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 struc-
tural support – the kind most commonly
witnessed in more northeastern and southern areas of

Therefore, in a very real sense, crannogs are a
direct product of the same environment at the
time of construction, which relied upon readily avail-
able materials in the surrounding environment. As a
result, these artificial islets range in composition from
timber wrecks to the much better-preserved 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 builders 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, alert-
ning us to past activity on islets through a number of
inertice 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 vis-
ible through the remains of stone, and less frequently,
timber causeways, or the presence of logboats. As
recent fieldwork by the author demonstrates, numer-
ous 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 plaid – the belted plaid (not the kilt), com-
monly worn throughout much of Scotland until at least
about 1600, typified earlier eras. By this point in time,
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). Yet even the 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.

Crannog sites in the Western Isles 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, 22). Far from
an isolated case, numerous examples of artificial islets
built next to natural islands are also found in the
Lake District (Henderson 1998), Loch Awe, Loch Garry,
and Loch Lundie (Blundell 2011), 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 a stockade which would not
act as a defence, though concerns of ritual matters appear
to have been present as well (below). The island dwelling
tradition is thus largely unaffected by the ling and
modern 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 from the current archaeological record during the
Norse Period (c. 800-1200), only to re-emerge
yet again during the Medieval and Post-Medieval Periods,
as a form of settlement increasingly associated with
circular towers and later, stately homes with large formal
gardens, rather than artificial islands upon which to
make their mark. Though the situation in Scotland
was 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 more likely to be educated in England or on the
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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 more likely to be educated in England or on the
Continent, or at least exposed to these cultural norms,
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, 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 posed 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; Crane 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, Dudington 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 archaeo-
logical 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 ani-
mals) 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 repre-
sented by sites such as Dun an Sticer, Dun Cromore, Dun Torcuill and Dun Nighean Righ Lochlainn (Fig. 6.3), to name but a few of the better-known examples (cf Beveridge 1911; Armit 1996; Lenfer 2012) In this sense, most archaeologists would agree monumenta-
architectural features such as Scottish brochs or Sardinian Nur-
agh, 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, providing the impression simply of a natural islet with a natural chas 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 abrupt manner of 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 1982; Piggott 1953; Crone 2000; Dixon 2004) may lack much to substantiate them artefactually with royalty or high-status lifestyles, yet the available picture is one of often intense activ-
ity: 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 archaeol-
ogy 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 juncture, oral traditions would become the primary
channel through which the knowledge of past events and places on these enigmatic sites were transmit-
ted 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, the symbolisms 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, and regards the biological factors associated with the
burial of mound structures from any number of causes, most commonly unstable foundations. Attempting to date island dwellings by association based upon visual chas could 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 water-
line) 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-formations processes rela-
tive 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 homog-
enuous 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 determina-
tions, and to a lesser extend, 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 Dhomnuill 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 Uist and Hebridean ware were recovered, along with carved stone balls, pumice fishing net floats and numerous saddle quivers, 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 Dhomhnuiil was important and permanent” (Armit 2003a, 98).

However, this prehistoric site in Loch Oblath does not end here. The site of Eilean Olabhat, only 200 m east of Eilean Dhomhnuiil 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. 1999, 54). This former islet is now connected to the waters – was rebuilt and occupied yet once more. This reuse of Eilean na Comhairle in Loch Finlaggan 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, b). 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 Mòr 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

Figure 6.4. Dun an Sticer, North Uist – a prehistoric Atlantic roundhouse with Late Medieval modification and reoccupation.
moving to the Scottish mainland, another example of Buiston men who rented. This societal stratum consisted of middle-ranking Lairds or the growing class of ‘fear-taic’ or tacksmen. 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 MacDonalda were the last in a long line of descend-ents from the obscure Somerled MacGillebrigt in the twelfth century, these seemingly obscure crannogs today in the Inner Hebrides actually served as a cen-tral place to which people could flee from conflict. 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, which 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 systemati-cally inspected by crannog divers in 1972. This site was located within the larger Highland lochs would have had reinvigoration or maintenance of the site, even after abandonment, could then be readily inserted into the silty lochbed. The thick vegetation which commonly covers islets 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 eas-ily defended form of settlement, one which may have persisted for three and a half centuries, creating a gap for centuries yet was renewed to its appar-ent 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 networks 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 mounds, which would have been a massive effort. Lack of maintenance 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 mounds (F Harding 2000, 305). The reuse of sites which could previously exist as a ruin and known in local memory – one of control over the reality is that crannog studies have been neither consist-ent in nature, nor well-developed in a regional context, while still reliant upon many interpretations first culti-vated in the nineteenth century. These issues may leave many modern archaeologists with a mottled view of this crannog dominated phenomenon. Lack of investigation is still a primary issue given the hundreds of sites which have largely been gone unnoticed, while finding the funding and sustained commitment required to send trained archaeologists of crannogs 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 find and preserve the current understanding of the Scottish crannog tradition. In this regard, the author is committed to building upon his research in the future to form a comprehensive understanding of the Scottish crannog tradition.
A fierce debate has developed in Sardinia between orientalists, 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 orientalists 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 (Campana 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 Crotone (Spadea 1994; Lilliu 2000a) and recently tomb 74 of the necropolis in Monte Vetromo (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 hierarchically 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 Nuraghe showed signs of dismantling, while the few remaining Nuraghe 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 Nuraghe 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’
Chapter 7

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 Mulini in Villanovafranca (Usas 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 1986) and Serra Niedda in Sorso (Rovina et al. 2002) or the stylized reproductions on bronze bowls and bronze statuettes (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 Nuraghi models with crenellated friezes, stone bull heads, votive swords and bronze figurines are also found together (Taramelli 1909, 1914, 1921, 1922, 1931). In room ‘e’ of the complex site of Su Mulini, 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 signifyng ‘a particular mythical nuragh […] 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 Mulini 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 the 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 bronze swords (Fig. 7.3) or bronze statuettes, one can observe the exceptional narrative power of the three-towered Nuraghi reproductions from Canni’ vado, near Cabras and from Paulilungo in San Sperate, in which the human figure in relief stands out against a complex Nuraghe. The model recently found at Serra Is Aras 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 centers of nuragic Sardinia and especially at Mont’e Prama.

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

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

Figure 7.3. Villaver, 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 Nuraghi reproductions from Canni’ Vado, near Cabras and from Paulilungo in San Sperate, in which the human figure in relief stands out against a complex Nuraghe. The model recently found at Serra Is Aras 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 centers of nuragic Sardinia and especially at Mont’e Prama.
Numerous archers, whereas figurines of boxers ought of anthropomorphic bronze figurines. There are also ing a votive sword, stand out among the collection are for the greater part images of cattle and rams, but also the mouflon, 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 Monte Prama near Cab rassis 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 sc. (Stiglite 2012b). The wells were covered with a layer of rubble which yielded a large amount of Final Bronze Age (eleventh to tenth centuries sc) nuragic ceramics (under study by G. Bacco), Phoenician and Punic pottery dating to the fifth to fourth centuries sc 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 baetyl-like the ones of Oraghina in Cuglieri. According to Carlo Tronchetti, the archae ologist 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 sc, that is 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 Dommelen 2005) or evidence of cross-breeding from other perspectives (Stiglite 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 sc) until the Early Iron Age (first half of the eighth century sc). It is therefore evident that, if we do wish to consider the statues of Monte Prama contemporary to the tombs, their dating ought to be placed within this entire time period.

Moreover, the whole apparatus of the sanctu ary, 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 Monte 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 2012, 296), 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 Phoenicians from Tharros.

Thus, Monte 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 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 knowl-
edge 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 intensi-
fying 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 reso-
lute search for a legitimisation 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, includ-
ing 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
Telv 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 con-
cerning 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 preserva-
tion, 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 sympatheti-
cally 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. Work-
men of the Ministry of Works were undertaking
consolidation works, also intended to improve public
access, at the Glenelg brochs, first at Dun Telv 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 Telv 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
reached 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. Contem-
porary photographs, held in the National Collection
(HERS A 47978 to A 47981) and presumably taken by
Curle himself, show that the workforce had fully
evacuated 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.
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, the 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, and 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 Thorndycroft (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 quantity 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 constructions (summary in Romankiewicz 2011a, 142–3; cf. Fojt 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 not of structural timber. 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...
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, 90). 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 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 fitments. 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’ Chorcan at Langwell and Rhinyo, both in Sutherland, Leskie in Stirlingshire and Scalloway on Shetland (Romankiewicz 2011a, 125). Two of these, Tor A’ Chorcan and Rhinyo, 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 insignificant to have supported a roof (Sharpley 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 Hurly 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 Clickimin 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 shown 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
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 might yet emerge, since past years may conceal or elude sight 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 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 indicates 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-Roman-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 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 if large-scale imports from areas beyond Scotland seems very difficult to sustain, as there is no other evidence for an exchange of aspects of material culture with for example Norway at that time (Crome 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 BC (Tipping et al. 2008, 38–9). Results from the Holocene palaeoenvironmental 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 (textate amoebeae) have been analyzed in a multi-proxy approach of ‘stacking’ and scientifically ‘tuning’ detrended records to identify clear, significant wet periods (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 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 spells begin at ca. [...] amongst others’ 2760 [cal yr BC]’ (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 suggest the hypothesis that hydrological vulnerability in northwest Europe is driven by solar variability manifested as changes in the location and strength of westerly storm tracks’ (Charman et al. 2006, 346). 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 mass-walled stone roundhouses such as Bu, Pierowall and St Bonaface, all on Orkney, and generally identified with the early developmental stages of monumen-
tal broch architecture (overview in Romankiewicz 2009). This climatic decline must have resulted in trees growing under increasing environmental stresses, and also in factors hindering the re-establishment of surviving woods after felling episodes. Such broad-scale phenomena would have been tempered by physical-geographical factors such as local topography, aspects of drainage, and indeed issues of ownership, unknown in Iron Age circumstances, of surviving woodland. To argue, however, for the 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 about the fourth century BC, it seems 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 expansive 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 if large-scale imports from areas that could have been required. It appears, however, to be more likely that the timbers envisaged by today’s historians emerged from elaborate reconstructions containing post-rings, upper timber...
Chapter 8

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 been more plentiful, they may have been used even under managed conditions, we may have to consider the use of alternative roofing methods such as grid shells rather than the typical rafters and purfling 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 would 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 constructions using slimmer-diameter wood, in such cases some 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 minimal, compared with those involved in 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, and the examination of particular sample sites. Archaeological evidence of pine and willow grown under stress survives from Dun Bharabhat and Dun Vulan, 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, 180).

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 must have 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

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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 (310–238 bc) and Roman (238 bc–ad 476) Sar-
dinia, 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 inhab-
Itants 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:

Iolaus, the nephew of Heracles, was in charge of the undertaking, and taking pos-
session of the island he founded it in notable cities, and when he had divided the land into allotments he called the folk of the colony Iolaus 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 da硫酸fia 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: L(itiensium) iur(a/e) in / Nurac(-) Sessar (7),
It is the first appearance of the word and dates to the first century BC (Gasperini 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, nurac (nu) Alt (L), is on a military diploma (so 102) found near Posada, east Sardinia (Sanicola 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 (Liliiu 1990; Pala 1990; Stigtz 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 a geographical order from north to south (Fig. 9.1).

**Nuraghe La Varrosa** (Sorso) is situated in the Baronia region in northwestern Sardinia at an altitude of 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 the central tower. There does not seem to be a continuity of occupation between the Nuragic and Punic periods (Manca di Mores 1998a; Manca 1991, 1997).

**Nuraghe S. Efis** (Orose) is situated in the region 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 turned and re-used 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; Manca 1991, 1997).

**Nuraghe S. Euf (Orose)** is situated in the region 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 2008). The multi-tower Nuraghe 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 BC) (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 2008).

**Nuraghe Aidu Entus** (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) (Gasperi 1992, 303-6; Moravetti 1998, 275-8; Mastino 2001 and a clay matrix for votive breads (the breast of Ashtarte), terracotta moulds, and hundreds of thymiateria, many oil lamps, coins and a fragment of a shrine in tower B and the finds of numerous lamps (of Ashtarte), oil lamps, coins, thymiateria (Stigtz 2012a, Stigtz et al. 2015, Ibba 2018). Nuraghe Genna Maria (Villanovaforru) is situated in the Mammuthus 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 AD. 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 (a mould for votive breads), a clay matrix for votive breads (the breast 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 that the occupation between the nuragic period and the Punic period (Liliiu & Badas 1993; Atzeni et al. 1998).

**Nuraghe Su Malinu** (Villanovafranca) is situated in the Nurac region in central-southern Sardinia at an altitude of 403 m a.s.l. (Fig. 9.1, 9). 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 (a mould for votive breads), a clay matrix for votive breads (the breast 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 that the occupation between the nuragic period and the Punic period (Liliiu & Badas 1993; Atzeni et al. 1998).
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 seems to have been abandoned at the end of the late fifth and fourth centuries BC. 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 inland areas.

Nuraghe Arrubiu (Orroli) is situated in Sarcidano region in central Sardinia at an altitude of 513 m a.s.l. (Fig. 9.1, 13). The multi-tower Nuraghe was constructed in the Middle Bronze Age and early Iron Age and the late Punic period (Ugas 1989–1990; Ugas & Faderi 1990). Nuraghe Arrubiu (Orebi) 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 (Consu et al. 2003). The Nuraghe seems to have been abandoned at the end of the late Punic period (third century BC onwards). The Nuraghe was reused as a shrine around which a Phoenician settlement was built from the eighth century onwards. 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 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 central areas. 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.
internal areas (Van Dommelen & Finocchi 2008, 173). In the coastal territories, this difference is not always easily 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. Native Nuragic material is at its height. In other words, the phenomenon as it does not seem to be a sufficient explanation of 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 Nuragic and the Roman periods show that personas 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’Urchu (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’Urchu (San Vero Milis), the settlement has ceramic material that is clearly identifiable as nuragic from the early Iron Age throughout the eighth century bc, which shows a strong nuragic material culture that appears 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 communities in Phoenician 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 more evident.

In areas further inland, as in the case of Nuraghi Genna Maria (Villanovaolmo) and Su Maluna (Villanovafranca), where written evidence in many centuries is clear, the reuse is in some ways similar to that of late nuragic practice, although the types of craft used are mostly Phoenician and Roman. The ritually and socially charged space that usually serves 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 is, why? Is it due to a lack of reuse, the alter 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 over time? In any case, plants and animals are not necessarily tied to the period of reuse, and a newly settled community that reused the shrines after centuries of neglect. In the coastal areas, by contrast, in Nuraghe La Varriona (Sosu) the reuse of the tower and the corridor as a place of worship was placed 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).

The grandeur of the structures in itself do not have to recall ancestral values. For the Roman period for example, Nuraghe Santa Antonia (Torralla) illustrates this point well. Its central tower was still very impressive at over 20 m in height, but the Nuraghe was reused as an utilitarian space for agricultural activities (Colombi 2010). For the Punic period the Nuraghe Sa Tana e sa Mura (Villanovamonteone) shows the same outcome. The Nuraghe was incorporeal at its core and an ancillary room in the rural structure. In the latter case, and perhaps in that of Nuraghe Orriosi (Orroli), we may see the reoccupation of the sites by people who may come from Libya or mainland Italy. That demonstrates that the nuragic world did not end with the Romans but by a newly settled community that reused the shrine after centuries of neglect. In the coastal areas, by contrast, in Nuraghe La Varriona (Sosu) 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).

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, or Romans? This question, during this period, does not necessarily tie to the period of reuse, although some clues can be detected in the material and linguistic world.

It appears that in Monte Sirai (Carbonia), during the late Punic period the Nuraghe was re-used 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 posture and the costume of the figure points to 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 funerary 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 not less significant. I will limit my example to the Nuraghe San Silano (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 WC° written in Punic: it is a very short inscription that is represented as mere archaizing elements, of a strong palaeo-Sardinian substratum in the naming of people during the period of Punic and Roman domination on the island (Filippesdi 1994, 811). The second one is written in Latin and dates to the first century ad. It contains the text USRITENERCAUNI: these are two personal names, Ursiti and Neracun 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 datable to the first century ad, contains the text: qatibilin. (Dyson & Rowland 2007). The name clearly indicates that it refers to a place of identity. The other hand, detailed analyses of archaeological data, where the excavation permits us to identify the precise forms of reuse, demonstrate that the reuse cannot be fitted in a single general model that is valid for every period; Sardinia shows, in fact, considerable variety: Nuraghi are reused in distinct areas and also within the same area.
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, 209, 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 & Yoca 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 maniement 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.