment in the mid-first millennium AD, marked initially by a domestic occupation phase, followed by the emergence of considerable metalworking activity on-site until perhaps the eighth century AD (Armit *et al.* 2009, 45). The evidence for metalworking from

phase three in the Early Historic Period is notable; 86 mould fragments were recovered while traces of silver were recorded in five crucible fragments (Armit *et al.* 2009, 83). Finally, phase four occurs after yet another lengthy period of abandonment, as a final discrete phase ending somewhere between the fourteenth to sixteenth centuries AD.

Dun an Sticer, North Uist, Western Isles

Another prehistoric islet which was later reoccupied in the Medieval and Post-Medieval Period is Dun an Sticer (Fig. 6.4), a prominent prehistoric Atlantic roundhouse situated on a natural islet on North Uist in the Western Isles. This popular site amongst tourists today is notable by the insertion of a Medieval rectangular interior within the modified broch shell (Royal Commission on the Ancient and Historical Monuments of Scotland 1928, 51). Dun an Sticer retains some of its associated oral tradition, unlike the majority of other islet sites. The Post-Medieval occupant, Hugh, son of Archibald ‘the Clerk’, utilized Dun an Sticer as a base from which he set out to murder the Chief of the MacDonalds and thereby assert control over North Uist during a period of inter-clan unrest after the murder of his father (Beveridge 1911, 140). This would-be usurper on North Uist reputedly held out for nearly a year on this prehistoric broch, until he was reputedly betrayed by his mother attempting to flee by swimming away. His capture, imprisonment in Duntulm Castle on Skye and gruesome death by being given only salted meat and no water, mark an end to this episode (Beveridge 1911, 138; Miers 2008, 5). It is difficult to imagine the unfortunate Hugh chose Dun an Sticer to make his ill-fated bid without considering the historical implications of political power associated with this islet. While this example is one of the more vivid legacies, the overall theme of reoccupying abandoned sites with an associated genealogical or mythological legacy (Gosden & Lock 1998, 2) is archaeologically visible throughout much of the Medieval period, though perhaps lacking the striking narrative associated with Dun an Sticer. It is plausible that throughout Scotland, multiple instances of islet reoccupation were key components towards asserting or contesting claims of ownership or control over the surrounding landscape.

Eilean na Comhairle, Islay: a prehistoric crannog fit for a medieval king

Loch Finlaggan, located on Islay in the Inner Hebridean archipelago, contains several islets which arguably play an under-recognized role in the history of Medieval Scotland. Loch Finlaggan is directly connected to the



Figure 6.4. *Dun an Sticer, North Uist – a prehistoric Atlantic roundhouse with Late Medieval modification and reoccupation.*

powerful Lordship of the Isles, which broadly existed from the mid-twelfth to the late fifteenth century AD. Between 1990 and 1998, excavations led by David Caldwell (Caldwell 2010a, b) allowed the team to conduct relatively dry excavations on some 80 sq. m of previously submerged lochbed (Caldwell 1997, 19). The loch contains three islets, two of which are artificial. Towards the southern end of the loch Eilean Mhuireill exists as an artificial sub-circular crannog measuring some 30 × 50 m at its base, with a usable living area of approximately 17.5 × 12.5 m (Holley 1995, 20). Local tradition indicates that Eilean Mhuireill served as a prison for the Lords of the Isles, visible through the remains of two sub-rectangular structures measuring approximately 3 × 7 m internally (Royal Commission on the Ancient and Historical Monuments of Scotland 1984, 154). Holley investigated the site as part of his PhD fieldwork in the Inner Hebrides (Holley 2000) and subsequently discovered the crannog was situated in water too deep for causeway construction, thus requiring a boat for access (Holley 2000, 210) further strengthening its attractiveness as a prison.

However, it is the second completely artificial islet, Eilean na Comhairle, located at the northern end of the loch, which provides one of the best examples of high-status medieval reuse of a prehistoric crannog in Scotland. Eilean na Comhairle, or ‘Council Island’ is a completely artificial Iron Age crannog some 30 m in diameter. Radiocarbon dating of structural timbers indicates an initial construction phase from the second century BC, with a second phase of revitalization taking place some seven to eight centuries later, on the cusp of the late Iron Age/Early Medieval transition in the fifth to sixth centuries AD (Caldwell 2010a, 49). Notably, the crannog later served as the principal residence for John, First Lord of the Isles (AD 1329–1380). This crannog is in turn associated with Eilean Mor some 50 m away, a substantially larger natural island which, in contrast to most natural islets near crannogs, holds the remains of some seven structures, including chapels. This reuse of Eilean na Comhairle in Loch Finlaggan during the Medieval Period indicates both symbolic and pragmatic motivations. As control over much of Atlantic Scotland was contested in the centuries

following the MacDonalds rise to power, crannogs would have served not only as pragmatic boltholes during periods of unrest, but as centres of political power and control by virtue of the reoccupation of ancient places in the landscape. In this regard, as the MacDonalds were the last in a long line of descendants from the obscure Somerled MacGillebrigte in the twelfth century, these seemingly obscure crannogs today in the Inner Hebrides actually served as a centralized location along the western Scottish seaboard from which to rule this maritime-based kingdom of Medieval Scotland.

While historical references to the islands extend as far back as the fourteenth century, by the late seventeenth century records indicate the dwellings were then in a ruinous state. (Celoria 1959). The ‘castle’ on Eilean Mor now survives as a substantial foundation underlying two later buildings, containing robust walling some 1.5 m in thickness (Caldwell 1993, 63). However, the choice of the smaller crannog Eilean na Comhairle as the site for the Lord’s centre, as opposed to the much larger adjacent natural island is telling here, as is the location and limited access. This desire to occupy a place seen as apart and therefore exclusive readily highlights the notion that a rather humble crannog in Loch Finlaggan was in effect, the administrative hub of a far-reaching maritime kingdom. While not all crannogs were ‘fit for a king’, it is apparent during the mid- to late Medieval Period in Scotland that a growing number of crannogs were occupied by persons of at least some status, such as landholders (Gaelic *Lairds*) or the growing class of ‘fear-taic’ or tacksmen. This societal stratum consisted of middle-ranking men who rented *taic* or a plot of land from the freeholder (i.e. Scottish *Lairds*) and subsequently sub-let it amongst their immediate kin or close clansmen. To this end, tacksmen appear to have been the primary occupants of many island dwellings, particularly in the Hebrides, during the Medieval and Post-Medieval periods (Raven 2005).

Ultimately, Loch Finlaggan stands as a notable exemplification of a Post-Norse return to prehistoric crannogs. The underlying importance stressed here is the association of crannogs with royalty and regional control on a scale previously unseen in Scotland through the archaeological record alone.

Buiston

Moving to the Scottish mainland, another example of reuse after extended abandonment is represented at Buiston, Ayrshire, which was initially excavated by the antiquarian Munro in the late nineteenth century (Munro 1882) and again in 1989–90 by Crone (Crone

2000). An important aspect of the later excavation was the application of dendrochronological dating, which has supplemented the radiocarbon results from the site. This data provide two discrete windows of activity: initial construction in the late first and early second centuries AD, followed by much later rejuvenation and reoccupation during the sixth to mid-seventh centuries AD with tree-ring dates falling between AD 520 and 668 (Crone 2000, 55, 160).

From a diagnostic standpoint, the later assemblage at Buiston included sherds of Continental E-ware, part of a crossbow mechanism (nut), eight knife blades and three spearheads amongst other metal objects. Notably, this artefactual evidence did not yield any material that would bridge the gap between construction and secondary reuse during the Early Historic Period, creating a gap of roughly three and a half centuries between these phases. If the occurrence of weapons such as spears, and the crossbow nut were intended for more than hunting, these artefacts suggest that crannog occupation by the early Medieval Period had perhaps taken on an increasingly defensive nature. Whether this perceived shift in use simply reflects a bias in the recovered material culture, in contrast to more benign, domestic assemblages from prehistoric occupation (i.e. quernstones, wooden vessels and lithics), it nevertheless suggests an expansion in the role of islet use beyond simple households or seasonal settlements.

Ederline and Loch Awe

Crannog reuse and reoccupation is again visible at Loch Awe in Perthshire, the first loch to be systematically inspected for crannogs by divers in 1972. This massive effort resulted in the documentation of 20 artificial islets (McArdle *et al.* 1973) which provides a clear indication of the intensity in artificial islet activity within several of the larger Highland lochs. One of the sites examined was Ederline crannog which exists as a seasonally submerged, sub-circular mound measuring some 37 m by 27 m and *c.* 2.5 m in height at the southern end of Loch Awe (McArdle *et al.* 1973; Cavers & Henderson 2005, 285). Initial radiocarbon samples produced an Early Iron Age date of 790–520 cal. BC (SUERC-20205) from an oak pile, yet rather than finding prehistoric artefacts, excavation in 2004 by Cavers & Henderson instead revealed sherds of E-ware from the sixth or early seventh centuries AD (Cavers 2006, 290). A reference in the Irish Annals indicates that *Etarlindu*, believed to be Ederline, was the site of a pitched battle between the Picts and the Scotti in AD 736 (Lane & Campbell 2000, 25) providing additional support for the reuse of prehistoric crannogs as contested places in the Early Historic Period.

Returning to (un)familiar places

While space prevents a detailed narrative of the sites briefly discussed above, the archaeological and historic records underscore a number of motives behind crannog reoccupation, ranging from the intentional reuse of a well-known structure to perhaps coincidental opportunistic reoccupation of an existing islet. The prominence of islet settlements is another aspect that lends itself to notions of control in the landscape – if not in the purely political sense – one of control over the surrounding arable land (Morrison 1985, 78). Occupied islets are visible from great distances in comparison to many ‘terrestrial’ sites. This suggests that the residents sought to reoccupy crannogs as an impressive and easily defended form of settlement, one which may have previously existed as a ruin and known in local memory for countless generations yet was renewed to its apparent former glory once again. Given the practicalities of living on crannogs, especially in rugged areas such as the Scottish Highlands or the Western Isles, many islets located within the larger Highland lochs would have also served as important nodal points in the landscape, because of their situation within water-based arteries of communication and travel.

One pragmatic aspect of crannog reuse is that reinvigoration or maintenance of the site, even after centuries of abandonment, would have required less effort in contrast to the laborious initial construction phase. Today, this is evident when one considers the number of crannogs which still survive above the loch level despite episodic periods of flooding or severe storms. The thick vegetation which commonly covers these sites helps to consolidate the core of the crannog mound, while waterlogged timber piles retain much of their original strength which further prevents the mass from slumping. Therefore, a site that has ‘only’ been abandoned for several centuries, could become inhabitable once again with a brief but intensive spate of repair. As driving new timber piles into stone mounds is impractical, if not impossible, this new occupation phase would often involve enlargement of the crannog mound itself, at which point timbers could then be readily inserted into the silty lochbed along new margins (*cf* Harding 2000, 305).

Specific motives for crannog reuse range from the opportunistic, short-term reoccupation of existing sites during periods of political insecurity, to more opaque considerations of ancestry, legacy, tradition and identity (Lenfert 2012, 39). The reuse of sites which already contain an associated legacy would provide a convincing display of authority not easily dismissed by others. As Cavers (Cavers 2006, 146) states: ‘occupation of ancient islet sites must have been a very deliberate

undertaking, designed to create a tangible connection to the past’. On a similar level, other scholars have argued that ‘that all prehistoric societies orientated their actions in the present with the past in mind’, making ‘a distinction between genealogical history, where the past is created through links to known ancestors, and mythical history, where a less well-known past is evoked’ (Gosden & Lock 1998, 2). Therefore, conceptual stimuli such as legitimacy via reoccupation, symbolism and status can be viewed as key drivers behind the longevity of the Scottish island dwelling tradition. By incorporating these non-tangible factors into narratives regarding crannogs, a more meaningful discussion of the tradition as a whole becomes more readily available. Conversely, more traditional, pragmatic explanations behind crannog use – primarily as defensive strongholds – can now be at least partially deconstructed in favour of deeper, underlying motives for reoccupation. As with many similar archaeological debates, there is no neat, singular explanation as to why Scottish crannogs were constructed and occupied (and subsequently reoccupied) over such a tremendous timespan. However, when the wider spectrum of motives discussed above are presented within a site-specific context, such as Dun an Sticer or Loch Finlaggan, the transposition of legacy through the occupation of ancient places becomes much more apparent.

In closing, despite a lengthy history of scholarly interest in Scottish island dwellings and crannogs, the reality is that crannog studies have been neither consistent in nature, nor well-developed in a regional sense, while still reliant upon many interpretations first cultivated in the nineteenth century. These issues may leave many modern archaeologists with a mottled view of this phenomenon. Lack of investigation is still a primary issue given the hundreds of sites which have largely gone unnoticed, while finding the funding and sustained commitment required to send trained archaeologists diving in Scottish lochs remains another formidable barrier, despite the proven abundance of high-quality finds that results from underwater archaeology here. Typical drivers of new archaeological discoveries such as commercial development play virtually no role in islet studies, unless located in a drained loch. Therefore, the impetus is upon research-driven archaeology to advance our current understanding of the Scottish crannog tradition. In this regard, the author is committed to building upon his research in the future to carry out more investigation, particularly in a Neolithic Hebridean context. With that said, the brief case-studies presented above will hopefully form one element from which to develop and expand new theoretical approaches to the remarkable longevity, reuse and memory contained which typify the Scottish island dwelling tradition.

Chapter 7

Remembering *Nuraghi*: memory and domestication of the past in nuragic Sardinia

Mauro Perra

A fierce debate has developed in Sardinia between orientalist, that is scholars of Phoenician and Punic archaeology, and protohistorians about the complex subject of the political and social structure in nuragic communities when they came into contact with the first Phoenician prospectors. This is because of both a constant lack of reliable archaeological sites excavated in the past and a blunt divergence between traditional dating, based on the presence of geometric Greek pottery, and the latest radiocarbon dates recorded at Carthage and in the Iberian peninsula (Nijboer 2002, 2004; Arruda 2003; Mederos Martin 2003). The debate has branched out into strictly connected themes such as the dating of the famous bronze figurines, of the stone statues of Mont'e Prama (Cabras) and of the stone and bronze *Nuraghe* models found in various Sardinian sites. The debate has recently seen echoes in the volume *I Nuragici, I Fenici e gli Altri: Sardegna e Mediterraneo tra Bronzo Finale e Prima Età del Ferro*, Sassari 2012, edited by Paolo Bernardini and Mauro Perra. In brief, while the orientalist are inclined towards more recent dates (not earlier than the ninth century BC), protohistorians consider the ninth century BC to be a *terminus ante quem*, therefore the date of the final phase of such production.

The archaeological data

While research in the key site at Mont'e Prama cannot yet be considered definitive, and despite the fact that most finds of *Nuraghe* models are, with a few exceptions, occasional and accidental, the recent acquisitions from excavations in nuragic sanctuaries allow us to date the first examples of bronze figurines, generally ascribed to the Early Iron Age, minimally to the initial and intermediate phases of the Final Bronze Age (Campus *et al.* 2010). The most recent phases of such artefacts do not come later than the eighth to sixth centuries BC,

particularly the bronze boats found in Italic and Etruscan sanctuaries, amongst which the sanctuary of Hera Lacinia in Crotona (Spadea 1994; Lilliu 2000a) and recently tomb 74 of the necropolis in Monte Vetrano (Salerno) (Cerchiai and Nava 2008–2009)

Between the Middle and Recent Bronze Age, settlements were characterized by a polycentric layout with nuragic towers at their centre, surrounded by large hierarchical territorial systems which extend to over 100/150 sq. km. Within these systems, one can distinguish both upper and lower order centres reflecting the hierarchy of society. As shown by the latest research, single-towered *Nuraghi* overlook unavoidable fords and mountain passes, but they also command, together with more complex *Nuraghi*, the road network which connects them. In short, all of them together control the territory and its resources. The ostensibly egalitarian communal burial in megalithic tombs apparently contrasted with such a strictly hierarchical socio-economic organization, leaving one with a suspicion that the power of the elites was anything but stable, and where it could actually be challenged by subordinate groups with a deeply egalitarian ideology (Perra 2009).

This pre-existing historical picture entered a crisis as early as the beginning of the twelfth century BC, at the onset of the Final Bronze Age, when 60 per cent of *Nuraghi* showed signs of dismantling, while the few remaining *Nuraghi* which escaped this fate underwent a phase of visible restoration (for example at Su Nuraxi di Barumini, Lilliu 1955). Already from about the eleventh century BC, no new *Nuraghi* were built. Whereas, in some cases, limited occupation can be observed during the Early Iron Age, in other cases the sites were still visited, but were turned into cult sites (Perra 2012). This is a period during which the ancestor cult in collective burials became weaker, while new structures employed for a strictly religious purpose, such as Well-Temples, Spring Fountains, 'megaron'

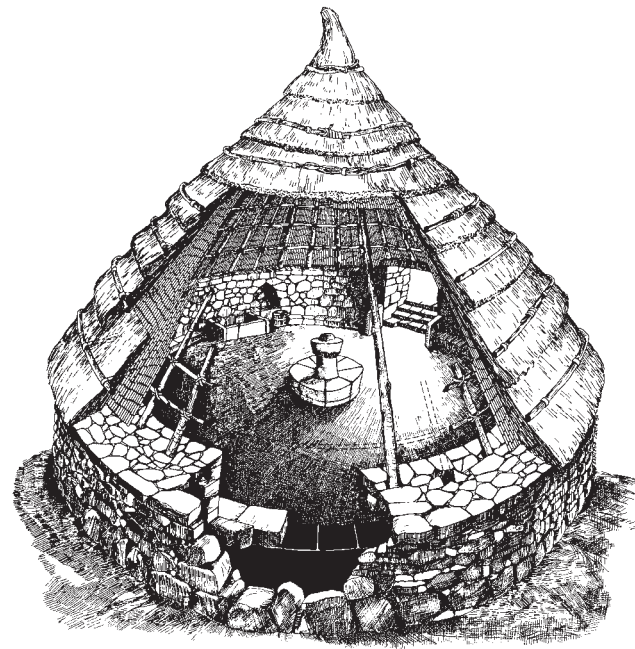


Figure 7.1. Alghero, Nuraghe Palmavera: the reconstruction of the reunion hut (after Moravetti 1992).

Temples and Round Temples were constructed and utilized at a higher rate. The surge of religious activity which can be detected in these structures stems from the nuragic elites' need to overcome a systemic crisis. The power system has become unstable under challenge from entropic forces, leading the elites to try to subject the community to a brand new cult that legitimized social inequality (Perra 1997a; 2009). During the most recent phase of this period, the first few individual tombs started to appear. This is also the moment in which specially distinct structures called *Capanne delle Riunioni* (Meeting Huts), round-shaped and equipped with benches, niches and also *Nuraghe* models, were used in the largest settlements such as those of Su Nuraxi di Barumini and of Palmavera in Alghero (Fig. 7.1) (Lilliu 1955, Moravetti 1992), but also near Well Temples like the one of S. Anastasia in Sardara (Ugas & Usai 1987).

Through an analysis of the recently examined sanctuary sites and *Capanne delle Riunioni*, it has become clear that during the rites a number liturgical artefacts were employed at the same time: *Nuraghe* models, votive swords, bronze or stone anthropomorphic and zoomorphic figurines (Campus 2012). In the light of this fact, we cannot separate nor study ritual instruments out of context, that is purely according to style or typology, otherwise we would risk misunderstanding their true meaning and, worse, be led into inevitable interpretative mistakes.

Models of Nuraghi

Nuraghi models have been studied by various authors, who have considered their typological and interpretative features (recently Blake 1997; Leonelli 2005, 2012a, 2012b; Perra 2017). The models have been generally analyzed as miniature reproductions of the typical Bronze Age monument of Sardinia. The reproductions of nuragic towers are in stone, bronze, pottery; they differ in size ranging from the large-scale models enclosed in altars, such as the ones at Su Mulinu in Villanovafranca (Ugas 1989–90) and at Su Monte in Sorradile (Fig. 7.2) (Santoni & Bacco 2005, 2008), to the bronze miniatures, such as the four-towered *Nuraghi* from Camposanto at Olmedo (Lilliu 1966) and Serra Niedda in Sorso (Rovina *et al.* 2002) or the stylized reproductions on buttons and bronze boats (Lo Schiavo 2012a & b). The four-towered bronze model of Serra Niedda is matched with anthropomorphic and zoomorphic bronze figurines. In the well-temple of Santa Vittoria in Serri, numerous fragments of stone *Nuraghe* models with crenellated friezes, stone bull heads, votive swords and bronze figurines are also found together (Taramelli 1909, 1914, 1921, 1922,

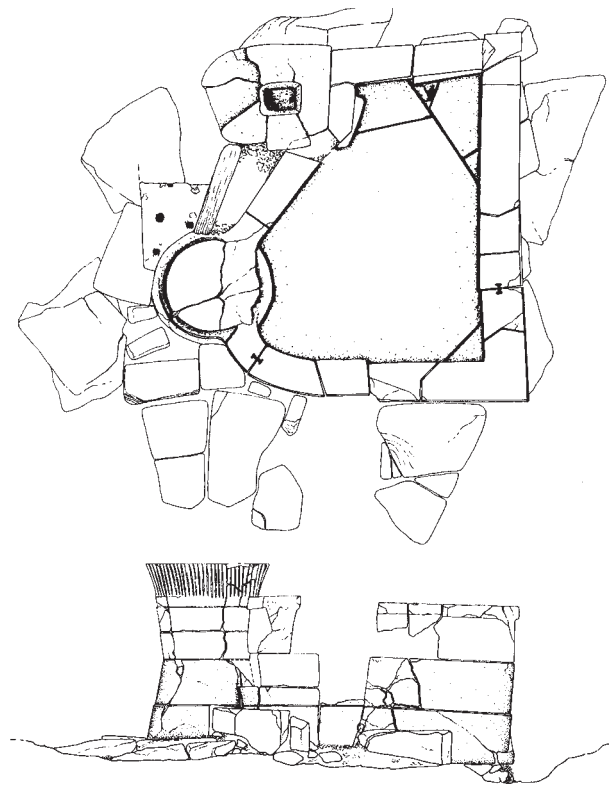


Figure 7.2. Sorradile, Su Monte, the reconstruction of the altar and the Nuraghe model, view from top and side (after Santoni & Bacco 2008).

1931). In room 'e' of the complex site of Su Mulinu, the altar with a single-towered model surmounted by a crescent is surrounded by bronze votive swords with 8-shaped and flabellum-shaped hilts. Here, in around the eleventh to tenth centuries BC, cathartic rituals and offerings of first fruit, scented oils and suckling pigs were performed.

According to Emma Blake, we ought to make a distinction between the representations of complex *Nuraghi* and of single-towered ones, with the first signifying 'a particular mythical *nuraghe* [...], the house of a god or hero [...] or perhaps [...] the standardisation of an ideal of success, a productive social unit', and the others representing '[...] a conservative image, a reification of the past and, by extension, a sign of discontent with the present situation [...]' (Blake 1997, 161). From my own point of view, it would be more useful to make a distinction between the large scale models enclosed in wide altars like the ones in Su Mulinu and Sorradile, which were themselves instrumental to the ritual, and the bronze miniatures to be interpreted instead as offerings. Moreover, the single-towered models are characterized by noticeable battlements, whereas excavations around single-towered *Nuraghi* have in no instance yielded any collapsed shaped ashlar that could be linked with such architectural features. It appears all too evident that single-towered miniatures are meant to represent a part of a whole (the central tower of a complex *Nuraghe*), thus they would have the same semantic value in the nuragic people's imagery.

Other votives

As Fulvia Lo Schiavo (2005) states regarding votive swords (Fig. 7.3): 'it is now beyond doubt that they are votive objects. The metallurgical analyses have now been joined to the archaeological assessments, showing how, rather than being of bronze, they are of an alloy of copper with a very small quantity of tin, totally unsuitable, on account of its flexibility and fragility, for use as a weapon, having been anyway rendered almost useless by the two sides not being perfectly symmetrical.' In those religious sites in which they were found in their original placement, they stand either in the higher parts of the shrine, or on top of partition walls in circular buildings. In all these instances the base of the swords are embedded in castings of lead at the base and with their tips always pointing upwards (recently Campus 2012). This is obviously a clear manifestation of weapon worship. As a matter of fact, there are very few swords among those found in nuragic contexts that can be considered as true weapons; moreover, during the archaic phases of the nuragic civilization, traces of war and warriors are not detectable within

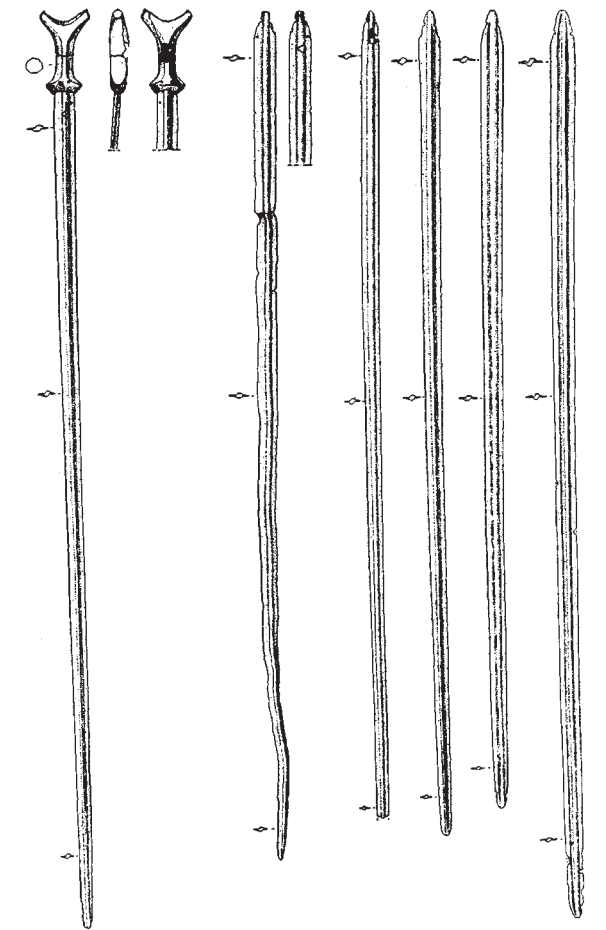


Figure 7.3. Villasor, hoard of Su Scusorgiu: votive swords (after Lo Schiavo *et al.* 2005).

Nuraghi from an archaeological point of view, and even less so in collective graves. The practice is an evident manipulation and falsification of the past in order to transform it to present-day advantage (Assmann 1997).

The votive context

As for the association of *Nuraghe* models with anthropomorphic statuettes, one can observe the exceptional narrative power of the three-towered *Nuraghe* reproductions from Cann'e Vadosu, near Cabras and from Paulilongu in San Sperate, in which the human figure in relief stands out against a complex *Nuraghe*. The model recently found at Serra Is Araus near San Vero Milis (Usai 2012a), showing a calf beside a human figure in relief, must be added to those two miniatures. (Fig. 7.4). Despite the fact that they were all chance finds lacking context, they still tell the same stories observed throughout all ritual centres of nuragic Sardinia and especially at Mont'e Prama.



Figure 7.4. *San Vero Milis, Serra Is Araus: Nuraghe model (after Usai 2012a).*

Sword-carrying warriors, in many cases carrying a votive sword, stand out among the collection of anthropomorphic bronze figurines. There are also numerous archers, whereas figurines of boxers ought basically to be considered irrelevant, despite the numerous specimens found at Mont'e Prama (Perra *et al.* forthcoming). Votive swords are in any case quite frequently represented in bronze figurines and it is worth mentioning that fragments of these were already found in the most ancient bronze-hoards of Sardinia dating from non-final phases of the Recent Bronze Age. The considerable amount of armed bronze figurines is not only evidence of a defined social group portraying their role as warriors; it is also indicative of the meaning underlying the exhibition of swords and the representation of the *Nuraghe*, which was probably strictly interpreted as a defensive structure.

Moreover, in nuragic sanctuaries one can observe a considerable amount of zoomorphic figures represented both in large scale stone statues (for example at Santa Vittoria in Serri) and in bronze miniatures. They are for the greater part images of cattle and rams, but there is also an abundance of deer, wild boars, foxes,

etc. There is an evident need to represent the wealth of the community ranging from cereal production to cattle, sheep and goat livestock. The presence of such imagery as the deer and the boar, but also the mouflon, should not surprise us given the great importance of hunting in nuragic cuisine (Perra 2018a). As for the zoomorphic figurines, their possible role as substitutes for real animal offerings in religious rituals has already been mentioned (Lo Schiavo and Manconi 2001).

Once the inseparable archaeological and semantic link among the different liturgical objects of nuragic rituals has been determined, the interpretation of the large and famous necropolis of Mont'e Prama near Cabras is probably less laborious (Tronchetti 2005, 2008; Bedini *et al.* 2012; Minoja and Usai 2014). This nuragic funerary sanctuary has been, and still is, an object of hot debate among scholars. In the 1970s, 33 pit graves were excavated, each one containing an individual burial, 27 of which belonged to male individuals and 6 to females, all strictly related to each other (Tronchetti *et al.* 1991). Only tomb 25 contained the remains of grave goods: various necklace beads and a scaraboid seal, possibly crafted in the East, dating, on typological grounds,

from the twelfth to tenth centuries BC (Stiglitz 2012b). The wells were covered with a layer of rubble which yielded a large amount of Final Bronze Age (eleventh to tenth centuries BC) nuragic ceramics (under study by G. Bacco), Phoenician and Punic pottery dating to the fifth to fourth centuries BC and 5,200 fragments of 28 life-size nuragic statues featuring 16 boxers, 6 archers and 6 sword-carrying warriors (Fig. 7.5), at least 16 stone models of *Nuraghi*, 8 of which are multi-towered, and several baetyls like the ones of Oragiana in Cuglieri. According to Carlo Tronchetti, the archaeologist who led the excavations of the necropolis, and to other scholars, there is a strong connection between the graves and the statues, which they dated to the eighth century BC, that is to an important transitional phase in the island's history. This is the period in which close contact between nuragic locals and Phoenician prospectors was established, at least in the regions of Sulcis, Sinis and Nurra (Alghero). In accordance with this interpretation the tombs, the statues and the models are a clear sign of hybrid practices or hybridization, according to some scholars (Tronchetti & Van Domelen 2005) or evidence of cross-breeding from other perspectives (Stiglitz 2010; Bernardini 2011a, 2012a, b). New research of the necropolis has been extended to the external part of the line of tombs, leading to the discovery of other structures which seem to be related to a sanctuary (Usai & Vidili 2016). The most recent radiocarbon dating reveals that the burial area was used from the Final Bronze Age (twelfth century BC) until the Early Iron Age (first half of the eighth century BC). It is therefore evident that, if we do wish to consider the statues of Mont'e Prama contemporary to the tombs, their dating ought to be placed within this entire time period.

Moreover, the whole apparatus of the sanctuary, pit graves, *Nuraghi* models and statues, clearly reproducing the iconography of the anthropomorphic bronze figurines, can be fully ascribed to the nuragic tradition which, with the baetyls, can even be dated as early as the Recent Bronze Age. Indeed the baetyls from Mont'e Prama belong to the same typology as those found in several nuragic megalithic tombs of Sardinia dating from the Middle Bronze Age. A fragment from a statue's finger was found in pit grave 28 (Tronchetti 2012a, 227), which clearly indicates that the statues were already in pieces at the moment when the grave was built and that the destruction of the statues should be linked to the internal social and political dynamics of the nuragic community in Sinis and not to contact with the *Phoinikes* from Tharros.

Thus, Mont'e Prama can be placed as a typical nuragic sanctuary dating back at least to the Final Bronze Age, or even to the Recent Bronze Age, as

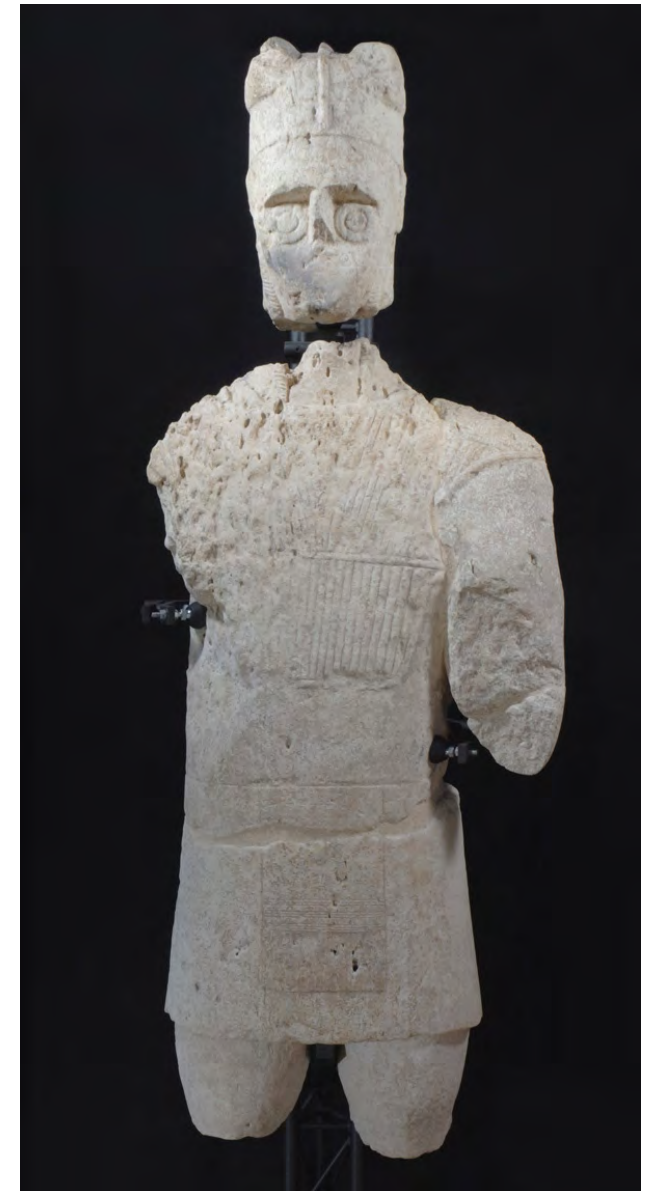


Figure 7.5. *Cabras, Mont'e Prama: warrior (after Bedini et al. 2012).*

shown by other Sardinian ritual sites, and lasting at least as late as the eighth century with various reuse episodes. The graves themselves are not dissimilar at all from other nuragic pit graves found in other places of the island, such as the sanctuary of Antas in Fluminimaggiore. So, should models and statues be considered as 'entangled' objects? Are they properly a sign of 'hybridization'? This could be the case, if we mean that all craft objects are entangled or that all cultural manifestations, especially the ones of the Bronze Age Mediterranean, are hybrid practices, but the precise connection with the Phoenicians cannot be

demonstrated. The cause is a memory geographically close at hand, not from an exotically induced knowledge from a distance.

Conclusion

Nuraghi models, bronze figurines, votive swords and shrines are inextricably entangled in meanings that are historically linked with a terminal, though not declining, phase of the nuragic civilization and that do not reveal anything unique nor anomalous if studied in a context seen as unitary. These meanings should be related to a historical phase which, starting from the final Recent Bronze Age marks a crisis amongst the *Nuraghe* as a political and social model, a crisis to which nuragic hegemonic groups respond by intensifying religious rituals in native sanctuaries, appealing to a deep monumental history. These sanctuaries, especially those located in the inner regions, retained

their political independence and economic welfare at least until the Orientalizing phase. Far from being an expression of aristocratic individuals, whose existence is elsewhere archaeologically well demonstrated by their tombs and monumental residences (at Murlo in Tuscany for example), such sanctuaries were the product of hierarchically dominant groups in a resolute search for a legitimation of their unequal social position in comparison with other subordinate groups and chose to emphasize their power by drawing on deeper memories (Perra 2009). The symbolic language employed for this aim is the one of a mythical age when the *Nuraghi* builders and the hero-warriors guaranteed peace and economic prosperity for a long time in a not too distant past, allowing the whole community to grow and evolve along the centuries before colonial contact with Phoenician people who brought great, but different, innovations to Sardinia, that is urban civilization, state organization and writing.

Chapter 8

Revisiting Glenelg a century after Alexander O Curle: reconstructing brochs in treeless landscapes

Tanja Romankiewicz & Ian Ralston
In memoriam Euan W. MacKie

The Glenelg area in the northwestern Highlands of Scotland is an archaeologically rich landscape, including at least five brochs and related structures. In one of its glens, Glen Beag, a series of three brochs sits along the river valley. The two best-known ones, Dun Telve and Dun Troddan, are in sight of each other, with Dun Grugaig further east towards the head of the glen (Fig. 8.1). The description and interpretation of these three monuments and their particular setting deserve a full consideration; however, this chapter concentrates on a much more specific problem concerning Dun Troddan.

Dun Troddan has been of central significance for interpreting the use and layout of brochs and for informing reconstructions of these monuments. It owes its importance not simply to its good preservation, but to the excavation of the site in the 1920s; and the interpretations of these excavations have since shaped our understanding of brochs. Alexander O Curle's discovery of the first post-ring within a broch interior – more than 90 years before the fieldwork reported here was undertaken – has now become part of our collective memory of this category of sites. While Curle's conclusions follow logically from his evidence, field visits by the present authors in 2010 and 2012 questioned the reliability of what Curle reported regarding the primary characteristics of this broch (Romankiewicz & Ralston 2013).

Our research highlights the importance of the physical record which survives at this site as evidence of its own building history and the subsequent changes to it. It also underlines how carefully and sympathetically any subsequent alterations or similar works at such a monument should be planned, given their potential impact on the preservation and presentation of the monument. By extension such modifications impact on our collective understanding and memory of the site.

Curle's excavations

In 1919, Alexander O Curle was the Director at the National Museum of Antiquities in Edinburgh. Workmen of the Ministry of Works were undertaking consolidation works, also intended to improve public access, at the Glenelg brochs, first at Dun Telve in 1914 and, until 1920, at Dun Troddan (National Archives of Scotland NAS MW1/573 and MW1/1136). By October 1914, Curle, in his capacity as the keeper of the national archaeological collection, had been told about the finds made at Dun Telve and claimed most of the artefacts for that collection (correspondence in NAS SC 22918/2A in MW1/573). He must have also been informed about the subsequent phase of works at Dun Troddan, but exactly why Curle visited the works there in their final stages remains unclear from the readily accessible documentation. In his 1921 publication, Curle records that he only visited the site when the scheme of works neared completion in the late summer of 1920 (Curle 1921, 84, 87).

On arrival at Dun Troddan, Curle was puzzled with the findings made by the workmen. Contemporary photographs, held in the National Collection (HES A 47978 to A 47981) and presumably taken by Curle himself, show that the workforce had fully excavated the entrance passage into the broch, and from there had seemingly chased the wall footings along the inner wall face, as was typical practice at the time (e.g. by Tress Barry in Caithness, Anderson 1901). The trench following the curvature of the inner wall was perhaps intended to test the character and stability of the lowest wall courses. This wall trench had already been backfilled with clean gravel prior to Curle's arrival. The gravel band edging the inner wall faces can be clearly seen in the historic photographs and still survived in 2012, when the fieldwork reported here was undertaken.

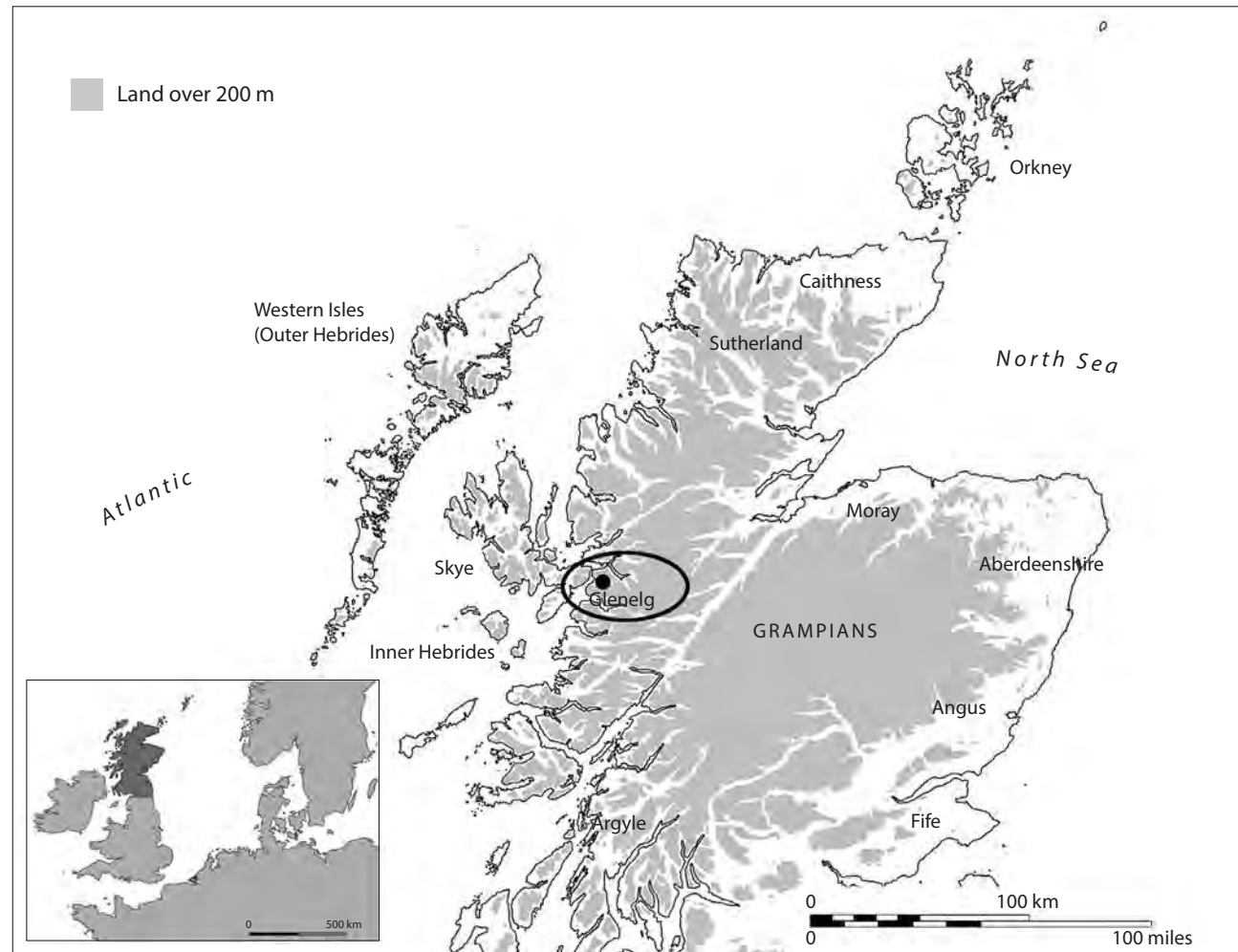


Figure 8.1. Map of Scotland showing location of Glenelg (drawing by Tanja Romankiewicz).

The central area of the broch interior, however, had been left untouched and an area 'measuring some 9 feet by 7 feet' (Curle 1921, 88) stood proud. Curle noted that this 'accumulated mass' survived 'about 4 feet deep' (1921, 87) and he offered further details:

Immediately to the north of this, and between it and the entrance to the stair, there had been laid bare on the very bottom, on the gravel subsoil, a well-formed rectangular oblong hearth measuring 4 feet 6 inches by 3 feet, paved and neatly surrounded by kerb-stones (Curle 1921, 88).

Curle's impromptu investigations of the workmen's discoveries revealed two further and stratigraphically later hearths in this area, and a series of overlying deposits and rubble. The stratigraphic sequence outlined in 1921 suggests successive phases of occupation

and collapse in this central area (see Fig. 8.2: schematically drawn section on the basis of Curle's description in 1921, 88–90). Below these deposits, Curle uncovered the first of a series of pits, lined with stone slabs:

In order to settle a question regarding the original levels at the inner end of the entrance passage, I had the inch or two of discoloured soil removed which was covering the top of the gravel subsoil within the court. In the course of this operation I observed, as the gravel surface was cleared, [...] a small pit with a diameter of about 2 feet, lined with four slabs and filled with wet discoloured silt. [...] on the bottom, 1 foot 9 inches below the surface, lay other two slabs, one on the top of the other. These lay on a clean gravel bed 2 feet 1 inch below the surface (Curle 1921, 90).

Although puzzled by this at first, Curle then described an eureka moment 'after a night's reflection' (Curle 1921, 90; cf. Ralston 2003, 12):

I returned to the broch, found the centre, took a radius from there to the pit, and drew out a circle [...]. On this line, [...] we located ten others [pits]. [...] in one hole, No. 6, which had been sealed on the surface by a large stone, the remains of decayed wood, recognisable [sic] by its fibrous character, were still visible. (Curle 1921, 90).

Curle had found a ring of post holes within the broch, at a time when such earthfast, negative features, although long known from Roman sites, were not yet the recurrent feature of Iron Age field archaeology they were subsequently to become. This post-ring was roughly concentric with the inner wall face of the broch, but the individual posts were not truly aligned along the circumference of a circle and were not very regularly spaced. However, Curle was clear in his description that the post-ring had been cut into natural subsoil and sat within the lowest occupation level within the broch. For him, the post-ring was thus part of the original configuration of the broch. In his further interpretation of the evidence, Curle did not go so far as to reconstruct Dun Troddan as a fully roofed structure, but suggested a lean-to timber arrangement supported against the inner wall face, with a possible upper walkway surrounding a central open courtyard (Romankiewicz 2011a, 124–5, illus. 164, drawing by Elizabeth Mulqueeny).

Curle's excavation report (1921) and his seminal paper in *Antiquity* (1927) inspired a new generation of scholars. When, for example, Gordon Childe and Wallace Thorneycroft (1938) identified two posts and charred timbers at Rahoy, a small vitrified broch-like structure in Morvern on Scotland's west coast, Childe (1946, 88–9) subsequently interpreted this also as a possible post-ring, or the rafters from a conical roof. It is from such ideas that our shared reconstructions of brochs have developed – as very much elaborated multi-storey versions of timber roundhouses, the typical domestic structures of British prehistory, in the case of the brochs set within a thick drystone wall (Romankiewicz 2011a, 125, illus. 166, drawing by Alan Braby).

The translation of the post-ring typical of timber roundhouses into broch architecture implies the provision of the necessary quantities of structural timber. The wider consequences of reconstructions of brochs founded on Curle's insight become apparent through the results from environmental analyses: by the Iron Age, many of the landscapes of Scotland

were essentially treeless, in particular in those parts along the Atlantic coastline where brochs were built in abundance (Tipping 1994, 24–5). Scholars have since struggled to explain from where the broch builders would have obtained the substantial timbers required for such reconstructions (summary in Romankiewicz 2011a, 142–3; cf. Fojut 2005). In fact, the use of large quantities of timber in landscapes largely denuded of trees has been presented as one aspect of what is extraordinary about broch architecture: the apparently conspicuous consumption of a scarce resource (Armit & Ralston 2002, 49): the erection of a broch, seen as a symbol of status, required not only large quantities of suitable stone and skilled labour to construct the outer wall, but also substantial timbers for the structural woodwork, including the post-ring, the upper floor (or floors) and the roof.

The archaeological evidence for post holes within brochs reconsidered

It is worth revisiting Curle's discoveries and interpretation of the Glenelg evidence because we consider that these laid the bases for such hypotheses as detailed above. Dun Troddan thus retains both a general archaeological significance, and a specific significance for the history and memory of our discipline.

The evidence from the site, although now grassed over, appears to be still preserved more or less in the same condition as when Curle left in 1920. The excavation photographs and his account of the works can be easily compared with the general condition of the site when the fieldwork reported here was undertaken in 2012 (Romankiewicz & Ralston 2013). These works, comprising a field visit in 2010, and a site survey by the authors in 2012, revealed small-scale differences in the topography across the site that complicate any reading of Curle's interpretation. There was, notably, a significant difference between the ground level within the entrance passage in 2012, the lowest point of the broch, and the apparent altitude of the post holes Curle encountered and which were set within the higher ground still present within the monument. This difference is emphasized by the modern retaining planking at the inner margin of the entrance, present at the time of our survey. As a result, we can question whether the investigations Curle recorded had reached primary levels over the broch interior. Re-reading Curle's 1921 account confirms that he realized this discrepancy between these heights, but no further explanation was offered. Curle described 'some special circumstances [that] controlled the arrangements of the posts in the neighbourhood of the entrance' (Curle 1921, 91), which appears to correspond to an arrangement leading from

the entrance into a lower vestibule (cf. MacKie 2007b, 857, 860) and into a corridor that opens into the central area. It might be postulated that this height difference was negotiated by a short flight of steps up from the entrance passage. Although Curle describes this as a possible arrangement satisfactorily to account for the height differences at the inner end of the entrance passage, investigations at other sites have shown such stairs to be a highly unusual feature in original broch architecture.

A reconsideration of the stratification of the mass of soil in the interior of the broch, as described by Curle (Fig. 8.2), in relation to the lower altitude of the entrance passage leads to the conclusion that he encountered the internal post holes at a level stratigraphically higher than that of the original floor in the entrance. Survey in 2012 demonstrated this difference to be about 0.85 m, as measured between the still exposed hearth stone in the centre of the broch visible on Curle's photographs, and the level of the inner end of the entrance passage as then visible – assumed to have been excavated to the original ground level (Romankiewicz & Ralston 2013). The 2012 profile recorded across these features, when superimposed onto Curle's section (Fig. 8.3), illustrates the order of magnitude of the difference

in height between Curle's internal post-ring and the level of the entrance passage. Although Curle claimed that the lowest hearth to which the post holes were related was built at the level of the natural gravel subsoil, it seems more likely that the hearth and post holes visible in 1920, and shown on the contemporary photographs, were in fact set into substantial deposits that must already have accumulated above the original floor during use of the site. The conclusion from our new observations is that the post holes identified by Curle could not have been a primary feature of the broch; however, only an invasive investigation could now clarify this.

A comparison between photographs taken in 1920 and 2012 highlights the problem of the height difference between the level of the entrance passage (where the workman was standing in 1920) and the position of the central hearth described as lying 'on the gravel subsoil' (Curle 1921, 88; Fig. 8.4). Whilst the monument was constructed on a natural hill-slope, this seems far from sufficient to explain the difference in height that is apparent. This 1920 photograph was not published in Curle's 1921 account; had it been, others may already have questioned Curle's interpretation. The tops of the post holes as they survived are visible

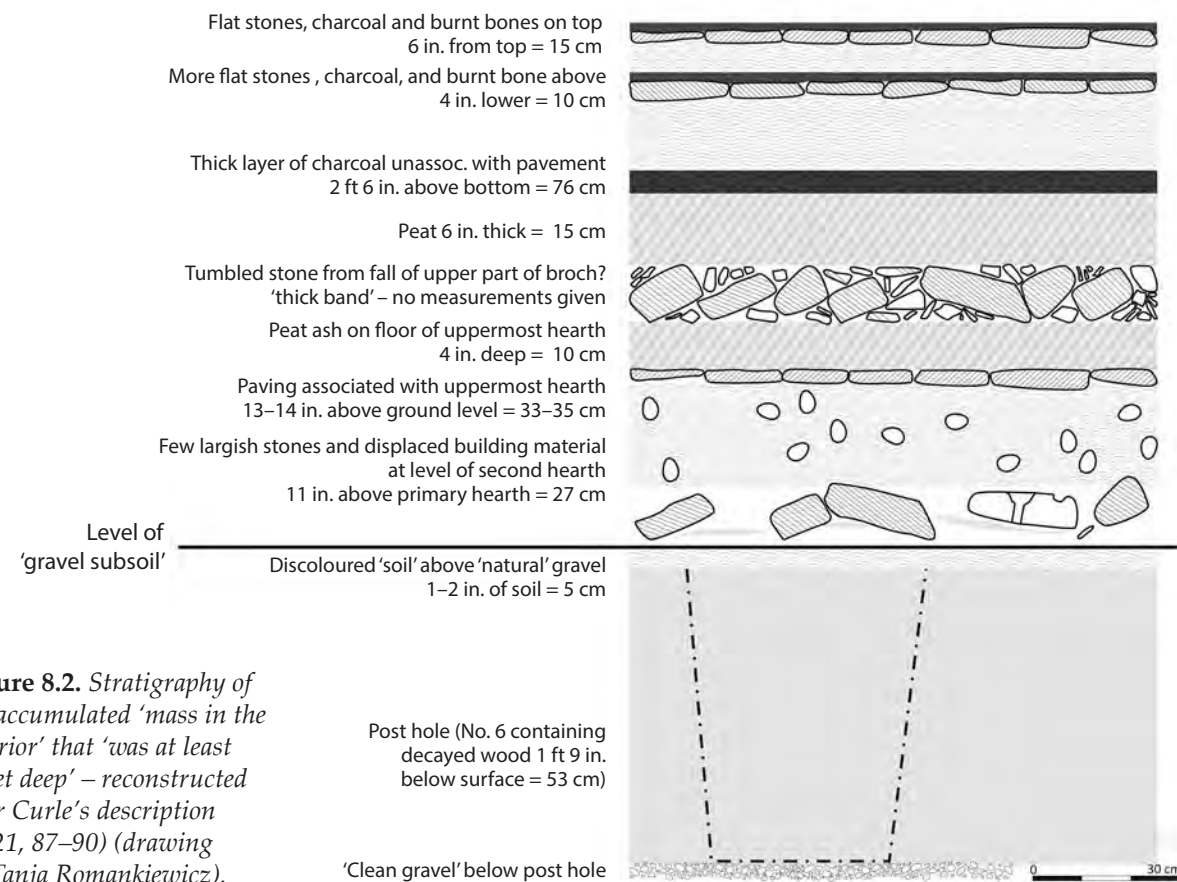


Figure 8.2. Stratigraphy of the accumulated 'mass in the interior' that 'was at least 4 feet deep' – reconstructed after Curle's description (1921, 87–90) (drawing by Tanja Romankiewicz).

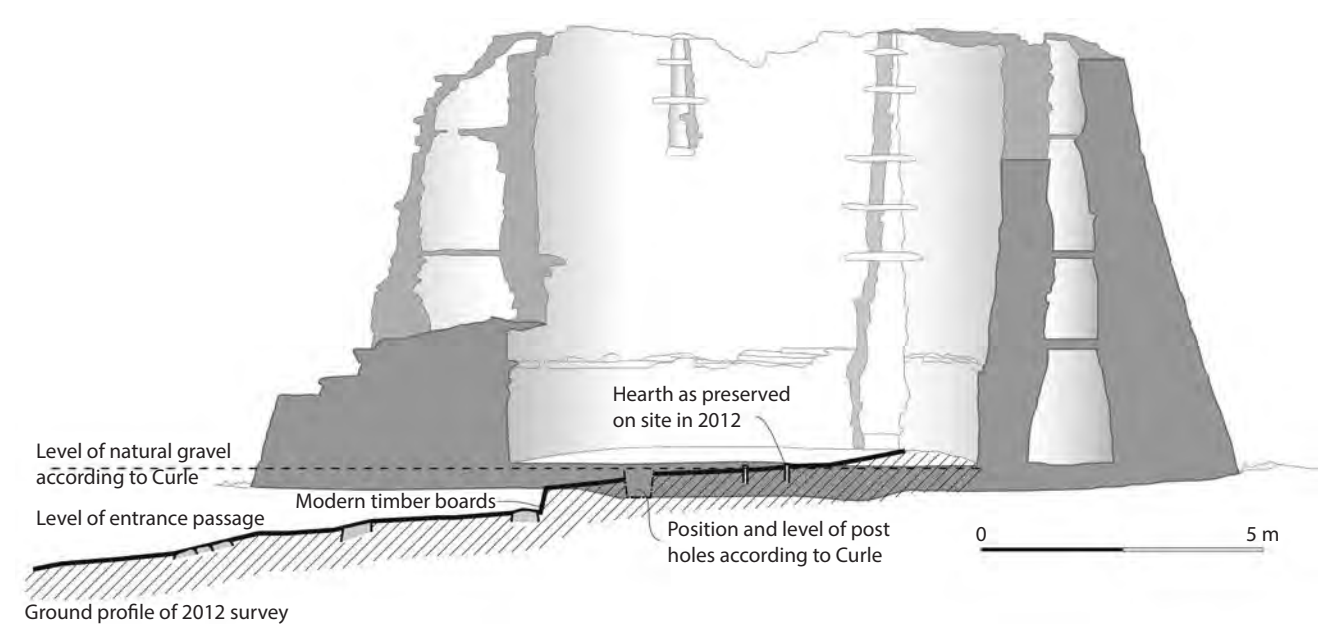


Figure 8.3. Profile of the interior of Dun Troddan, field survey by Romankiewicz & Ralston September 2012 (drawing by Tanja Romankiewicz).

in Curle's pictures. The likelihood is that they were cut down from an unknown point above. Given that the recorded depth of the post holes was 0.5–0.6 m, and given the difference in altitude between them and entrance passage, it is clear that the bases of these stone-lined post holes regarded by Curle as a primary feature of the broch and lying 'on a clean gravel bed 2 feet 1 inch below the surface' (Curle, 1921, 90), are floating approximately 0.3 m above the level of the entrance passage, as projected into the broch interior. A post-ring for a substantial timber construction – even if only for a lean-to structure as Curle suggested – cut into gravel fills and adjacent to a sunken vestibule towards the entrance, appears to the writers to be an unsound structural arrangement to have acted as a foundation for substantial timber fittings. Interpreting these post holes as primary features supporting one or more upper floors and the roof is thus problematic in structural terms; and we are of the opinion that it is highly unlikely that these post holes were part of the original broch construction.

If this key example of a primary post-ring within a broch is now in doubt, what of other sites of the class? In fact, evidence for other post-rings within brochs is rare, in part because excavation may rarely have attained the primary floor level within such sites. In an analysis of 148 brochs that retain appropriate details of architectural complexity, only four sites could be put forward as preserving evidence for a concentric post-ring contemporary with their primary occupation:

these are Tor A' Chorcain at Langwell and Rhiroy, both in Sutherland, Leckie in Stirlingshire and Scalloway on Shetland (Romankiewicz 2011a, 125). Two of these, Tor A' Chorcain and Rhiroy, would not even be included as brochs if strict criteria for this monument category are applied (cf. MacKie 2007b, 617, 766). The evidence for vertical posts at Scalloway was interpreted by the excavator as internal partitioning, being considered too insubstantial to have supported a roof (Sharples 1998, 39), but they may have been sufficient to hold up some form of an upper floor. Evidence for post holes within brochs and cognate structures elsewhere is more ambivalent. At Hurlly Hawkin in Angus for example, the post holes did not form a circle concentric with the inner face of the enclosing wall; others were placed immediately along this inner face and were interpreted as indications of a series of huts built against the inner wall. Their integrity with the original use of the broch itself is unclear (Taylor 1983, 220). Other possible examples of post-rings include Ousdale and Carn Liath, both in the northern Highlands, Buchlyvie (Stirlingshire) phase 2, as well as Clickhimin on Shetland, although the post-rings in the latter three in particular seem to have been associated with either earlier – and thus pre-broch – or later secondary occupations (Romankiewicz 2011a, 125). Of the 148 investigated brochs considered by Romankiewicz (2011a & b), a total of 68 have seen some form of intrusive investigation, but of course not all were excavated down to primary levels (Romankiewicz 2011b). Many of these were also examined before



Figure 8.4. Curle's photograph from late summer 1920 (left) compared to the situation as extant in September 2012 (right). Image on left: Crown Copyright. HES. HES images are excluded from the terms of the CC-BY-NC-ND copyright licence. Image on right: photograph Tanja Romankiewicz.

Curle's identification of the Troddan post-ring, and thus their investigators would have been unaware of the possible presence of an internal post-ring (e.g. at Ousdale, Caithness; MacKay 1892, 354). We therefore emphatically do not discount that further evidence for primary post-rings may come to light in new or ongoing investigations of brochs, but note that for the time being confirmed examples in Atlantic Scotland remain remarkably infrequent.

If then we assume, as present evidence suggests, that very few brochs included a primary timber post-ring, we would need to put forward other carpentry techniques to reconstruct the relatively complex roof and floor constructions often envisaged within brochs, for example by utilizing ties, collars or ring beams (for examples see Fojut 2005, 193–5; Romankiewicz 2011b). The feasibility of roofing certain of the greater spans encountered in these sites with such traditional roof constructions is questionable; and these would also consume a large quantity of substantial timbers.

Timber sources in deforested landscapes – the environmental record

If Scotland's north and west are envisaged as being substantially devoid of trees by the Iron Age – as reconstructed by environmental data discussed in more detail below – only three options as to where the timber could have been obtained for broch construction are realistic (cf. Fojut 2005, Romankiewicz 2011a, 142–3). Although the presence of driftwood has been recognized both archaeologically and in environmental

research (Church 2000, 125; 2002, 68), its structural stability as a constructional material has not been scientifically tested (although its use in buildings is known elsewhere); meantime at least archaeological evidence for its use as structural timber in the corpus of brochs is rare (Romankiewicz 2011a, 142 for overview). Models based on the accumulation of driftwood as a building material also raise questions as to the control of shoreline access, and the nature of storage arrangements until sufficient quantities of driftwood had been gathered to allow a broch building exercise to start (Romankiewicz 2016, 17–24)

Environmental evidence datable to the last quarter millennium BC indeed indicates a substantial reduction in woodland cover in the Southern Uplands of Scotland, notably around the Bowmont Valley (Tipping 2010, 182–3). A similar 'abrupt and near complete woodland destruction' of late Iron Age but pre-Romano-British date, has now been demonstrated for many sites in northern England and southern and central Scotland (Tipping 2010, 183). Tipping associated these clearances with the expansion of farmland in response to changes in demand for agricultural products; he also demonstrated that clearances for local building projects could not have had such a devastating impact (2010, 184, 186–7). As the trees were felled not burnt down, this might indicate the retention of timber as surplus, possibly to facilitate its exchange beyond the immediate locality; this, however, with the caveat that available technologies for transporting timber overland would have been very limited. A hypothesis advancing the possibility of timber imports

from beyond Scotland seems very difficult to sustain, as there is no other evidence for exchange of aspects of material culture with for example Norway at that time (Crone 1998, 162, *contra* Fojut 2005, 198–9).

Results from pollen analyses have demonstrated that it was possible to manage hardwood trees, for example oak, in sheltered pockets, even in the harsh and unforgiving climate of northern Scotland from about the third century AD (Tipping *et al.* 2006, 38–9). Research into Holocene palaeoclimatic conditions based on records of peatland surface wetness might help to clarify the environmental circumstances for Iron Age Scotland. For example, water tables as reconstructed from proxy records (testate amoebae) have been analyzed in a multi-proxy approach of 'stacking' and scientifically 'tuning' detrended records 'to identify clear correlative events' (Charman *et al.* 2006, 336). Based on the recognition of such events and their fixing by independent age markers, such records can be compiled and reconciled to allow finer chronological precision (Charman *et al.* 2006, 336–7, 339). By compiling proxy records from 12 different profiles in this way, large-scale, non-localized long-term climate signals can be identified 'while minimising [sic] uncertainties associated with individual records and imprecision in the chronologies' (Charman *et al.* 2006, 343, 345). Results of this work indicate that for northern Britain 'the most consistent and significant wet shifts begin at ca [...] amongst others] 2760 [...] cal yr BP' (Charman *et al.* 2006, 345), very broadly at around the time when the earliest architecture cognate with brochs started to appear (Romankiewicz 2011a, 19). The results from fine-tuning the relevant palaeoenvironmental records within regions also 'support the hypothesis that hydrological variability in northwest Europe is driven by solar variability manifested as changes in the location and strength of westerly storm tracks' (Charman *et al.* 2006, 348). This can be read to imply a general and widespread trend towards the emergence of wetter and colder summers starting at around 750 BC.

From such palaeoclimatic research, a striking picture emerges of an environmental decline that would have broadly coincided with the emergence of massive-walled stone roundhouses such as Bu, Pierowall and St Boniface, all on Orkney, and generally identified as the early developmental stages of monumental broch architecture (overview in Romankiewicz 2009). This climatic decline must have resulted in trees growing under increasing environmental stresses, and in other factors hindering the re-establishment of woods after felling episodes. Such broad-scale phenomena would have been tempered by physical properties such as local topography, aspect and drainage, and indeed issues of ownership, unknown

in Iron Age circumstances, of surviving woodland. To argue, however, for the local development of an architectural style that is apparently characterized by the deliberate consumption of quantities of substantial timbers at a time of environmental stress seems at first sight difficult to sustain. Even if the earlier massive-walled roundhouses required fewer major timbers than the fully developed brochs, such as Old Scatness in Shetland, which dates to around the fourth century BC (Dockrill *et al.* 2006), it seems counter-intuitive to argue that a more complex architecture requiring substantial posts, rafters and other pieces of structural timber would have flourished at a time when these key woodland resources were becoming more and more difficult to sustain locally. The regional composite records for northern Scotland indicate that this period of high water tables lasted well into the third century BC, with an onset of drier summers seemingly not occurring before 250 BC (Charman *et al.* 2006, Fig. 4). Given that trees would take a further generation to grow to a usable size, it seems unlikely that substantial new-growth timbers could have been obtained in quantity and locally for any major set of broch building projects before approximately 200 BC. One related aspect in this context is also the sheer number of brochs present in Scotland, currently estimated at over 500 (Strat Halliday pers. comm.). While we may expect poor conditions for tree growth to have existed in the exposed northern and western fringes of Atlantic Scotland for much of the period when these structures were being erected, this environmental research also indicates comparably wet conditions for central Scotland and the Borders (Charman *et al.* 2006, Fig. 4). Their data for the composite water table for the Borders do not fall until the first century BC, while the record for central Scotland points towards a wet period continuing into the first millennium AD.

From these results it might be postulated that an excessive consumption of substantial timbers for broch building in Atlantic Scotland could not have been readily sustained, either by sourcing locally grown timbers, or through large-scale imports from areas further south. The environmental evidence pointing to lack of woodland is, however, only problematic if large quantities of timber for posts and beams to support upper floors and roofs were indeed required for Iron Age broch construction. Of course, individual pockets of better land and particular woodland management strategies may have been successful, up to a point, in furnishing the major constructional timbers that could have been required. It appears, however, to be more likely that the timbers envisaged by today's archaeologists to be required for the elaborate broch reconstructions containing post-rings, upper timber

floors and substantial roof constructions, would simply have not been widely available across Atlantic Scotland and, where they were, their incorporation into broch architecture would indeed have represented the conspicuous consumption of this resource. It therefore seems difficult to argue *a priori* for the development of an architectural type which necessarily consumed large amounts of substantial timber at a time of environmental decline, when woodland growth would have been restricted. To say this is not to disallow the possibility that some brochs did indeed need substantial quantities of major timbers in their interiors, but to allow the contrary possibility – that some brochs did not.

Alternative reconstructions

An analysis of key broch dimensions suggests regional variation, which may correlate with the less-than-regular availability of structural timbers in different parts of the country. In regions where it is suggested that large trees would have been difficult to obtain,

such as Caithness, Shetland or the Western Isles, the internal diameters of brochs are comparatively small. Minimizing individual structural spans may thus have been an adaptation to the availability of only smaller individual timbers there. Where such trees cannot have flourished even under managed conditions, we may have to consider the use of alternative roofing methods such as grid shells rather than the typical rafter and purlin arrangements – and perhaps abandon the dominant perception of what a broch should have looked like (Romankiewicz 2011a, 163–5, also here Fig. 8.5). Such a grid shell would only have required small trees less than 0.1 m in diameter in its assembly, and would have eliminated the need for a supporting post-ring for the roof set into the underlying ground surface. Trees of the diameters necessary to build such grid shells could have been produced in sheltered locations in most of Atlantic Scotland and managed as part of a coppicing regime; here they would have flourished much more readily than major timber trees.

If we accept that at least some brochs could have been satisfactorily roofed by grid shells or similar

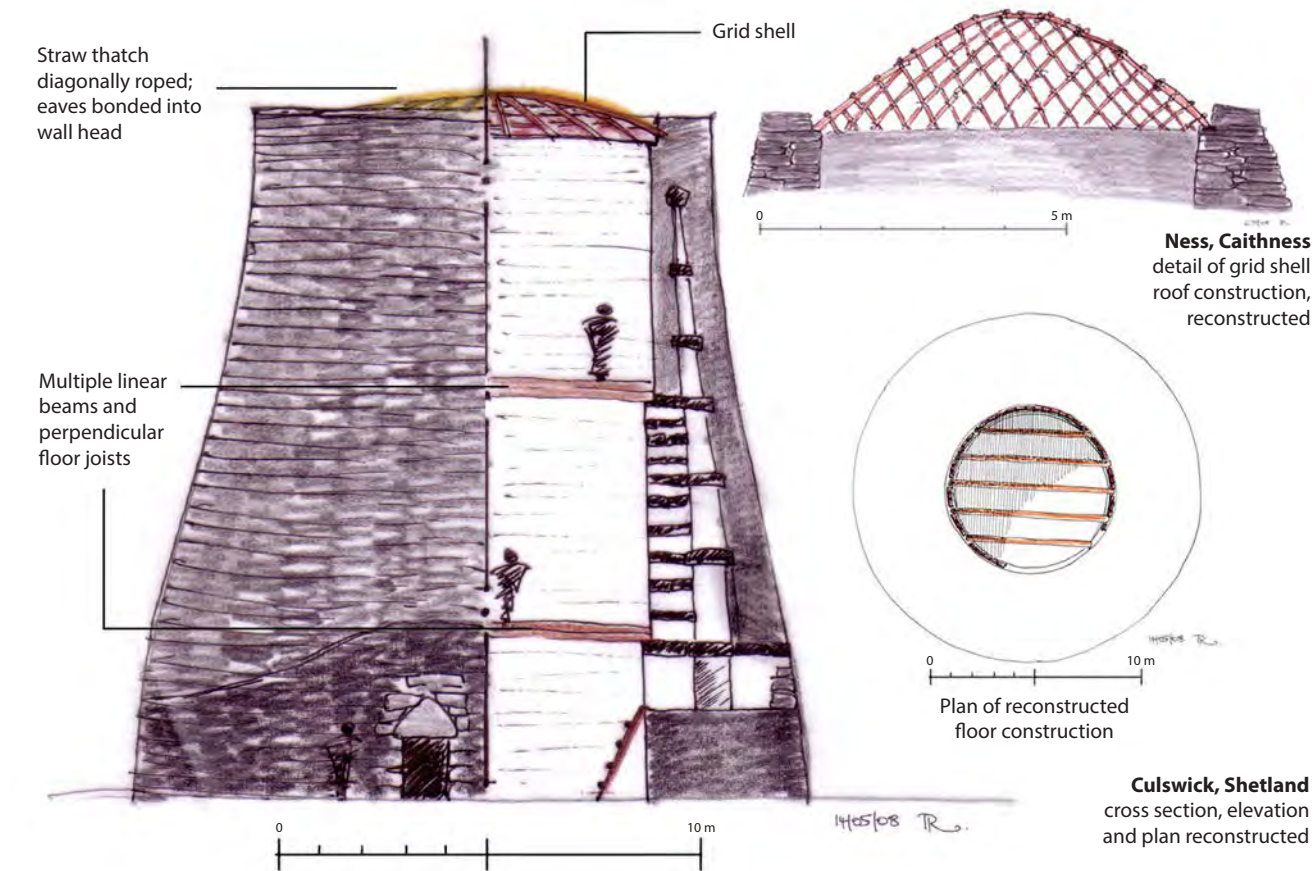


Figure 8.5. Upper floor and grid shell roof reconstructions for Culswick, Shetland, and Ness broch, Caithness (upper right detail) after Romankiewicz 2011b, 12, 147 (drawing by Tanja Romankiewicz).

constructions using slimmer-diameter wood, in such cases shorter substantial timbers would only have been required as upright posts to support an upper floor. Without the additional need to support the roof weight or to extend up to rafter height, these posts could have been constructed using timber of much smaller dimensions than previously estimated (cf. Romankiewicz 2011a, A-90-5 for calculations of timber dimensions for traditional and alternative constructions).

In the case of the smaller broch interiors, a post-ring would not even have been required to support an upper floor. For example, to construct a floor across the 8 m of internal diameter within the broch at Culswick, Shetland, would have required only five large beams laid parallel across the structure. The longest would have needed to be 8 m, but because of the circular geometry the rest would have been shorter – a total of well under 40 linear metres of timber. In the reconstruction proposed here these elements were laid tangentially, and supported on the inner scarcement ledge which is ubiquitous in these buildings (Romankiewicz 2011a, A-90, compare here Fig. 8.5).

In other cases, examination of architectural details suggests that the insertion of upper floors into particular brochs would have been problematic, and contrasts with the general level of accomplishment indicated by other aspects of these remarkable buildings. For example, at some brochs, the threshold of one of the upper openings in the inner wall face (believed to have permitted egress onto the upper floor) sits at the same level as the scarcement ledge (believed to have supported the said upper floor). Given the thickness of any floor construction, a step up onto the floor supported on the scarcement would have been required in these cases. At other brochs, the scarcement is set well below the upper opening, and a floor of considerable thickness would have had to be raised from the scarcement – or steps down provided – to negotiate such a large height difference (Romankiewicz 2011a, 151). These structural oddities, taken together with the postulated shortages of constructional timbers in some areas, might encourage us to abandon the concept of the insertion of upper floors altogether, in the case of some brochs at least, and the function of the scarcement could have been unrelated to upper floor constructions. Without the requirement for an upper floor, for instance, only some 100 pieces of wood each about 3–3.5 m in length would have been needed to construct a gridshell roof for Dun Torcuill (North Uist; Romankiewicz 2011a, A-94). If regularly coppiced trees each produced three or four stems of such a size, it would only need the product of 25–30 such coppiced trees to roof a broch.

The overall land-take for such woodland would be very modest and the success of growing such trees in sheltered pockets seems likely, even in generally harsh environmental conditions.

Local woodland management, often small-scale and protected in sheltered niches, might therefore offer the best-fit hypothesis to answer the questions regarding timber provision for broch construction. Such small-scale endeavours may be difficult to detect in environmental studies reliant on the catchment of particular sample sites. Archaeological evidence of pine and willow grown under stress survives from Dun Bharabhat and Dun Vulcan, both in the Western Isles, and seemingly confirms that only roundwood of relatively small dimensions was available there (Romankiewicz 2011a, 143; cf. Church 2002, 72; Taylor 1999, 190).

From timber sources to models of social organization

If we accept the arguments brought forward that locally managed woodland provided the most likely source for the timbers required in broch construction, this would mean that woodland pockets must have been created, maintained and managed over generations. Wood, of course, would have been required for a range of other purposes from the hafts of tools to fuel for heating and cooking. In terms of the growing of timber for architectural purposes, however, there would have been a need to look after woodlands intended for the construction projects of future generations, which may imply that some longer-term security over land tenure was expected at the time. Such a conclusion suggests that patterns of inheritance existed, implying in turn that any given generation was looking after woodland resources earmarked for future architectural projects (for related aspects of inheritance cf. Armit 2005). Were these broch builders anticipating the need for future repairs to their recently built structure or might we even argue that they expected the succeeding generation to build another broch nearby? Or was there no such long-term management against future requirements, thus every broch project would have first involved growing the required timber before building works could start? These alternative strategies have deep implications for the management of resources and prehistoric concepts of time and memory.

It is in this context that questions concerning the timber resources consumed in broch construction might provide one route by which to investigate the social organization of broch-builders, as well as their patterns of inheritance and ultimately their

geographical and political stability (see Romankiewicz 2016). If we accept that locally grown and managed timber resources underpinned each broch project, this might suggest the existence of much more stable and enduring societies than the defensive character often read into the external appearance of brochs, and hence the prevalence of unsettled times, may lead us to believe. Societies which invested considerable labour and material resources in such substantial domestic building projects were arguably seeking to construct a physical memory within, and perhaps upon, a wider landscape (cf. Hingley 1992, 14, 17; Sharples 1984, 119–21). Adding the importance of the creation of memory to the nexus of factors involved in the construction of brochs that have been discussed elsewhere (Romankiewicz 2011a, 195–207) seems a profitable way to help our understanding of the erection of these remarkable structures in Iron Age landscapes.

Acknowledgements

The authors would like to thank the late Euan MacKie for commenting on ideas and sharing information of his own most recent survey at Dun Troddan in 2012 confirming the height difference at the entrance into the central area. The Society of Antiquaries of Scotland and Historic Environment Scotland are thanked for allowing reproduction of copyright illustrations. Tanja Romankiewicz would like to thank the Leverhulme Trust (grant no. ECF-2014-424) for support during the latter stages of this project.

The fieldwork underpinning this chapter was undertaken in 2012, shortly before the ‘Gardening time’ conference was held. Since then, HES has undertaken minor improvements and interpretive work within Dun Troddan, but these do not materially impact on the hypothesis advanced here.

Chapter 9

Beyond the *Nuraghe*: perception and reuse in Punic and Roman Sardinia

Alfonso Stiglitz

Nuraghi play a pivotal role in the collective imagination of Sardinia. The large number of towers on the island means that there is practically no place without at least one of these great buildings in sight. We see them still standing on mountain tops, scattered in the plains, dotting the coast, safeguarding our homes and watching over fertile and mineral rich locations. In Punic (510–238 BC) and Roman (238 BC–AD 476) Sardinia, when more towers survived and were clearly visible, this presence would have been perceived in an even more significant manner. Unfortunately, the lack of written records and the unfamiliarity by Greek and Latin historians of the Sardinian world, does not provide us with direct evidence of how the later inhabitants of Sardinia perceived the *Nuraghi*. Among the rare quotations, only one gives a careful description of the *Nuraghi*:

In the island of Sardinia they say there are many beautiful buildings constructed in the ancient Greek style, and, amongst others, domes carved in remarkable proportions. (*De mirabilibus auscultationibus* 100)

According to Diodorus Siculus, who probably draws from the same source as the previous author (Chiai 2004, 122), it is Iolaus, nephew of Heracles, who arrived in Sardinia at the head of the Tespiadi:

Iolaüs, the nephew of Heracles, was in charge of the undertaking, and taking possession of the island he founded in it notable cities, and when he had divided the land into allotments he called the folk of the colony Iolaës after himself; and he also constructed gymnasia and temples to the gods and everything else which contributes to making happy the life of man, memorials

of this remaining even to this day (Diodorus Siculus V, 15.2 [Loeb translation])

The ‘gymnasia and temples’, named *daedaleia* after the architect brought by Iolaus, clearly refer to the towers and other nuragic buildings like the well sanctuaries and giants’ tombs, the collective megalithic tombs that were still clearly visible at the time of writing, even though they are attributed to the Greek world, probably influenced by an Athenian source (Chiai 2004, 120). The few other references that are known from written sources should be understood from the perspective of Roman colonialist ethnology that instead of offering a realistic description underlines the opposition between civilization and barbarism. In this way *Nuraghi* are reduced to caves, underground constructions, the last refuge of uncivilized people:

They live in caverns (Strabo V, 2, 7)

They also built themselves underground dwellings, and by spending their lives in such dug-out homes they avoided the perils which wars entail (Diodorus Siculus IV.30.5)

They dwelt in scattered groups, where chance found them a home in cabins or caves (Pausanias X.17.2)

This lack of knowledge about Sardinia is reinforced by the fact that the term *Nuraghe* is not mentioned in any source, even though the word belongs to the pre-Latin substrate of the Sardinian language (Paulis 1993) and almost certainly must have been in use. The only evidence is in fact two Latin inscriptions: the first on *Nuraghe Aidu Entos* of Bortigali (Fig. 9.1, 7). The inscription on the lintel above the entrance of the *Nuraghe* reads: *Ili(ensium) iur(ale) in / Nurac(-) Sessar (?)*.

It is the first appearance of the word and dates to the first century AD (Gasparini 1992, 303–6). *Ilienses* refers to one of the tribes that inhabited the island and who famously rebelled against the Romans (Mastino 2005). Beyond the legal interpretation, the inscription tells us the existence and use of the term *Nuraghe* in the Roman era: Nurac Sessar. The second, *nur(ac) Alb (-)*, is on a military diploma (AD 102) found near Posada, east Sardinia (Sanciu *et al.* 2013). In order to understand how the Sardinians perceived the *Nuraghi* during the Punic and Roman period and whether this perception influenced the reuse of the *Nuraghi*, we can only turn to archaeological data. Unfortunately, the lack of well-published stratigraphically significant contexts complicates the use of these data (Lilliu 1990; Pala 1990; Stiglitz 2005; Trudu 2010).

Examples of reuse of *Nuraghi*

I will illustrate the difficulties encountered in the ongoing investigations by analyzing some examples taken from across the island and discussed here in geographical order from north to south (Fig. 9.1).

Nuraghe La Varrosa (Sorso) is situated in the Romangia region in northern Sardinia at 7 m a.s.l. (Fig. 9.1, 1). This is a multi-tower *Nuraghe* that was reused from the second century BC onwards as a cult site until the first century AD. In the entrance corridor to the central tower, several square bases were erected and on top of one must have stood a bronze statue of which the arms have been discovered. The finds point to the cult of Hermes. Secondary uses of the area are discovered until at least the third century AD (Rovina 1997; Longu 2015).

Nuraghe San Pietro (Torpè) is situated in the Baronia region in northwestern Sardinia at an altitude of 17 m a.s.l. (Fig. 9.1, 2). The multi-tower *Nuraghe* was reused in the late nuragic period as a place of worship, as is indicated by the presence of finds like bronze figurines in the courtyard and in the central tower. The building seems to have been suddenly abandoned after a large fire. During the early Roman Empire (first to second century AD) tower F was reused as the communal granary of a local settlement. Containers of wood and cork, two wicker baskets, amphorae and a substantial amount of corn and beans have been discovered. After the roof collapsed during the Late Roman Empire, part of the *Nuraghe* was used for a small cemetery (D'Oriano 1984).

Nuraghe Santu Antine (Torralba) is situated in the Meilogu region in northwestern Sardinia at an altitude of 361 m a.s.l. (Fig. 9.1, 3). The multi-tower *Nuraghe* is surrounded by a village (Moravetti 1988). The finds of the old excavations seem to show a continuity of

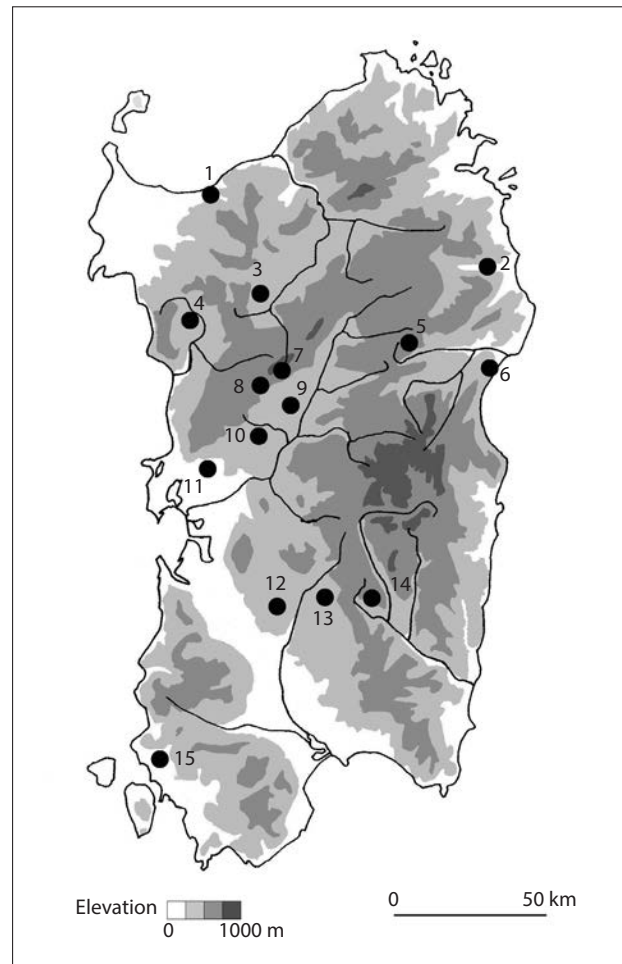


Figure 9.1. Archaeology of reuse: 1) *Nuraghe La Varrosa* (Sorso); 2) *Nuraghe San Pietro* (Torpè); 3) *Nuraghe Santu Antine* (Torralba); 4) *Nuraghe Sa Tanca 'e sa Mura* (Villanova Monteleone); 5) *Nuraghe Sant'Efis* (Orune); 6) *Nuraghe Mannu* (Dorgali); 7) *Nuraghe Aidu Entos* (Bortigali); 8) *Nuraghe Santa Barbara* (Macomer); 9) *Nuraghe Sanilo* (Aidomaggiore); 10) *Nuraghe Lugherras* (Paulilatino); 11) *Nuraghe s'Urachi* (San Vero Milis); 12) *Nuraghe Genna Maria* (Villanovaforru); 13) *Nuraghe Su Mulinu* (Villanovafranca); 14) *Nuraghe Orrubiu* (Orroli); 15) *Nuraghe Monte Sirai* (Carbonia).

habitation throughout the first millennium BC (Madau 1988) and up to the fifth to sixth century AD (Manca di Mores 1988b). Between the first half of the second and first half of the first centuries BC the nuragic village was restructured and subsequently abandoned to make room for a large structure, probably related to the Roman villa that lies southeast of the *Nuraghe* (Taramelli 1939, 65–6; Colombi 2010). The central tower has yielded numerous *dolia* fragments that

suggest it was used as a warehouse (Manca di Mores 1998b, 274).

Nuraghe Sa Tanca 'e sa Mura (Villanova Monteleone) is situated in the Meilogu region in northwestern Sardinia at an altitude of 400 m s.l.m, along the banks of the river Temo. At present, the site is flooded by an artificial lake (Fig. 9.1, 4). The excavation of the single-tower *Nuraghe* brought to light Middle and Late Bronze Age material. At the end of the fourth century BC, it was included in a medium-sized Punic farm which remained in use until the second half of the first century BC. The rural site looks like a well-articulated building, geometrically laid out, which also contains the reused *Nuraghe*. The discovery of several iron slag and glass points to industrial activity. It should be noted that there is no continuity of occupation between the Bronze Age and the reuse during the Punic period (Manca di Mores 1988a; Madau 1991, 1997).

Nuraghe S. Efis (Orune) is situated in the region Barbagia in central-eastern Sardinia at an altitude of 750 m a.s.l., (Fig. 9.1, 5). The multi-tower *Nuraghe* is surrounded by a village. During the Roman Empire a large building was constructed in the village that may have been a *mansio*, connected to the road to the interior of the island. Occupation does not seem to have continued between the nuragic and Roman periods (Delussu 2009a).

Nuraghe Mannu (Dorgali) is situated in the Baronia region in eastern Sardinia at an altitude of 180 m a.s.l. (Fig. 9.1, 6). The single-tower *Nuraghe* is surrounded by a village, dating from the Middle Bronze Age to the early Iron Age. After a long break the tower was reused as a warehouse during the late Republican period (mid-second century BC) until the early medieval period (sixth century AD) (Delussu 2008, 130). The nuragic village saw major restructuring, as the excavations brought to light square buildings that date from the late Roman Empire to the early medieval period (Delussu 2009b).

Nuraghe Aidu Entos (Bortigali) is situated in the Marghine region in central-western Sardinia at an altitude of 803 m a.s.l. (Fig. 9.1, 7). The corridor *Nuraghe*, was reused in the Roman period to indicate the boundary of the territory of the *Ilienses* with an inscription on the lintel above the entrance (see above) (Gasparini 1992, 303–6; Moravetti 1998, 237–8; Mastino 2007).

Nuraghe Santa Barbara (Macomer) is situated in the Marghine region in central-western Sardinia at an altitude of 648 m a. s. l. (Fig. 9.1, 8). The multi-tower *Nuraghe* is surrounded by a village. Occupation of the *Nuraghe* and the village continued from the Middle Bronze Age to the early Iron Age, after which large parts of the buildings were abandoned and collapsed. Reuse in the Punic period is shown by the presence of

a shrine in tower B and the finds of numerous *thymiateria* in the central chamber, the staircase and the slits. Occupation in the village continued during the Roman and medieval periods (Moravetti 1986).

Nuraghe Sanilo (Aidomaggiore) is situated in the Guilcier region of central Sardinia at an altitude of 350 m a.s.l. (Fig. 9.1, 9). The multi-tower *Nuraghe* is surrounded by a village. The area surrounding the *Nuraghe* was reused as a burial space during the Punic and Roman periods (Gasparini 1992, 310; Filigheddu 1994, 811).

Nuraghe Lugherras (Paulilatino) is situated in the Guicier region in the highlands of central-western Sardinia at an altitude of 329 m a.s.l. (Fig. 9.1, 10). The central tower of the multi-tower *Nuraghe* was used as a shrine in the late Punic age. More than 700 *thymiateria*, many oil lamps, coins and a fragment of a statue of Bes were discovered in the lower chamber of the central tower. There does not seem to be a continuity of occupation between the nuragic and late Punic periods (Taramelli 1910; Regoli 1991; Del Vais & Serreli 2014–2015).

Nuraghe S'Urachi (San Vero Milis) is situated in the Campidano of Milis in western Sardinia at an altitude of 4 m a.s.l. (Fig. 9.1, 11). The multi-tower *Nuraghe* is among the largest on the island (Fig. 9.2). The village was occupied without interruption from the Middle Bronze Age until the Roman Republican period. During the Punic period, at least since the end of sixth to fifth centuries BC, part of the *Nuraghe* was reused as a large cult site, which is yet to be excavated. The archaeological deposit is notable for the presence of clay statues (four of the god Bes (Fig. 9.3) and one of a black man (Fig. 9.4)), a clay matrix for votive breads (the bread of Ashtarte), terracotta moulds, and hundreds of *thymiateria* (Stiglitz 2012a, Stiglitz *et al.* 2015, Ibba 2018).

Nuraghe Genna Maria (Villanovaforru) is situated in the Marmilla region of central-southern Sardinia at an altitude of 395 m a.s.l. (Fig. 9.1, 12). The multi-tower *Nuraghe* is surrounded by a village, which dates from the Bronze Age to the eighth century BC. After a break of several centuries, from the end of the fourth century BC, the central tower of the *Nuraghe* and the corridor in front were used as a cult place. Inside there were a large number of oil lamps, coins, *thymiateria* and a clay matrix for votive breads (the bread of Ashtarte). The presence of numerous lamps is peculiar. In the courtyard, the presence of ash and burnt bones of animals indicates a place of sacrifice. Here too, it should be noted there is no continuity of occupation between the nuragic period and the Punic period (Lilliu & Badas 1993; Atzeni *et al.* 1988).

Nuraghe Su Mulinu (Villanovafranca) is situated in Marmilla region in central-southern Sardinia at an



Figure 9.2. *S'Urachi, San Vero Milis (Foto Museo Civico di San Vero Milis).*

altitude of 286 m a.s.l. (Fig. 9.1, 13). The multi-tower *Nuraghe* was constructed in the Middle Bronze Age and was surrounded by a village. Very interesting is room e, already used during the late nuragic period as a cult place; from the eighth century BC, there was an altar in the form of a *Nuraghe* decorated with a half-moon and holes to hold votive swords. The presence of a large amount of oil lamps, vessels and furniture for worship indicates the performance of rituals. The room stayed in use as a cult place from the late Punic period (third century BC) until the Roman Empire. This second phase was characterized by the presence of lamps and reuse of the *Nuraghe*-shaped altar as well. Here again it should be noted that there was no continuity of occupation between the nuragic period (Middle Bronze Age and early Iron Age) and the late Punic period (Ugas 1989–1990; Ugas & Paderi 1990).

Nuraghe Arrubiu (Orroli) is situated in Sarcidano region in central Sardinia at an altitude of 513 m a.s.l. (Fig. 9.1, 14). At the moment, it is the largest *Nuraghe* in Sardinia with 21 towers (Cossu *et al.* 2003). The *Nuraghe* seems to have been abandoned at the end of



Figure 9.3. *S'Urachi, clay statue of Bes (Archivio Ilisso Edizioni, foto Pietro Paolo Pinna).*



Figure 9.4. *S'Urachi, clay statue of a black man (foto C. Buffa, Soprintendenza ABAP della Sardegna meridionale).*

the Late Bronze Age or early Iron Age. In the main courtyard, the layers of this phase are covered by c. 9 m of collapsed walls. On top of this rubble a workspace for the production of wine with tanks, the base of a press and a counterweight, was built in the second century BC. The structure remained in use until the late Roman period. A similar structure was built in the village. These two areas were associated with a series of domestic structures that are visible around the *Nuraghe* and may be part of an agricultural villa (Lo Schiavo – Sanges 1994, 75–7; Sanges 2001).

Nuraghe Monte Sirai (Carbonia) is situated in the Sulcis region in southwestern Sardinia at an altitude of 194 m a.s.l. (Fig. 9.1, 15). It is a single-tower *Nuraghe* around which a Phoenician settlement was built from 725 BC onwards. The *Nuraghe* was reused as a shrine within a temple structure that was probably dedicated to Ashtarte. Inside the tower, the cult statue was placed together with some anthropomorphic *bronzetti*. Then at the end of the late sixth or beginning of the fifth

centuries BC, in connection with the Carthaginian conquest of Sardinia, the temple area underwent an extensive transformation. The *Nuraghe* was destroyed and a new building was constructed on its remains. A final refurbishment of the temple in the mid-third century BC completely concealed the previous phases. The settlement was suddenly abandoned around 110 BC (Guirguis 2015, 24–5).

The archaeology of reuse

The known archaeological data reported above allow us to clarify the chronological correlations of each site and avoid generic discourses on the *longue durée*, which still deeply influences research on the island. We do not yet have an overall view of the phenomenon of reuse of *Nuraghi*, nor quantitative data that can be used for comprehensive analysis, although the examples are sufficiently representative of the whole sample as much as we can currently understand it.

Many of the *Nuraghi* show a break during the last stages of nuragic occupation. Reuse during the Phoenician period is rare. Reuse increases in the Punic and Roman Republican periods and reaches its peak under the Roman Empire, when most of the *Nuraghi* show traces of some form of reuse, both in the coastal areas and in the interior of the island. Especially interesting are the data from the interior of the island which is generally considered the most conservative part of the island and resistant to outside forces (Lilliu 1971). A recent examination of data, mainly from surveys, showed that of 246 *Nuraghi* that had been reused, 229 *Nuraghi* showed a break of occupation between the nuragic and Roman periods. The fact that 78.9 per cent of the *Nuraghi* are reused only from the Roman Empire onwards is even more compelling (Trudu 2010, 395–6).

These facts underline the more general phenomenon of a significant reduction in the number of settlements between the seventh and fifth centuries BC. Only areas in the vicinity of the Phoenician urban centres show traces of rural settlements that can be dated to the Phoenician period (van Dommelen & Finocchi 2008, 173), while at the same time evidence of nuragic presence seems to disappear at the end of the seventh century/first half of the sixth century BC. The reoccupation of the countryside takes place very quickly in the late fifth and fourth centuries BC (van Dommelen & Finocchi 2008, 172), at the time of the new territorial policy of Carthage in the western Mediterranean.

The data from the systematic surveys of the hinterland of some cities show different patterns. In the case of *Nora* and *Neapolis*, new Punic settlements in lowland areas closer to the city seem to prevail, while a reoccupation of old nuragic sites occurs in the more

internal areas (Van Dommelen & Finocchi 2008, 173). In the hinterland of *Tharros*, however, this difference is not noticeable (Stiglitz 2011, 363–8). A credible explanation for the apparent disappearance of people for several centuries and the sudden repopulation has not been found. Colonists from Carthage are assumed to have resettled a number of territories (eg. Rendeli 2005, 167; *contra* Van Dommelen Gomez & Bellard, 2008, 224), but this does not seem to be a sufficient explanation of the phenomenon as it does not explain the persistence of a community of clear nuragic descent even as late as during the Roman Empire. To this we must add our current inability to recognize proper nuragic evidence after the sixth century BC.

From this point of view, it seems interesting to note that the few cases of continuous occupation between the late nuragic and the Punic-Roman periods show that persons of nuragic descent continued to live in settlements that took on Phoenician and Roman connotations. Paradoxically, these places seem to be those that show the greatest detachment from the previous nuragic world and that are characterized by their full integration into the new world. This means that the inhabitants of those places were an integral part of the developments that took place on the island in this period and that they cannot be suggested to have led archaic lifestyles. Significantly, this fact is clearly visible at *Nuraghe S'Urachi* (San Vero Milis) and *Monte Sirai* (Carbonia), which played a key role in the relations between the coast and their respective hinterlands rich in resources.

In the case of *S'Urachi* (San Vero Milis), the settlement has ceramic material that is clearly identifiable as nuragic from the early Iron Age throughout the eighth century BC, when Phoenician material appeared by the end of the century. During the seventh century BC, local craft practices were increasingly influenced by new oriental technologies and morphologies and, starting from the sixth century BC, a clear Phoenician style can be discerned (Roppa 2012; Roppa *et al.* 2013). The votive deposit in the *Nuraghe* that can be dated to at least the sixth to fifth centuries BC, did not in fact display craft and cultural elements that relate to the nuragic world (Stiglitz 2012a, b) and this remains so until the Roman Republican period. In other words, the continuous occupation of nuragic sites seems evident only in areas that are related to the more productive territories and where the integration between the different elements of the nuragic and Phoenician world is at its height.

In areas further inland, as in the case of *Nuraghi* Genna Maria (Villanovaforru) and *Su Mulinu* (Villanovafranca), where an interruption of many centuries is clear, the reuse is in some ways similar to that of late

nuragic practice, although the types of craft used are totally Punic and Roman. The rituals of worship seem to show the continuity of nuragic traditions, such as the deposition of several lamps (Ugas & Paderi 1990, 482–6; Lilliu 1990, 435–7; Lilliu 1993, 20). The question remains whether, during this second phase of reuse, the altar in the shape of a *Nuraghe* that was still present and visible continued to be a powerful sign of the sacred, or whether it had lost its meaning and was used merely as furniture. Both possibilities are credible, but we are missing too many elements to reach a conclusion. The interpretation suggested by the excavators of the two *Nuraghi* (Ugas & Paderi 1990, 479; Lilliu 1993, 13) assumes the continuity of a community that held on to its place. Specific analyses of the contexts, however, allow us to say that there is no continuity of use by a community tied to its past, but by a newly settled community that reused the shrine after centuries of neglect. In the coastal areas, by contrast, in *Nuraghe La Varrosa* (Sorso) the reuse of the tower and the corridor as a place of worship took place in the Roman period, after nearly a thousand years of interruption and follows the Roman tradition of worship unrelated to the traditional nuragic world, as is illustrated by the type of cult statue (Rovina 1997).

Finally, the grandeur of the structures in itself do not have to recall ancestral values. For the Roman period for example, *Nuraghe Santu Antine* (Torralba) illustrates this point well. Its central tower was still very impressive at over 20 m in height, but the *Nuraghe* was reused as a utilitarian space for agricultural activities (Colombi 2010). For the Punic period, the case of *Nuraghe Sa Tanca e' sa Mura* (Villanova Monteleone) shows the same outcome. The *Nuraghe* was incorporated as an ancillary room in the rural structure. In the latter case, and perhaps in that of *Nuraghe Orrubiu* (Orroli), we may see the reoccupation of the sites by people who may come from Libya or mainland Italy in the wake of the colonial power (Acquaro 1996, 8; *contra* Ridgway 1989, 136; van Dommelen & Finocchi 2008, 194–6) and who, therefore, are indifferent to the history of the place.

The comparison of these cases makes it clear that we have different forms of reuse. This raises the question of a consistent pattern for regions within the island that are not necessarily linked to scales of identity. On the other hand, detailed analyses of archaeological data, where the excavation permits us to identify the precise forms of reuse, demonstrate that every place has its own specific history, which cannot be fitted in a single general model that is valid for every period; Sardinia shows, in fact, considerable variety in the way *Nuraghi* are reused in distinct areas and also within the same area.

Who reused the *Nuraghi*?

Behind the specific data addressed above, the central issue is the identity of those who reused *Nuraghi*: can they be neatly defined as nuragic people, Carthaginians and Romans? This question is not easily answered although some clues can be detected in the material and linguistic world.

It appears that in *Monte Sirai* (Carbonia), during the Phoenician period, the *Nuraghe* was reused as a place of worship by a community that comprised Phoenician and nuragic people. This is indicated by an object discovered in the sacred space within the *Nuraghe*: it is a small votive bronze figurine that dates to the eighth century BC, that is of an eastern type but with strong nuragic elements. In particular the pot held in the figurine's hand is of the well-known nuragic *askos* type (Guirguis, 2010, 24; Bernardini & Botto 2010, 51–4) and this can be seen as a sign of an integrated, hybrid community. The discovery of a contemporary necropolis shows evidence of a hybrid nuragic-Phoenician community as well (Guirguis 2010, 25).

Even more direct evidence is provided by funeral inscriptions from the *Nuraghi* in the central regions of Sardinia (Stiglitz 2010). Even though the majority of the inscriptions date to the late Roman Empire they are no less significant. I will limit my example to *Nuraghe Sanilo* (Aidomaggiore), from where three interesting inscriptions come that date to different periods and contain anthroponyms that provide useful information for understanding the complexity of the Sardinian situation. The oldest one dates back to the third century BC and contains the word *WG^c* written in Punic: it is a personal name that demonstrates the persistence of a strong palaeo-Sardinian substratum in the naming of people during the period of Punic and Roman domination on the island (Filigheddu 1994, 811). The second one is written in Latin and dates to the first century AD. It contains the text *URSETINERCAUNI*: these are two personal names, *Urseti* and *Nercaui* that are also known elsewhere and that are considered to be of nuragic origin (Gasperini 1992, 310).

A third inscription from the same *Nuraghe* and dating to the first century AD, contains the text: *qdabinel. / Dom (inus) fec (it)*. The name of the deceased, *Qdabinel*, clearly illustrates the *Punic* component of the Sardinian population (Gasperini 1992, 307–10), the name is, in fact, to be connected with the Punic *kbd^lln* – honor of the god, a common name in North Africa (Zucca 1999, 35–6). The three inscriptions show that, during the Punic and Roman periods, cultural components of various origins (nuragic, Punic and Roman) were still present and recognizable. They are not demarcated and

all belong to the same social reality, and sometimes the connections can even be seen within one family.

These finds challenge the traditional interpretation of the reuse of *Nuraghi* and other nuragic structures that emphasize the survival of traditional nuragic communities within the Punic or Roman societies, stuck in a conservatism without any contamination by the dominant official culture – which Giovanni Lilliu called the *costante resistenziale sarda* (permanent Sardinian resistance: Lilliu 1990, 1971). This interpretation is consistent with the primitivist views of some Anglo-Saxon scholars (Webster 1996; Rowland 2001; Dyson & Rowland 2007).

The visibility of the towers obviously played a role in the imagination of the people and, in some cases, certainly recalled the memories of their ancestors. But memory does not necessarily turn into ideological action. In many cases, the structures are seen as useful for domestic functions: durable existing buildings that could provide excellent storage space for foodstuffs. In other cases, however, the combination of the monumentality and the cave-like appearance did induce religious experience that led to the construction of cult places. In other cases, we are dealing with real persistence, or a renewal of ancestral worship, but should not be seen as a mere survival of what would by then have been dated archaizing elements, but as an actual interpretation of dynamic traditions.

Archaeological evidence has thus brought to light a more complex situation that is quite different from the conventional representation of the island based on nineteenth-century colonial ideology. It has in fact become clear because of the discontinuities demonstrated at many nuragic sites, their reuse cannot be interpreted as mere survival. When, after a break of many centuries, a reused site evokes traditional elements, it is no coincidence that this occurs at rural sanctuaries that can be seen as places of dialogue and integration between cultures.

The case of *Su Mulinu* (Villanovafranca) is particularly informative in this regard. During the early Iron Age, a space within the *Nuraghe* was perceived as sacred and furnished with what can be termed an altar that reproduces the *Nuraghe* within which it is located (Ugas & Paderi 1990, 478). The consecration, then, centres on the memory of the *Nuraghe*. Problematic, however, is the Punic-period reuse after several centuries of abandonment, because the similarity of offerings between the nuragic and Punic-Roman period, in particular the large numbers of oil lamps (Ugas & Paderi 1990, 477–9) suggests a revival of earlier traditions transformed by new artisan practices but not by the types of objects offered. This situation may thus perhaps be interpreted as the return of the

descendants of former residents (Bartoloni 1988, 346–7) or the resettlement by new groups to this place but, not necessarily from outside the island. In both cases, it is a new community that kept some features of the nuragic tradition and taken on new ones from the Punic and Roman traditions. This was demonstrably not a passive or residual community, but one able to handle and manipulate, consciously or not, the situation of their time (Stiglitz 2020).

Conclusion

It is important to draw the attention to the inhabitants of those places, the women and men who created their environment, and who were able to express their own culture, who were subaltern but not passive and capable of taking ‘a more or less explicit counter-hegemonic character in the form of subcultures or popular, often religious, movements [...] a specifically local response to colonialism’ (van Dommelen 1997, 309, 315).

The geographical, chronological and contextual distinctions briefly summarized in this article question the old dichotomy between colonial occupation and resistance that viewed the world in ethnic terms. Instead, I argue that the terms ‘nuragic, Punic or Roman’ lost their ethnic connotation and became mere labels to classify material culture. It also does not necessarily mean the replacement of the indigenous inhabitants with colonial outsiders (van Dommelen & Gomez Bellard 2008, 2–5, 202). The communities under Carthaginian and Roman political control seem to form new cultural features adapted to the new colonial situation and in line with the concepts of hegemony and subordination

as defined by Gramsci (van Dommelen & Gomez Bellard 2008, 237–8; Liguori & Voza 2009, *passim*; Stiglitz 2020), rather than in nineteenth-century colonial terms. Notions such as ‘survival, persistence and continuity’, which have long been used to analyse these situations, no longer seem to be able to provide the appropriate conceptual tools for interpreting these complex realities:

S’agit-il véritablement d’une catégorie historiographique recevable? Rend-elle compte de phénomènes homogènes ? peut-elle assumer le rôle de principe explicatif qu’on a voulu lui attribuer parfois? Le thème, on le voit, n’est peut-être pas d’un manière aussi simple, aussi commode, ni aussi innocent qu’il peut paraître à première vue. (Benabou 1990, 7)

In the end, it comes down to exploring the role in and impact of nuragic towers on their local setting place by place:

Memory and tradition alone do not preserve an object’s identity, it is the ongoing incorporation of that object into routinized practices that generates its meaning (Blake 1998, 68).

It is therefore the social practices of that reality that will clarify our ideas. In conclusion, the *Nuraghi* tell us a long story with a solid foundation, but that is also one with many twisted branches, rich in different narratives.