ScARF Scottish Archaeological Research Framework

Regional Archaeological Research Framework for Argyll

Chapter 6. Neolithic, Chalcolithic and Bronze Age



Beaker from grave in Upper Largie © Alison Sheridan

Scottish Archaeological Research Framework

6. Neolithic, Chalcolithic and Bronze Age c 4000BC – 800BC

written by Alison Sheridan

with contributions, feedback, critical comment and participation at workshops from: Gabriel Cooney, Vicki Cummings, Simon Gilmour, Stephen Mithen, Aaron Watson, Caroline Wickham-Jones



Contents

Brief summary 4

6.1 Archaeological work (from antiquarian activity onwards) undertaken to date 5

6.2 Neolithic 8

6.2.1 The appearance of this new way of life and the switch from foraging-fishing-hunting 9

6.2.1.1 The appearances of the novel practices, things and beliefs: the 'Breton' and 'Carinated Bowl' Neolithics 12

6.2.1.2 The process whereby most or all people ceased to subsist solely on exploiting wild resources, choosing instead to adopt the farming lifestyle 16

6.2.2 Subsequent developments during the Neolithic period, from c 3750 BC to c 3000 BC 18

6.2.3 Late Neolithic Argyll, c 3000BC to c 2450 BC 19

6.3 Chalcolithic (c 2450–2200/2150 BC) 21

6.4 Bronze Age (2200/2150–800 BC) 26

6.4.1 The first centuries of the Early Bronze Age – a 'golden age' for Argyll and Bute (and especially Kilmartin Glen), 2200/2150–1900 BC 27

6.4.2 The rest of the Early Bronze Age and the Middle Bronze (1900 – c 1100/1000 BC) 33

6.4.3 Late Bronze Age (c 1100/1000–800 BC) 35

6.5 Bibliography 37

Brief Summary

Neolithic c 4300/3900 BC to c 2450 BC

Sometime between 4300 BC and 3900 BC a new way of living, featuring the cultivation of cereals and the management of domesticated animals, appeared in the area. This represents the beginning of what archaeologists call the Neolithic (New Stone Age) period. This new lifestyle also featured a novel technology – pottery making – and other new practices, including the construction of megalithic chamber tombs as communal houses for the dead, which were wholly alien to the lifestyle and beliefs of the indigenous communities who had lived in Argyll for several millennia. There has been much debate about how these novelties came to arrive in Britain and Ireland, with one school of thought arguing that the indigenous hunter-gatherer-fisher groups were the 'prime movers' for the introduction of these novelties, while another attributes the appearance to episodes of immigration by small farming groups from two areas in northern France. Some of the detail of this argument is presented in this section, with the Breton-style closed chamber and simple passage tomb with Breton-style pottery at Achnacreebeag, near Oban, reflecting one of these strands of Neolithisation.

Other Neolithic monuments in Argyll include the cursus monument and stone circles in Kilmartin and there is evidence indicating that rock art (mostly found in the form of cup marks and cup and ring marks, but also including spirals and lozenges) dates to this period. There is plentiful evidence for the existence of links with other parts of Scotland and with Ireland from the Early Neolithic onwards.

Chalcolithic (c 2450–c 2200/2150 BC) and Bronze Age (c 2200 BC/2150 – c 800 BC)

Further Continental novelties appeared in Argyll during the 25th century BC, including the use of metal for the first time – copper here, but elsewhere also gold – and the use of a novel style of pottery known as Beaker pottery. The period 2450–2200/2150 BC is known as the Chalcolithic, or Copper Age. Argyll has two of the earliest Beaker-associated graves in Britain, at Sorisdale on Coll and at Upper Largie, in Kilmartin Glen. Both of the inhabitants of these graves may have been Continental immigrants; indeed, recently obtained results from ancient DNA analysis of the Sorisdale individual confirm that her genetic ancestry lies on the Continent, not in Britain.

From the 22nd century BC, when across Britain and Ireland copper started to be alloyed with tin to make bronze, parts of Argyll, especially Kilmartin Glen, enjoyed a period of great prosperity, thanks to the ability of its elite to control the flow of much-needed metal from Ireland to elsewhere in Scotland and northern England. This wealth was expressed in building round cairns for the graves of the leaders of the community, in the use of Irish- and Yorkshire-style Food Vessel pottery and in lavish grave goods for the elite. Ancient monuments were modified and (in one case) relocated as part of this process of competitive conspicuous consumption. This 'golden age' lasted until around the 19th century, by which time cremation was the dominant funerary rite. The Late Bronze Age (around 1100–800 BC) was another period when social status was displayed prominently: this was when the elite participated in an extensive network of contacts along the Atlantic façade, making votive offerings of their precious metal possessions and indulging in impressive feasts. But the collapse of this network around 800 BC, combined with climatic deterioration and the concomitant expansion of bog, meant that some areas (including Kilmartin Glen) were abandoned.

Our understanding of the everyday lives of these people during the Chalcolithic and Bronze Age is limited by the relative scarcity of settlement evidence, although important Early Bronze Age settlements are known from Coll and Islay.

6.1 Archaeological work (from antiquarian activity onwards) undertaken to date

Compared with some other parts of Scotland, the region is relatively well served in terms of archaeological survey, fieldwork and research, extending back at least as far as the early 20th century with Professor Thomas Bryce's excavations of several chamber tombs on Bute (and Arran) in 1903 (Bryce 1904). Bryce's work followed on from earlier, antiquarian investigations, principally by Canon Greenwell (who excavated the Clyde cairn at Nether Largie in Kilmartin Glen, among other sites in Argyll and elsewhere: Greenwell 1866; Kinnes and Longworth 1985).

Significant contributions to survey, fieldwork and research during the third quarter of the 20th century were made by female archaeologists, namely Marion Campbell of Kilberry, who collated information about archaeological sites in mid-Argyll in the 1950s and early 1960s (Campbell and Sandeman 1962); Audrey Henshall, whose magisterial survey of the megalithic monuments – part of a nationwide survey of such monuments (Henshall 1972) – remains the key source of information on these sites; Dorothy Marshall, who excavated several Neolithic and Bronze Age sites on and near Bute, including the very important Early Neolithic shieling-like settlement at Auchategan in Glendaruel (Marshall 1978a), and who worked tirelessly to promote and research the archaeology of Bute (eg Marshall 1978b); and Elizabeth (Betty) Rennie of the Lorn Archaeological and Historical Society, who has undertaken field survey and excavation and has enthusiastically promoted the prehistoric archaeology of Lorn (eg Rennie 1993).

The survey and excavation work undertaken by Graham Ritchie and his Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) colleagues in preparing their Inventories of on the sites and monuments of Argyll, principally during the 1970s and 1980s (eg RCAHMS 1988; cf. Ritchie 1977), not only synthesised the results of previous work but also very substantially added to our understanding of specific sites and types of monument, most notably the closed megalithic chamber and simple passage tomb of early Neolithic date at Achnacreebeag (Ritchie 1970); kerb (and other) cairns (Ritchie et al. 1975); and the Early Bronze Age settlement at Ardnave (CANMORE ID 37488) on Islay (Ritchie and Welfare 1983). Further influential research into megalithic monuments in the region was undertaken by Jack Scott between the 1950s and 1970s: not only did he define Clyde cairns as a regionally specific type of chamber tomb (Scott 1969a), he also undertook excavations at the Clyde cairns at Brackley (Scott 1955) and Beacharra (Scott 1964) and at the Temple Wood stone and timber circles in Kilmartin Glen (Scott 1989). Work at the latter sites included an investigation of the circles' possible archaeoastronomical orientation. Archaeoastronomy features prominently in the study of prehistoric sites in Argyll, with Alexander and Archibald Thom having made claims for various orientations and observational devices as a result of their investigations from the 1960s to the 1980s (eg Thom and Thom 1990); Gerald Hawkins discovering a fallen standing stone in Kilmartin Glen, and discussing the orientation of several monuments in the Glen (Hawkins 1983); and Clive Ruggles producing a measured critique of previous work both here and elsewhere in Britain, and demonstrating the lunar orientation of the short stone rows of western Scotland (Martlew and Ruggles 1996; Ruggles 1999). Interest in this aspect of prehistoric monuments in Argyll continues with Douglas Scott's observations of solar and lunar orientations of monuments in Kilmartin Glen (Scott 2010) and elsewhere.

Much other survey, fieldwork and synthesis work has taken place in the region. Caves in Argyll have been investigated by Christopher Tolan-Smith, Clive Bonsall and the Lorn and District Archaeological Society (Tolan-Smith 2001; Bonsall et al. 2012; Connock 1985), with Bonsall et al. demonstrating that a shift in their

use can be discerned during the early Neolithic period, when in this part of Scotland they began to be used for funerary purposes (Bonsall et al. 2012). Argyll's rich and varied rock art has also received much attention, its location and meaning being explored in Richard Bradley's Rhind lectures publication, *Altering the Earth* (Bradley 1993). More recently, excavations by Andrew Jones at Torbhlaren in Kilmichael Glen shed new light on the possible date of rock art, and experimentation there by Hugo Anderson-Whymark demonstrated how such designs had been created and how they would have appeared when new (Jones et al. 2011). Surveys undertaken by Kilmartin Museum at Carnasserie and Kilbride farms uncovered 19 new rock art sites (Regan and Webb 2006, Regan 2007, Regan 2008, Regan 2009). The timber circles of Argyll have been considered as part of Kirsty Millican's survey of prehistoric timber monuments in Scotland (Millican 2007); and locational (and other) aspects of Argyll chamber tombs were discussed as part of Shannon Fraser's study of Neolithic monumentality in the west of Scotland (Fraser 2004). The surveys undertaken by Kilmartin Museum at Carnasserie and Kilbride farms identified five possible cairns and a further possible burial cairn was recorded at Barnluasgan (Regan and Webb 2006, Regan 2007, Regan 2008, Regan 2009). The prehistoric (and other) archaeology of Bute has recently been explored in depth in the Discover Bute Landscape Partnership Scheme (Duffy 2013; see in particular Finlay 2013 and Sheridan 2013) – an initiative that included updating the sites and monuments records in a community co-production initiative by RCAHMS (Geddes and Hale 2010) – while a synthesis of the Neolithic to Bronze Age prehistory of Kilmartin Glen has been presented by the current author (Sheridan 2012a).

While there has not been as much developer-funded excavation as in some other parts of Scotland, several sites of key importance to our understanding of the periods in question have been excavated over the last 40 years, either as rescue or research projects. The rescue excavations carried out from 1982 to 2005 in the gravel quarry at Upper Largie highlighted the wealth of non-megalithic prehistoric monuments in this part of Kilmartin Glen, with finds including an Early Neolithic post-built cursus, a timber 'avenue', a timber circle, a Continental (arguably Dutch)-style Beaker grave and an Early Bronze Age grave yielding a unique, Irish- and Yorkshire-style of Food Vessel (Sheridan 2008; 2012b, Cook et al. 2010). And excavations in the quarry by Clare Ellis in November 2016 and February 2017 have produced a very important assemblage of early Grooved Ware – a rare discovery for this part of Scotland. Just outside Argyll and Bute, but geographically integral to our narrative, Alison Haggarty's excavations on Machrie Moor, Arran (Haggarty 1991), revealed that this complex of stone circles had been preceded by a Late Neolithic timber circle associated with Grooved Ware pottery, and the current author was able to draw out the broader significance of these finds in terms of a southerly spread, from Orkney, of the use of this kind of circular monument and of Grooved Ware around the 30th century BC (Sheridan 2004a). Important information about prehistoric settlement and land use, particularly during the Bronze Age, was provided by Colin Burgess' (and others') excavation of an Early Bronze Age settlement at Kilellan on Islay (Ritchie 2005) and by John Barber's excavations along a transect across part of Arran (Barber 1997). Barber's work revealed the attempts made by prehistoric farmers to deal with the issue of peat expansion during a second millennium climatic downturn. Most recently, Oliver Harris' excavation of the Cladh Andreis Clyde cairn, Ardnamurchan (Harris et al. 2014) and Vicki Cummings' excavation of a Clyde cairn at Blasthill on the Kintyre peninsula – part of her and Gary Robinson's broader research project, the Southern Kintyre Project – have produced some valuable new chronological data for this type of chamber tomb (Cummings and Robinson 2015a; 2015b), while the Forestry Commission recently commissioned a measured survey of the chamber tombs on its estates on Arran. Such work is relevant to the Clyde cairns of Argyll and Bute.

In addition to the site- and area-based work mentioned above, there has been a considerable amount of research on the artefacts and human remains found in Argyll, some of it undertaken as part of more geographically extensive corpora. Thus, for example, the small number of Early Neolithic axeheads of Alpine jadeitite found in Argyll (eg at Appin) have recently been analysed and published as part of a major international French-led research project, Projet JADE (Sheridan and Pailler 2012), while the similarly rare, later Neolithic carved stone balls found in Argyll were listed in Dorothy Marshall's nationwide corpus (Marshall 1977). Torben Ballin's recent research on the use of Arran pitchstone (Ballin 2009) has documented the increase in its use and in the distribution of pitchstone artefacts during the Neolithic. The Beaker pottery of Argyll was covered in David Clarke's nationwide corpus of funerary Beakers (Clarke 1970) and in Alex Gibson's corresponding study of non-funerary Beakers (Gibson 1982); and the region's Vase Urns and Collared Urns featured in the corpora by Trevor Cowie (1978) and Ian Longworth (1984; see also Waddell 1995 on Cordoned Urns). The Irish connections of many of Argyll's Food Vessels were highlighted by Alison Young's study of Tripartite Vase Food Vessels (Young 1951), and the daggers of Argyll (including an example with a gold pommel-band from Blackwaterfoot on Arran) were catalogued by Audrey Henshall (Henshall 1968) and Sabine Gerloff (Gerloff 1975; see Sheridan and Cowie 2003 for a more up-to-date distribution of Scottish dagger and knife-dagger graves). Needham and Cowie's recent study of a probable representation of a halberd on a decorated slab from the Ri Cruin cist has discussed the significance of halberds more widely (Needham and Cowie 2012), and further discussion of the halberd hoard from Largiezean (alternative name Langalbuinoch, Kingarth) on Bute can be found in Sheridan's review of the Chalcolithic and Bronze Age in Bute (Sheridan 2013). The Early Bronze Age jewellery of jet and jet-like materials is the subject of ongoing long-term nationwide research by the current author (eg Sheridan and Davis 1995; Sheridan 2013), while the Bronze Age gold finds of Argyll were dealt with in George Eogan's corpus of Irish and British gold (Eogan 1994). The remarkable Late Bronze Age wooden figure found at Ballachulish featured in a broader study of prehistoric British wooden figures by Bryony Coles (Coles 1998), while the remarkable and very rare Late Bronze Age bronze flesh-hook from Inveraray was discussed in Stuart Needham's and Sheridan Bowman's study of this specific class of artefact (Needham and Bowman 2005). As for other artefact studies, Jack Scott, following Isla McInnes (1969), attempted to characterise the Neolithic pottery of this part of Scotland, coining the terms 'Rothesay style' (Scott 1977) and 'Beacharra Ware' (Scott 1964) for specific types of Early to Middle Neolithic pottery. (See also Sheridan 2003 for a more recent summary of the development of Neolithic pottery in western and south-west Scotland). Scott also discussed the distribution of imported Antrim flint, of porcellanite axeheads from Antrim and of tuff axeheads from Great Langdale in Argyll, comparing the pattern with that of Dumfries and Galloway (Scott 1969b). Further research into imports of Antrim flint, by Alan Saville, was triggered by the discovery of a large hoard at Auchenhoan in 1989 (Saville 1999).

Radiocarbon-dating programmes by Rick Schulting (Schulting 2004), by National Museums Scotland (as reported annually in Discovery and Excavation in Scotland since 2005, and more occasionally between 1997 and 2003) and by the Beaker People Project (Sheridan et al. 2007) have clarified the currency of Clyde cairns and of Chalcolithic and Early Bronze Age ceramic traditions, while Clive Bonsall's dating of human remains from Raschoille Cave near Oban has demonstrated their Early Neolithic date (Bonsall et al. 2012). Isotopic analysis of human remains by Rick Schulting and Mike Richards (eg Schulting and Richards 2002; Richards and Schulting 2006; Schulting 2013) has made a major contribution to the debate concerning the Mesolithic-Neolithic transition, demonstrating a contrast between the terrestrial-based diet of Neolithic coast-dwellers and the strongly marine-

based diet of the Late Mesolithic inhabitants of Oronsay. Further isotopic work has been undertaken as part of Jessica Marie Bownes' current doctoral research undertaken at the SUERC laboratory, East Kilbride. Other isotopic analysis, undertaken on Chalcolithic and Early Bronze Age skeletal material from Argyll as part of the Beaker People Project (and, before that, as part of Janet Montgomery's doctoral research) has confirmed that people's diet continued to be overwhelmingly terrestrial in nature. It has also highlighted the non-local origin of the young woman buried with an early, All-Over-Cord Beaker at Sorisdale on Coll (Jay et al. 2012; Parker Pearson et al. in press), contrasting with the more local origin of the somewhat later young woman who had been buried wearing a spacer-plate necklace of jet and jet-like materials on Inchmarnock (Sheridan 2013). The foreign origins of the Sorisdale individual have been confirmed by recent analysis of her DNA, which has revealed that her genetic ancestry lies on the Continent, not in Britain (Olalde et al. in press) Other research into human remains from the region has confirmed a rare case of trephanation (ie 'surgical' removal of bone from the skull, thereby perforating it in an attempt to heal an illness) at Mount Stuart (alternative name Kerrycroy Bridge, Bute – another case of a young woman buried wearing a spacer-plate necklace, this one almost exclusively of jet (Kranioti and Sheridan 2012).

Some important palaeoenvironmental research has been undertaken in Argyll, most recently involving a detailed reconstruction of the Neolithic and Chalcolithic landscape around Torbhlaren rock art site (Tipping et al. 2011). See also Section 4, Tipping et al. (2012) and ScARF for a more general assessment of the strengths and weaknesses of the palaeoenvironmental record in Scotland, and for some interesting suggestions concerning climate change during the period in question.

Finally, as noted elsewhere in this document, the contribution of community-based (and community-orientated) archaeology cannot be overstated. The region benefits from the work of active Societies, museums and individuals with a passion for archaeology; their activities have greatly contributed to enhancing understanding and awareness of the Neolithic, Chalcolithic and Bronze Age (and other) archaeology in this part of Scotland. The Discover Bute Landscape Partnership Scheme (Duffy 2013) demonstrated just how much can be achieved through community co-production; and that is also a theme of much of the work undertaken by Northlight Archaeology (eg in its experimental construction and burning of a timber circle on Arran and by the Forestry Commission on its estates, led by Matt Ritchie).

6.2 Neolithic

A wholly new way of life based on the management of domesticated plants and animals – all imported from the Continent – and featuring a novel technology (pottery), novel practices (including the construction of funerary monuments) and novel beliefs appeared and became established in this part of Scotland, in stark contrast to the forager-fisher-hunter lifestyle and its associated material culture and practices that had characterised the preceding millennia. This is what is defined as the Neolithic period, and it will be dealt with here in three sections:

6.2.1 The appearance of this new way of life and the switch from foraging-fishing-hunting

The term 'Mesolithic-Neolithic transition' is usually employed to refer to this period of change (and is indeed used in Section 5 of this research framework, dealing mainly with Upper Palaeolithic and Mesolithic Argyll and Bute), but in fact it is necessary to deconstruct this concept into two chronologically separate phenomena, namely:

1. The appearance (or rather appearances – since this appears to be a multi-strand

phenomenon) of the novel practices, things and beliefs; and

2. The process whereby most or all people ceased to subsist solely on exploiting wild resources, choosing instead to adopt the farming lifestyle.

The 'how', 'why' and 'when' questions relating to these phenomena as they occurred within Britain and Ireland have been the subject of intense debate for the last quarter century (eg Whittle et al. 2011; Thomas 2013; Sheridan 2010a; 2012a; 2015), with a key point of contention being whether the prime movers for the appearance of this new lifestyle were the indigenous forager-fisher-hunters or immigrant farmers from the Continent. The arguments for the various positions have been discussed exhaustively elsewhere, but for the benefit of those readers who have not been following the debate, the key arguments can be summarised as follows:

The 'indigenist' model (as articulated most fully by Julian Thomas in his 2013 book, *The Birth of Neolithic Britain*, and see also Cummings' in this publication): this posits that there had been regular contact between indigenous hunter-gatherer-fisher communities in Britain (including Argyll) with farming communities on the Continent through the fifth millennium BC – farming having reached the north-west corner of the Continent a millennium before it appeared in Britain and Ireland. Evidence proposed to support this view includes the presence of Alpine axeheads of jadeitite and other rocks, which are known to have been manufactured during the fifth millennium. Thomas argues that, as a result of this putatively regular seaborne contact over several centuries during the fifth millennium BC, indigenous groups became familiar with the different lifestyles, beliefs, and practices of their Continental farming neighbours. This contact engendered an interest, among some of the indigenous people, in 'the accumulation of collective property' (Thomas 2013, p.423) and these people selectively adopted specific elements of the novel lifestyle and practices from different parts of the Continent 'from Armorica to Jutland and Scania', indulging in a kind of cultural bricolage and recombining the elements to make a variegated and distinctively British Neolithic (ibid., 424). At a certain point- not simultaneously, but over the course of three centuries between the forty-first and thirty-eighth centuries BC – 'there must have been an active decision [among different communities] to "become Neolithic" (whatever that entailed) … What this probably involved was an identity process, in which a social group resolved to immerse itself in one network of contacts and relationships, while relinquishing another: ceasing to "be Mesolithic" (ibid., 425) and becoming 'property-owning corporate groups' in 'house societies' (ibid., 296). As for how the indigenous groups acquired the alien skills such as potting, flint mining [in southern England], cereal cultivation, and herding domesticated animals, this was achieved by visiting the Continent and serving a kind of apprenticeship: '[cattle-herding] "apprentices" who might have been attached to communities in northern France for a decade or more' (ibid., 406), and by having small numbers of foreigners coming over, perhaps as marriage partners, as he speculates in the case of his putatively female potters (ibid., 373). Thus, according to Thomas, although some Continental people from farming communities came over to settle, he rejects the idea that there had been a process of immigration – however small in scale – of entire groups or communities from the Continent.

In support of this 'indigenist' model, Thomas and others have pointed to the fact that Neolithic material has been found in areas of Mesolithic activity, arguing from that that there had been a continuing interest in – and therefore, according to the 'indigenist' model, continuity in the people using the same places. Some have even claimed that the Mesolithic shell middens on Oronsay and elsewhere served as a kind of monument, pre-figuring the cairns of the Neolithic monuments.

The 'immigration followed by acculturation'

model (as espoused by the author of this section – see, for example, Sheridan 2010): this posits several small-scale episodes of immigration from different parts of northern France to different parts of Britain and Ireland (including Argyll), for different reasons, at different times (and with different reactions from indigenous communities) between c 4300 BC and 3800 BC. The two 'strands' of this immigration to have affected Argyll are one from the Morbihan region of Brittany, arriving at some point between 4300 BC and 3900 BC, and another from the Nord-Pas de Calais region of northern France (via the east coast of Scotland), around 3800 BC, as outlined below. These movements can be understood in the context of socio-economic changes in each of these regions of France: in Brittany, there were profound social and ideological changes following the collapse of a highly stratified, theocratic society dominated by a small number of men, while the emigrants from the Nord-Pas de Calais region were part of the consequence of over-population of the Paris Basin following a millennium-long growth in the farming population there, resulting in northwards and eastwards expansion from this area.

In this model, the French immigrants might have co-existed beside the indigenous hunter-gatherer-fisher groups – possibly not coming in contact with each other – for several generations. It then appears that the indigenous groups chose to adopt the novel lifestyle, practices and beliefs; whether this was because they perceived farming as a more reliable source of food, we cannot be sure. However, the switch seems to have occurred relatively rapidly, as far as can be discerned.

Evidence in support of the 'immigration then acculturation' model includes:

1. the wholly novel and alien nature of the Neolithic way of life – featuring domesticated plants and animals that can only have been imported from the Continent – which can be matched closely in the regions of France from which the putative immigrants came;
2. the appearance of a wholly new technology – pottery, expertly made from the beginning – and a different approach to the procurement, exploitation and working of lithic resources, all of which can be matched in northern France;
3. the appearance of a wholly novel and alien way of dealing with the dead, and of Continental beliefs and practices (eg those relating to the use of Alpine axeheads);
4. the evidence for a radically different diet, with farmers avoiding marine resources whereas a predominantly marine diet is seen in most of the Oronsay Mesolithic individuals;
5. the clear evidence for a long tradition of deep-water navigation by the inhabitants of Brittany, which includes crossing the Bay of Biscay to Iberia (where a monument similar to the Achnacreebeag tomb, and with Breton-like pottery, has been found)
6. the aforementioned social and economic context on the Continent, which provides a convincing rationale for why some people should have sought to relocate elsewhere.

As argued by the author in detail elsewhere (eg Sheridan 2015), the many problems with the 'indigenist' model include the following:

For these and other reasons, the author of this section is strongly in favour of the 'immigration and acculturation' model. The results of ancient DNA analysis of a Mesolithic individual from Cnoc Coig on Oronsay, and of several Early Neolithic individuals from Raschoille and MacArthur Caves, shortly to be published, will provide powerful new evidence to add to the debate. The initiation of the Neolithic in Argyll and Bute therefore stands at the cutting edge of one of the biggest questions in archaeological research and future research works should focus on investigating whether there is any evidence for the veracity of the various proposed acculturation process theories.

1. There is no evidence of 5th millennium regular contact from Britain and Ireland to the Continent (or vice versa), as implied in

Garrow and Sturt's phrase 'already busy seaway' (2011). The domesticated cattle from Ferriter's Cove in Ireland that is sometimes cited as such evidence is arguably more likely to have related to an episode of very small-scale immigration (Sheridan 2010; 2015), while the 'Continental'-style lithics found by Garrow and Sturt at St Martin's in the Scilly Isles (Anderson-Whymark et al. 2015) – if they do genuinely attest to Late Mesolithic contact along the Channel, since the typo-technological match is not an exact one – remain a one-off candidate for interaction at this time. (There is one other claim for contact, namely aDNA evidence from sediment suggesting the presence of wheat at Bouldnor Cliff off the Isle of Wight as early as c 6000 BC (Gaffney et al. 2015). The nearest place from which wheat could have come at this early date is the Mediterranean. The claim has however been met with justifiable scepticism, not least because it leaves many key questions unanswered.) There is nothing on the Continent that can be pointed to as evidence for contact with Britain and Ireland – no Scottish Mesolithic-style lithics in Brittany or Nord-Pas de Calais, for instance. And the claims that Alpine axeheads had arrived prior to 4000 BC (as repeated, for example, by Anderson-Whymark and Garrow in 2015 albeit more cautiously than Thomas (2013, 273–83)) are not backed up by any evidence: no Alpine axehead has ever been found in a Mesolithic context, and all the available dating evidence points to their having been old when brought to Britain and Ireland by migrant farmers. Moreover, the depositional practices associated with these axeheads (including the use of watery areas) are those seen on the Continent, and stand in contrast to the depositional practices of indigenous, Mesolithic communities.

2. The oft-repeated argument for spatial correlation (and implied continuity) between Mesolithic and Neolithic activity is seriously weakened by the fact that, where the material in question has been radiocarbon dated, there is a very considerable time gap between the two. This is the case, for example, with the Neolithic chamber tomb at Glecknabae on Bute, which was built partly on top of a Mesolithic midden. Radiocarbon dating of animal bone from the midden and of human bone from the chamber tomb revealed that the former, at 4460–4270 cal BC, is some 2000 years older than the latter. Even allowing for the probability that the human bone post-dates the construction of the chamber tomb by a long time, we are still dealing with a difference of several centuries between the Mesolithic and Neolithic activities (Sheridan et al. 2012). The same can be argued for the evidence from Islay, reviewed in Section 5: at Bolsay there is a considerable interval between the 'Mesolithic' and the 'Neolithic' dates, suggesting a punctuated palimpsest of activity, rather than continuity.
3. The documented movements of Late Mesolithic communities in Britain and Ireland are relatively local, as the evidence from Oronsay (Mellars 2004) and Islay, and from the regionally variable lithic assemblages, indicates (Anderson-Whymark et al. 2015). Given this relatively local focus, it seems impossible to conceive of Mesolithic communities in Argyll sending representatives on long sea journeys to the Continent to be 'apprentices' to learn the ways and techniques of farmers, as Thomas has claimed.
4. Claims that the Neolithic way of life was not so very different from that of the hunter-fisher-gatherers, especially in terms of mobility, are simply not supported by the evidence. The fact that some members of the farming community moved to higher pastures during the summer months as part of a transhumant style of herding is not in any way comparable to the whole-community movements that were part of the hunter-gatherer-fisher communities' annual round of subsistence activities.
5. Evidence that farmers also hunted and gathered wild resources – something that is held up by some as evidence that they were hunter-gatherer-fisher communities who

simply adopted elements of the Neolithic lifestyle – is not proof that farmers had been indigenous hunter-gatherer-fishers. The farming communities on the Continent undertook hunting and gathering as well as cereal growing and managing domesticated animals.

6. Elsewhere, archaeological evidence for hunter-gatherer-fisher communities adopting elements of a Neolithic lifestyle is abundant (eg in Denmark), and it usually takes the form of the presence of a few Neolithic-style artefacts, or selected domesticates, in Mesolithic sites, and perhaps some Mesolithic artefacts in Neolithic sites. So far, the record for Argyll shows no such patterning.
7. The 'indigenist' model fails to accept the possibility that the transition to a Neolithic way of life (as far as the indigenous communities are concerned) occurred after that new way of life had appeared in the area.
8. The newly obtained results of ancient DNA analysis of Early Neolithic individuals from Raschoille and MacArthur Caves, and from elsewhere in Britain (Olalde et al. 2017) provide irrefutable evidence that farming was introduced by immigrants from the Continent.

Moreover, the criticisms levelled at the author's multi-strand 'immigration and acculturation' model, including attempts to downplay the Breton design origin of the Late Castellic pottery from Achnacreebeag, have been consistently addressed and thoroughly dealt with in publications including Sheridan 2012c, 2015 and 2016. See also 'The Mesolithic-Neolithic transition in Argyll – an alternative view'.

For these and other reasons, the author of this section is strongly in favour of the 'immigration and acculturation' model. Future research now needs to focus on investigating whether there is any evidence for the acculturation process, and on assessing for how long the purely Mesolithic lifestyle persisted.

6.2.1.1 The appearances of the novel practices, things and beliefs: the 'Breton' and 'Carinated Bowl' Neolithics

In Argyll, as noted above, the earliest evidence for a Neolithic way of life takes two discrete forms, attesting to the existence of two strands of Neolithisation (as discussed elsewhere, for example in Sheridan 2010a). The first strand (Figure 48) relates to a northward movement up the Atlantic façade of small groups of settlers from the Morbihan region of Brittany, as attested by the Morbihan-style closed megalithic chamber and simple passage tomb, with Morbihan-style pottery (including a Late Castellic bowl), at Achnacreebeag (Ritchie 1970; Sheridan 2010) (Figure 49).

Similar monuments are known elsewhere in western Scotland (eg the north-west chamber at Greadal Fhinn in Ardnamurchan: Ritchie 1970, 37), at the north-west and south-west tips of Wales, and around the northern half of Ireland, always in coastal (or near-coastal) locations (Figure 50). No settlements or other evidence relating to the builders of these monuments have yet been found in Britain and Ireland, but it is known that, in the Morbihan, they had already been farming for several centuries. Similarly, there is no radiocarbon date for the construction of the Achnacreebeag monument (and no chance of obtaining such a date), and radiocarbon dates obtained for similar monuments at Carrowmore in County Sligo, Ireland, have been subject to trenchant (and justified) critique (Bergh and Hensey 2013). At present their dating, and that of Late Castellic pottery, is based on dates from Brittany and Normandy, where they date to between 4300 BC and c 3900 BC. The British and Irish monuments and pottery are therefore likely to fall within this date bracket, and could lie towards its end.

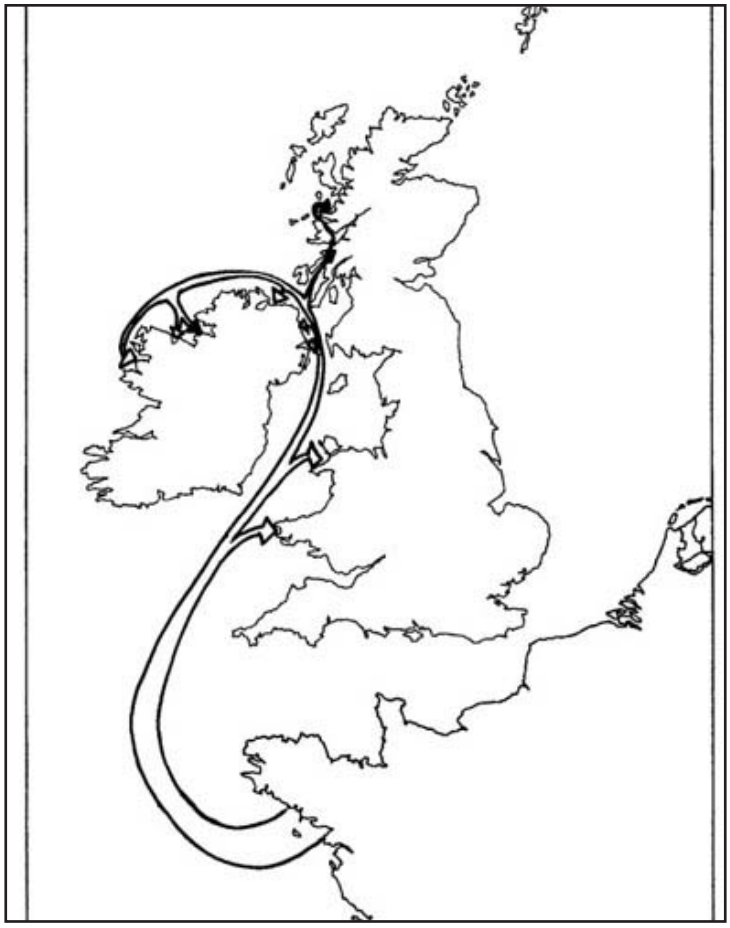

Figure 48: The Atlantic façade strand of Neolithisation. © Alison Sheridan

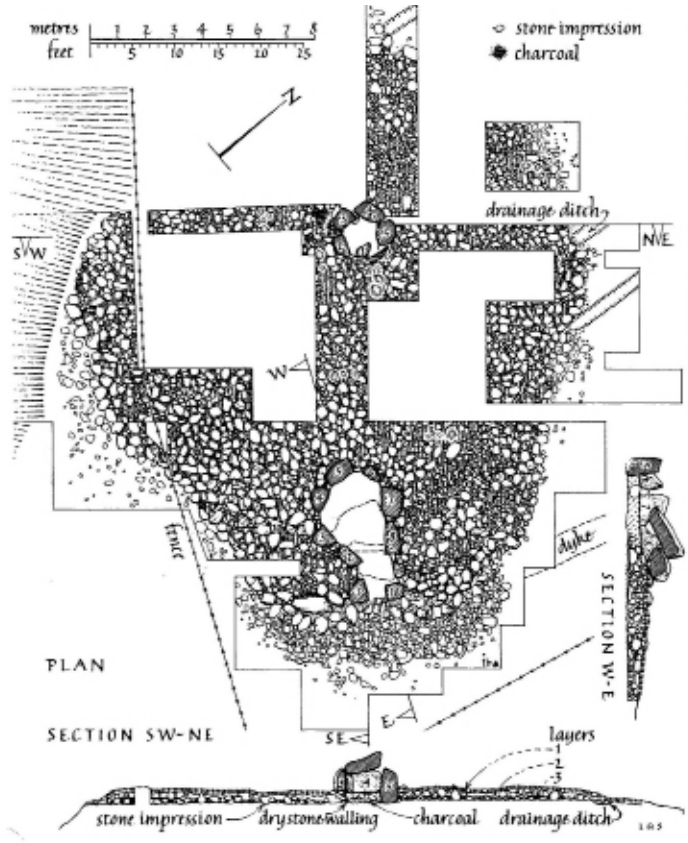





Figure 49: Achnacreebeag: left, ground plan showing central closed chamber and secondary simple passage tomb (© HES); top right: view of the central closed chamber (©HES); bottom right: Late Castellic-style bowl (© NMS)

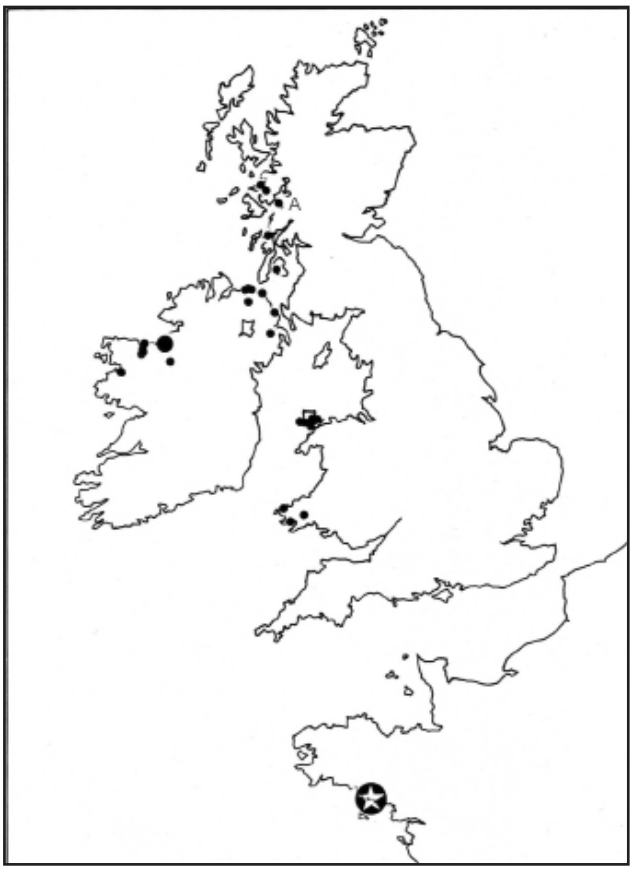

Figure 50: Distribution of Breton-style closed chambers and simple passage tombs; the star indicates the Morbihan region of Brittany and the 'A' indicates the location of Achnacreebeag. From Sheridan 2010



Figure 51: The Carinated Bowl strand of Neolithisation. © Alison Sheridan

The second strand of Neolithisation in Argyll (Figure 51) relates ultimately to a different northward movement, again of small numbers of immigrant farmers, this time from the Nord-Pas de Calais; this has been named the 'Carinated Bowl [or 'CB'] Neolithic', after its distinctive style of pottery (Figure 52; Sheridan 2007; 2010a).

These people had been farming for a millennium by the time they arrived in Britain. The appearance of this CB Neolithic in Argyll – extending as far north as Islay and the Cowal peninsula, as excavations at Newton (McCullagh 1989) and Port Charlotte on Islay (Harrington and Pierpoint 1980), and at Auchategan, Glendaruel (Marshall 1978) make clear (and see Sheridan 2012b on the 'CB Neolithic' presence in Kilmartin Glen) – is likely to relate to a rapid south-westerly spread of settlers from eastern Scotland, moving along major river valleys and the Great Glen, rather than to direct movement from northern France.

Much more is known about these people: in addition to their distinctive pottery style (Carinated Bowl pottery – one of several variants of Chasseo-Michelsberg pottery that developed towards the end of the fifth millennium in northern France and Belgium), we know that:

- in some parts of Scotland the first arrivals built large rectangular communal timber houses (halls), staying there until people felt sufficiently well established to 'bud off' into individual households;
- they initially used non-megalithic communal funerary monuments, usually involving rectangular timber mortuary structures that were usually burnt down and covered by long or round mounds; importantly, however, we know that they also buried their dead in the cave at Raschoille near Oban (Connock 1985; Bonsall et al. 2012), and elsewhere in Scotland

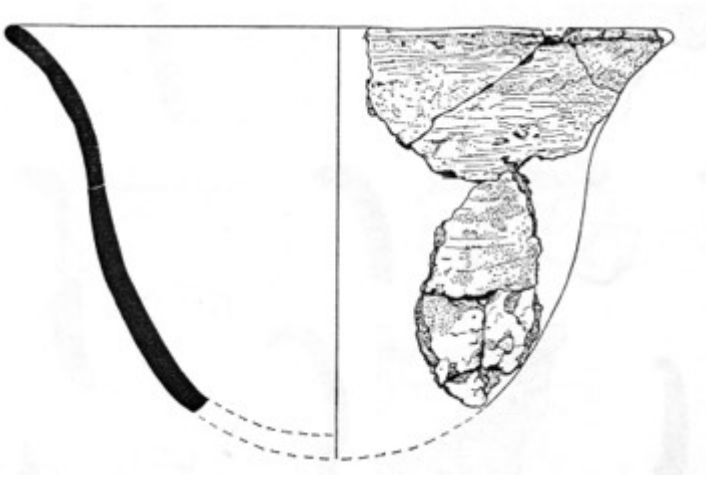



Figure 52 (above, left): Traditional Carinated Bowl pot from Auchategan. From Marshall 1978a; reproduced courtesy of the Society of Antiquaries of Scotland

Figure 53 (above, right): Alpine jadeitite axehead from Appin. Image © National Museums Scotland

(and Ireland) they also cremated people on open pyres, covering them with round mounds (as at Boghead, Aberdeenshire: Sheridan 2010);

- they brought with them their sacred and ancient axeheads made of jadeitite and other Alpine rocks, as precious and talismanic heirlooms (rather than as workaday axeheads: Sheridan and Pailler 2012; Figure 53);
- they introduced to Scotland the practice of using ground stone axeheads – necessary for clearing the forest and working timber for their houses, tools and monuments – and they sought out good sources of stone for making them;
- they also introduced new styles of small lithic artefact (eg leaf-shaped arrowheads) and a new style of knapping flint (Warren 2005), and they also sought good-quality flint and other types of stone; furthermore, they introduced technology relating to the processing of cereals (i.e. saddle querns and rubbers);
- they rapidly established networks of contact over which they exchanged objects (such as pitchstone artefacts and stone axeheads), ideas and probably people;
- they grew cereals (wheat and barley) and flax in small plots on good agricultural land that they had sought out, and kept domesticated cattle, sheep/goats and pigs. They also hunted wild animals (as is clear from the yew bow found at Rotten Bottom, Dumfries and Galloway: Sheridan 2007) but they did not consume marine foods (Schulting and Richards 2006). The site at Auchategan (Marshall 1978a) suggests that they practised transhumance, this being a probable summer camp.

The date of the arrival of the CB Neolithic in this part of Scotland is likely to fall within the 39th century or early 38th century BC; at Newton on Islay, a mixed-species sample of charcoal associated with CB pottery has produced a date of 3945-3640 cal BC (to use the Bayesian-modelled calibrated version as cited in Whittle et al. 2011, 813). It is unclear whether the individuals buried in Raschoille cave belong to this strand of the Neolithic, but their calibrated date ranges extend back to the 39th century BC (Bonsall et al. 2012), as does a recently obtained date for an individual at Macarthur Cave (Armit et al in press). (See Sheridan 2012a for a critique of Whittle et al.'s (2011) date estimates for the appearance of the Neolithic lifestyle in different parts of Scotland.)

6.2.1.2 The process whereby most or all people ceased to subsist solely on exploiting wild resources, choosing instead to adopt the farming lifestyle

As indicated above, the practices, material culture and beliefs of these first farmers in the area stand in stark contrast to those of the forager-fisher-hunters: for example, the way in which the Late Mesolithic inhabitants of Oronsay dealt with their dead (by laying them out on their shell middens to be excarnated naturally) is completely different from that practised by the farming groups, who built megalithic monuments (in the case of the Breton settlers) and timber monuments (in the case of the CB settlers) and also deposited their dead in caves. Similarly, the emphatic avoidance of marine foodstuffs as shown in the bodies of these Early Neolithic farmers stands in complete contrast to the overwhelmingly marine nature of most of the Mesolithic inhabitants of Oronsay (Richards and Schulting 2006 Schulting 2013).

A key point of interest, and of continuing debate, is how these very different communities interacted (if at all); how long the Mesolithic lifestyle based on exploiting exclusively wild resources continued after the appearance of farming; and why this lifestyle seems to have disappeared.

The currently available dating evidence, reviewed in Section 5 of this framework, suggests that there could have been a period of several generations when farmers and forager-fisher-hunters coexisted within a few kilometres of each other, perhaps unaware of each other, in view of the low population densities involved. The strongest evidence for this is offered by recently obtained radiocarbon dates on human and boar remains from the Cnoc Coig shell midden, which lie within the first quarter of the fourth millennium (corrected for marine effect; Charlton et al. 2016, and see also Milner 2010). Quite how long this period of overlap continued is a moot point: the 'palimpsest' nature of the evidence from multi-period sites such as the Islay sites discussed by Mithen et al. in Section 5 of this framework makes it hard to be certain whether there had been genuine continuity of use of these sites from indigenous foragers to farmers, or whether in fact there had been a long gap in activity.

Whatever the length of the overlap, clearly a process of acculturation seems to have taken place eventually and possibly swiftly, with the demise of the purely fishing-hunting-foraging way of life. This is starkly illustrated in the isotopic and lipid evidence relating to human diet, with no individuals having a 'Mesolithic' dietary signature being known to post-date the aforementioned Oronsay shell midden individuals. (For a recent summary of the 'diet' issue, see Sheridan and Pétrequin 2014.) It appears that indigenous groups may well have 'bought into' the promise of a superficially more reliable food supply, adopting farming.

It has been argued by some (Bonsall et al. 2002) that climate change around the turn of the fifth millennium affected the switch in subsistence practice, but the evidence is not convincing, and, the author would argue that the argument fails to take into account that the appearance of 'the Neolithic' can be related to economic and social changes in different parts of northern France (as argued, for example, in Sheridan 2010a). For further information about the palaeoenvironmental conditions around the late fifth and early fourth millennia, see Section 4.

The key research questions are as follows:

This requires field survey, particularly in the areas around the monuments: not easy given the rough pasture that surrounds most of the candidate sites. It also requires palaeoenvironmental investigation, to check for signs of Early Neolithic cereal cultivation in the area. For dating the appearance of the Breton 'strand' of Neolithisation, it will be necessary to undertake excavation at 'candidate' monuments (ie the other closed polygonal chambers and simple passage tombs, as identified by Graham Ritchie.

1. What exactly was the process, timing and tempo of the acculturation of indigenous fisher-hunter-gatherer groups? How late did a lifestyle based solely on the exploitation of wild resources continue? Is there any reason at all to accept Bonsall et al.'s (2002) argument for environmental change having had an impact on the lifestyle of the fisher-hunter-gatherer groups such as to make them more receptive to growing crops and herding domesticated animals?
2. In addition to the examination of 'Mesolithic' assemblages for signs of 'Neolithic' traits (and vice versa), as Mithen advocates – something that will have to take into account any possible time interval between the deposition of the 'Mesolithic' and 'Neolithic' material, and the question of residuality – we need to examine and date more shell middens (cf. Bonsall et al. 2012) to assess how late the process of exploiting marine resources continued, and to what extent this was part of a purely 'Mesolithic'-type lifestyle (as opposed to a minor element in a Neolithic lifestyle). Furthermore, work is currently underway to assess the aDNA profile of Mesolithic individuals from Cnoc Coig and their contemporary 'Neolithic' counterparts from Raschoille Cave and Macarthur Cave. This should reveal whether we are dealing with (at least) two discrete populations in early fourth millennium Argyll and Bute.
3. Where did the builders of the Breton-style closed chambers and simple passage tombs live, and what was their lifestyle and subsistence practice? And when, precisely, did these putative Breton immigrants arrive?
4. Where (in addition to the sites we already know) did the CB Neolithic settlers live, and what precisely was their subsistence strategy? Is their settlement organisation the same as elsewhere in Scotland (as reviewed, for example, in Sheridan 2007)? And are there any non-megalithic CB funerary monuments in Argyll and Bute, such as we see at Lochhill and Slewcairn in Dumfries and Galloway, for instance (Masters 1973; 1975; Millican 2012)? This, too, requires field survey and palaeoenvironmental investigation; and should any candidates for non-megalithic funerary monuments be found, excavation is recommended. The various Neolithic lithic scatters discovered as part of the Southern Kintyre Project (Cummings and Robinson 2015b) need to be investigated further, to see whether they relate to Neolithic settlement sites; in particular, the rectangular ditched structure found at Macharioch, cutting through a Late Mesolithic flint scatter, deserved further investigation to check whether it may relate to a Neolithic house or not.
5. Why were some of the early Neolithic inhabitants buried in a cave (Raschoille cave) as opposed to a built funerary monument? In theory, if there were sufficient individuals from a range of funerary sites to provide aDNA data, we might be able to detect whether the specific choice of funerary practice related to the traditions of different groups. Currently, however, while the Raschoille Cave individuals offer excellent prospects for gaining aDNA evidence, there is a dearth of contemporary human remains from built monuments in the area, with Achnacreebeag having been looted long ago. Note that individuals from the Clyde cairn at Clachaig, on Arran – just outside the RARFA area – have been included in the GENSCOT ancient DNA programme.
6. What was the nature of the vegetation and climate, and what was the sea level, around the late 5th and early 4th millennium? This relates to the broader need for a more comprehensive picture of the palaeoenvironment throughout prehistory, as discussed in Section 4

6.2.2 Subsequent developments during the Neolithic period, from c 3750 BC to c 3000 BC

Note: since these have already been discussed by the present author in some detail in previous publications (most recently Sheridan 2012a,

and see also Sheridan 2004a), the reader is recommended to consult those for a fuller discussion. It is clear that once both sets of putative immigrant farming groups (i.e. the Breton 'strand' and the 'Carinated Bowl Neolithic strand') became settled in Argyll and Bute, they flourished and spread. This is seen, for example, in the construction (probably around 3600 BC) of a bigger, 'better' passage tomb at Achnacree, not far from Achnacreebeag (Henshall 1972, 355–7), and the expansion of passage tomb building to the Hebrides, the NW and NE mainland of Scotland, and the Northern Isles (Sheridan 2004b; 2014a). It is also seen (with regard to the 'CB Neolithic') in the construction of the simple stone chamber at Ardnadam, Mid-Argyll (Henshall 1972, 331, 333) and, subsequently, of 'Clyde'-type chamber tombs in Argyll and Bute (eg Nether Largie South: ibid, 338–40 and Cladh Andreis on the Ardnamurchan peninsula: Harris et al. 2014). Both forms may indeed be present as sequential phases in the construction of the chamber tomb at Blasthill on the Kintyre peninsula (Cummings and Robinson 2015a and b). These represent translations into stone of the timber funerary monument tradition brought by the earliest CB Neolithic communities, and to judge from the currently available dating evidence, the 'Clyde cairn' format was being constructed by the mid- to late-38th century BC, with clear evidence for use during the 37th and 36th centuries BC. Other 'CB Neolithic' constructions include the cursus monument at Upper Largie in Kilmartin Glen (Sheridan 2012a, 170).

Interaction between the 'Breton' and 'CB Neolithic' communities is abundantly clear from the sharing of ceramic designs, with a distinctive, fluted or burnished tall-necked carinated bowl type of pot, probably dating to the 36th century BC, being found both in the Achnacree passage tomb (CANMORE ID 23223) and in the Nether Largie South (CANMORE ID 39460) Clyde Cairn, for instance (ibid, 170) (Figure 54). This type of pot has also been found on Balloch Hill (CANMORE ID 38340), near the tip of the Kintyre peninsula, in what may well be a domestic context (Peltenburg 1982, Figure 12). There is also abundant evidence for the exchange of ideas, designs, objects and probably also people between Argyll and Bute and Ireland for most of the Neolithic period, as seen for example in ceramic similarities and in the sharing of the 'Clyde cairn' constructional tradition (which is expressed as 'court tombs' in Ireland) (Sheridan 2004a). Further afield, at Clettraval (CANMORE ID 10196) on North Uist, a dramatic example of the melding of the two ancestral Neolithic traditions can be seen in the design of a chamber tomb that combines elements of both the passage tomb and Clyde cairn traditions (Henshall 1972, 506–11).

Relatively little is known about developments between c 3500 BC and c 3000 BC in Argyll and Bute (Sheridan 2012a, 171) even though palynological evidence from Kilmichael Glen indicates a strong signal for barley cultivation from 3600 BC (Tipping et al. 2011, 161), and there is evidence for the continuation of extensive exchange networks, such as had been involved in the transportation of the Antrim porcellanite axehead – and perhaps also its associated wooden haft – found at Shulishader

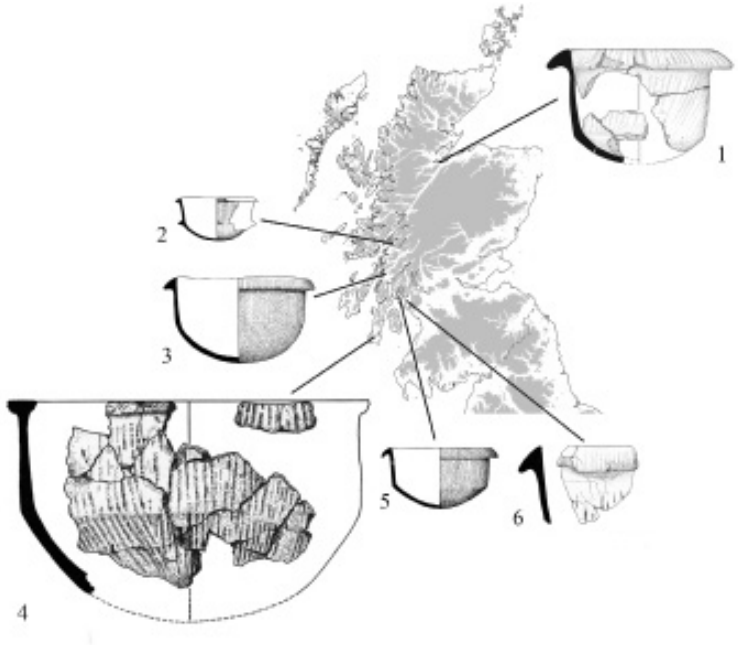

Figure 54: Distibution of 'Achnaree bowls' from Sheridan 2016. © Alison Sheridan

(CANMORE ID 71061), Lewis, during the second half of the fourth millennium: Sheridan 1992. It is during this period that farming communities were flourishing in the Outer Hebrides.

6.2.3 Late Neolithic Argyll, c 3000BC to c 2450 BC

Around and shortly after 3000 BC, however, there is clear evidence for new developments, relating to the operation of an extensive network of contacts, extending from Orkney in the north to Ireland in the south, over which novel ideas, traditions, beliefs and practices were travelling (Figure 55).

Essentially, this was connected to the undertaking of long-distance journeys from Orkney to the Boyne Valley by the ambitious emerging elite of Orkney: these individuals would have visited the renowned Boyne valley with its magnificent passage tombs of Newgrange, Knowth and Dowth, and they brought back to Orkney design ideas that were expressed in the construction of Maeshowe-type passage tombs, and the practices of using megalithic art and of aligning Maeshowe on the midwinter solstice sun (Schulting et al. 2010).

These people in Orkney, who were engaged in a process of competitive conspicuous consumption, invented a new style of pottery – Grooved Ware – and also seem to have invented the henge with internal stone circle, as seen at the Stones of Stenness. They also used a range of carved stone objects as symbols of power.

Between c 3100 BC and c 2900 BC we can trace a reciprocal movement of ideas and objects between Orkney and Ireland, with Grooved Ware, the practice of using stone (and timber)

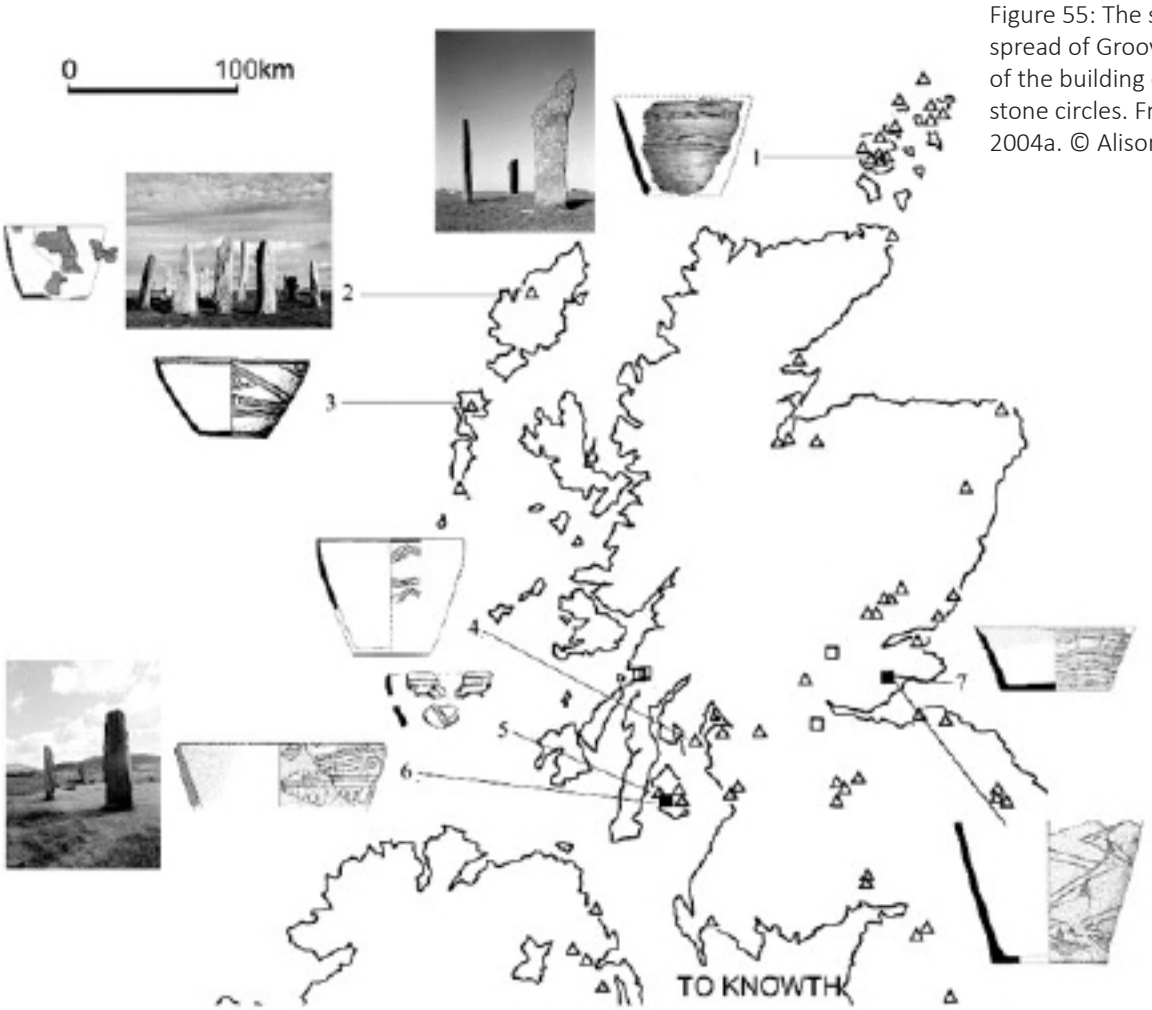

Figure 55: The south-westerly spread of Grooved Ware and of the building of timber and stone circles. From Sheridan 2004a. © Alison Sheridan

circles and the use of maceheads and – in miniature form – of carved stone balls travelling southwards from Orkney to Ireland (Sheridan 2004a; 2014b). Argyll and Bute were on this 'Atlantic façade' route, and the involvement of its inhabitants is shown in the construction of the timber and stone circles at Temple Wood in Kilmartin Glen (with their specific astronomical orientations: Figure 56 and see Scott 2010); in the use of carved stone balls and maceheads (Figure 57); in the pecking of designs (Figure 58) resembling those seen on Irish and Orcadian passage tombs and in sites such as Skara Brae and the Ness of Brodgar (and on Orcadian Grooved Ware); and finally in the use of Grooved Ware itself, at Townhead, Rothesay, Bute (Figure 59) and at Upper Largie – where an important assemblage of early Grooved Ware has just been excavated. This overall phenomenon is discussed at length in Sheridan 2004a; 2012a; 2014b; and Schulting et al. 2010, so will not be discussed further here.

One additional novelty that may well have appeared during the first half of the third millennium is the use of cup-and-ring rock art (Figure 60; Webb 2012). With its widespread comparanda in Britain, Ireland and Galicia, this offers additional evidence suggesting that the inhabitants of Argyll and Bute were interacting with a range of external contacts, far and wide. Excavations at Torbhlaren in Kilmichael Glen provided tentative support for a dating during the first half of the third millennium (Jones et al. 2011). Again, this phenomenon is explored further in Sheridan 2012a (and see Bradley 1993 for a broader discussion of rock art).

The key research questions for this period would appear to be:

1. What is the precise nature of the settlement pattern and subsistence strategy for the inhabitants of Argyll and Bute between c 3750 BC and c 2500 BC – especially during the relatively poorly attested period 3500–3000 BC? Are we correct in assuming that population was increasing over this period? And is there any evidence for survival of indigenous Mesolithic communities after c 3750 BC?
2. Where did the people who constructed the Nether Largie South Clyde Cairn and the other Neolithic monuments in Kilmartin Glen live? Currently there is no unequivocal evidence for Neolithic settlement in the Glen; was it solely a 'ceremonial landscape' at the time, or are there remains of habitation waiting to be found?
3. What was the full range of funerary practices used during this period? And we need better dating of passage tombs and Clyde cairns (and related monuments).
4. What was the specific trajectory of ceramic development (and development in other aspects of material culture) over this period in Argyll and Bute? The proposed ceramic sequence for western and south-west Scotland as presented in 2003 (Sheridan 2003) needs to be underpinned by more dates, for example.
5. Is there further evidence for participation in the Orkney-Boyne nexus in the centuries around 3000 BC? Is there much more evidence for the use of Grooved Ware to be uncovered in Argyll and Bute? And where, apart from Townhead on Bute, are the settlements that date to this time? What did participation in this extensive network mean for the social organisation of the farmers in Argyll and Bute? Were they, too, engaging in some kind of competitive conspicuous consumption?
6. How does cup-and-ring rock art fit into our overall understanding of the nature of society, beliefs, and external contacts in Argyll and Bute? Currently it tends to be studied in its own right, but it needs to be situated within Late Neolithic practices (and more dating evidence for its creation is needed).

6.3 Chalcolithic (c 2450–2200/2150 BC)

The Chalcolthic period in Britain is defined as the three centuries between the first appearance of

metal objects (of copper and gold), probably during the 25th century BC, and the inception of bronze use and manufacture during the 22nd century BC (Needham 2012). No Chalcolithic gold objects so far have been found in Argyll and Bute but copper artefacts are known.

The appearance of metal objects (and metalworking know-how) was just one of a range of novelties that appeared in Argyll, as elsewhere in Britain and Ireland, from the Continent during the 25th century BC. Other novelties include a Continental style of pottery – the 'Beaker' ceramic repertoire – that stylistically and technically contrasts with indigenous Late Neolithic pottery; the use of individual interment as a funerary practice; and an archery kit that included a new style of arrowhead (barbed and tanged), possibly also a new type of bow (the recurve bow), a new style of belt ring, and the stone 'wristguard' (which was probably an ornament embellishing a functional hide wristguard). It may be that the use of oval houses – as attested in the Western Isles – was a further Beaker-associated novelty.

The question of how these new practices, technologies and artefact types appeared in Britain has been debated for well over a century, with 19th and early 20th century interpretations favouring an invasion of 'Beaker People' from the Continent. Disillusionment with a culture-historical approach that interpreted every change in terms of population replacement led to other explanations gaining in popularity during the 1970s: it was suggested, for example, that ambitious individuals in Britain deliberately adopted the practices and trappings of a European cult-like movement in order to gain prestige. However, following the discovery in the early 2000s of the 'Amesbury Archer' near Stonehenge – an individual whose strontium and oxygen isotope values in his dental enamel revealed that he had grown up in or near southern Germany – the idea of immigration from Europe returned as an explanatory mechanism, albeit one greatly nuanced and scaled down by comparison with earlier invasion hypotheses. (For an excellent summary of the debate, see Needham 2012, and for discussions of the Scottish evidence, see Sheridan 2008; 2012a; 2012b and 2013; Curtis and Wilkin 2012; and Wilkin 2016. See also Parker Pearson et al. 2016 and Vander Linden 2012 on the British Beaker phenomenon more generally – with different views being expressed.) Current ancient DNA analysis of a number of Beaker-associated individuals in Britain (including one from Sorisdale on Coll – another isotopic 'alien') should clarify the scale of immigration. In terms of the direction of movement, Stuart Needham's careful reading of the artefactual evidence for Britain and Ireland (Needham 2005) concluded that Beaker users probably arrived in different areas from different parts of the Continent, with an Atlantic element being represented in western Britain and Ireland, and a Rhineland element (both from the Netherlands and further down the Rhine) being represented in parts of Britain. As for why people should wish to come to Britain and Ireland from the Continent during the 25th century, there are several plausible reasons (Needham 2012): firstly, the Continental elite tradition of the brave male warrior/hunter undertaking an heroic journey, to gain kudos; secondly, the undertaking of pilgrimage-like journeys to participate in the solstitial ceremonies at Stonehenge and elsewhere in Wessex (and possibly elsewhere too); thirdly, prospection for copper and gold; and fourthly, possible migration for reasons of economic or social upset. The local reaction to these immigrants will have varied, with the inhabitants of Wessex, for example, continuing to build major ceremonial structures (Needham 2012) while in north-east Scotland new (and non-Continental) ostentatious graves were constructed as monuments for certain special Beaker-associated individuals (Sheridan 2012b). Stuart Needham has proposed a plausible three-phase model for the Beaker phenomenon in Britain – featuring an initial period when Beaker pottery and its associated novelties were regarded as an alien curiosity, followed by a period, several generations later (during the 23rd or early 22nd century BC), when Beaker material

culture and associated practices were widely adopted and adapted, becoming the norm, and ending with a period (from around the 20th to the 19th or 18th century) when Beaker use declined as other styles of material culture and other novel practices such as cremation gained in popularity.

Argyll and Bute did indeed experience the Beaker 'phenomenon'. For its Chalcolithic (as opposed to its later, Early Bronze Age) manifestation, the key evidence in this part of Scotland comes from two graves – one at Upper Largie (CANMORE ID 39486) in Kilmartin Glen (Figure 61; Cook et al. 2010; Sheridan 2008) and the other at Sorisdale (CANMORE ID 21703) on Coll. (Figure 62; Ritchie and Crawford 1978). These are Continental in style and in grave goods, and the current author has argued for a Rhine delta connection, at least for the Upper Largie individual if not also for the Sorisdale (CANMORE ID 21703) individual (eg Sheridan 2008). Sadly, no human remains survived from that individual but the young woman from Sorisdale (CANMORE ID 21703) has been shown, from isotopic analysis of the enamel of one of her molar teeth (undertaken for the Beaker People Project: Parker Pearson et al. 2016), to have been raised non-locally (Sheridan 2012b). Moreover, her DNA reveals that she is of Continental, not British ancestry



Figure 61: The early Beaker-associated grave at Upper Largie and the Beakers from the grave. Plan and pot drawing from Cook et al. 2010; photos © Alison Sheridan

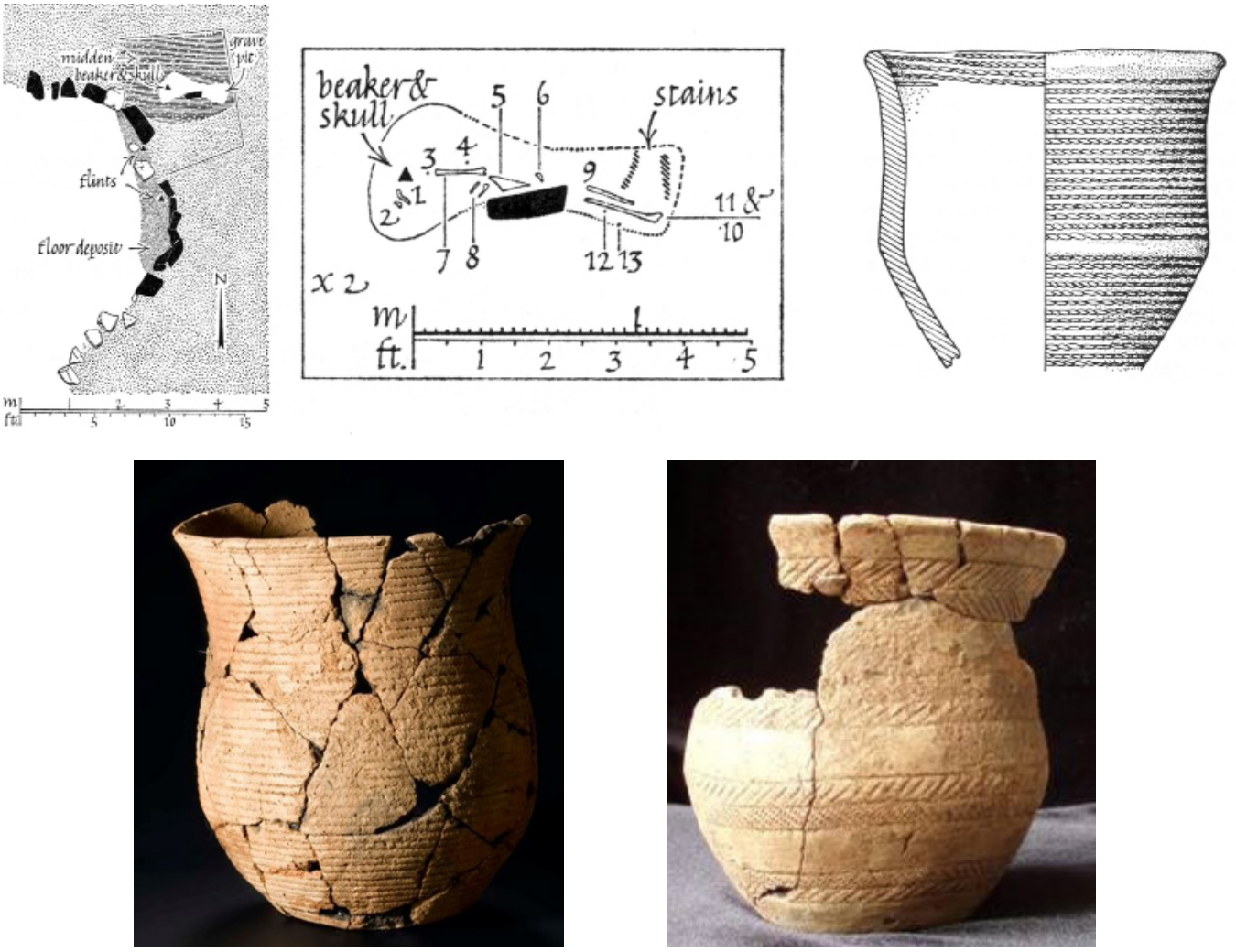

Figure 62 (top): The early Beaker-associated grave at Sorisdale, Coll, and the Beaker from the grave. After Ritchie and Crawford 1978, reproduced courtesy of the Society of Antiquaries of Scotland
Figure 63 (above, left): All-Over-Cord Beaker from Upper Largie © Alison Sheridan
Figure 64 (above right): Epi-Maritime Beaker from Upper Largie. © Alison Sheridan

(Olalde et al. in press).

The Beaker pottery associated with these early graves is of types that were widespread on the Continent: All Over Corded and Epi-Maritime style (Figure 63 and Figure 64).

While the earliest Beaker presence in Argyll and Bute does not currently include any metal objects, from a few generations later there is a tanged copper knife from Callachally (CANMORE ID 22285) on Mull, associated with a stone wristguard); and from Largizean on Bute there is a magnificent hoard of four copper halberd blades (Figure 65; Sheridan 2013, 54 and 56), of which three are made of Irish copper and the fourth of copper that may have originated in Iberia. Halberds – a bladed weapon where the blade was set at right-angles to the wooden haft – were a popular high-status weapon in Atlantic Europe, and especially in Ireland, during the late third millennium (Needham et al. 2015). Furthermore, at Ri Cruin (CANMORE ID 39456) in Kilmartin Glen, a slab in a cist appears to show a representation of a halberd, bedecked with streamers (Figure 66; Needham and Cowie 2012). Such objects remind us of the extensive networks of contacts over which precious materials were circulating at this time.

Other evidence for Chalcolithic activity in Argyll and Bute is reviewed in Sheridan 2012a



Figure 65: Halberd hoard from near Largizean, Bute. © Alison Sheridan/NMS

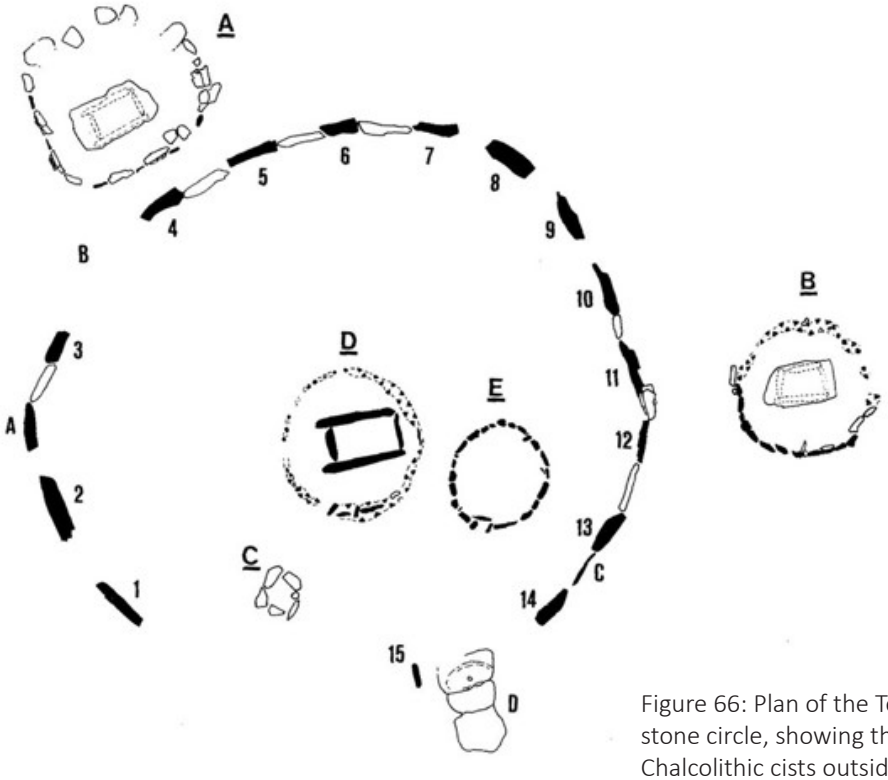

Figure 66: Plan of the Temple Wood South stone circle, showing the position of the Chalcolithic cists outside the circle. From Scott 1989

and 2013. Clearly, the practice of using Beaker pottery, and the associated novel practices and beliefs, was adopted by the inhabitants of this part of Scotland. Their graves are sometimes located in significant relationships to extant monuments, as with the two Chalcolithic cists located just outside the Temple Wood South (CANMORE ID 39504) stone circle (Figure 67) or the Beakers found inside Nether Largie South (CANMORE ID 39460) Clyde cairn, in Kilmartin Glen (Figure 68; Sheridan 2012a). Interestingly, in contrast to later, Early Bronze Age funerary practices in this part of Scotland, these additions and insertions did not materially alter the pre-existing monuments.

Outstanding research questions regarding this period include the following:

1. Where did the users of Beaker pottery live; what was their subsistence strategy; and what impact (if any) did they have on the environment? (The abundant evidence for Beaker settlements in the Outer Hebrides is not matched on mainland Argyll.) See Section 4 for comments on our current understanding of the Chalcolithic palaeoenvironment.
2. How many incomers were there?
3. How did the initial immigrants relate to/ interact with the indigenous population? It would appear that they were accepted, since the practice of using Beakers (and associated novelties) clearly continued in Argyll and Bute after the initial appearance of the phenomenon; but we know too little about where and how the indigenous inhabitants were living to have much sense of



Figure 67: Cast of stone pillar from cist at Ri Cruin, showing image of what has been interpreted as a halberd. Image © NMS



Figure 68: Beaker from Nether Largie South. From Henshall 1972

the interactions. Indeed, the archaeological record for the second quarter of the third millennium is very sparse for Argyll and Bute; we need much more information about lifestyle, material culture and practices. The Beaker novelties seem to appear in a kind of vacuum, although this is clearly a function of archaeological recovery.

4. The users of Beaker pottery appear to have belonged to a socially differentiated society (as suggested, for example, by the Largizean (CANMORE ID 40255) halberd hoard); how did this compare to the nature of indigenous social organisation before 2500 BC?
5. Was there any prospecting for, or extraction of, copper in the region at this time? It is known that copper-bearing rock is present near Kilmartin Glen, for example, but there is no evidence for its use at this time. Were people coming to prospect for copper, as they had done at Ross Island in Co. Kerry, in south-west Ireland (O'Brien 2005)?
6. Were these people engaged in the north-eastwards movement of copper from Ross Island in County Kerry to north-east Scotland, via the Great Glen, as seems to have been the case from 2200 BC onwards? It is clear that Ross Island copper was reaching north-east Scotland before 2200 BC, and it may be that Kilmartin Glen was already being used as a routeway up towards the Great Glen but there is no unequivocal evidence for this.
7. Was Iberian copper used for one of the Largizean (CANMORE ID 40255) halberds? And if so, how had it reached Bute? Was Iberian copper circulating widely at this time?

Ways to address these questions include field survey to try to locate settlements, and surveying for traces of prehistoric copper extraction around the source areas. If further early Beaker graves are found (which seems likely), then isotopic and aDNA analysis will need to be undertaken to explore their identity. The results of the current aDNA analysis of the Sorisdale skeleton and of other Beaker-associated individuals in Britain will clarify issues pertaining to the movement of people from the Continent.

6.4 Bronze Age (2200/2150–800 BC)

This 1400-year period takes us from the first appearance of bronze – an alloy of copper and tin – to the beginning of iron use. The first of these developments seems to have had a profound effect on the prosperity of the inhabitants of Argyll and Bute – and in particular the area around Kilmartin Glen – as they were able to control the flow of the new metal (bronze) and/or of the Irish copper that formed its main constituent, as it travelled north-eastwards from Ireland to a flourishing centre of bronze production in north-east Scotland, via the Great Glen. The first few centuries of the Early Bronze Age (covered in the first part of this section) was thus a kind of 'golden age' in this part of Scotland, with new-found prosperity being shown off in ostentatious funerary monuments and personal possessions.

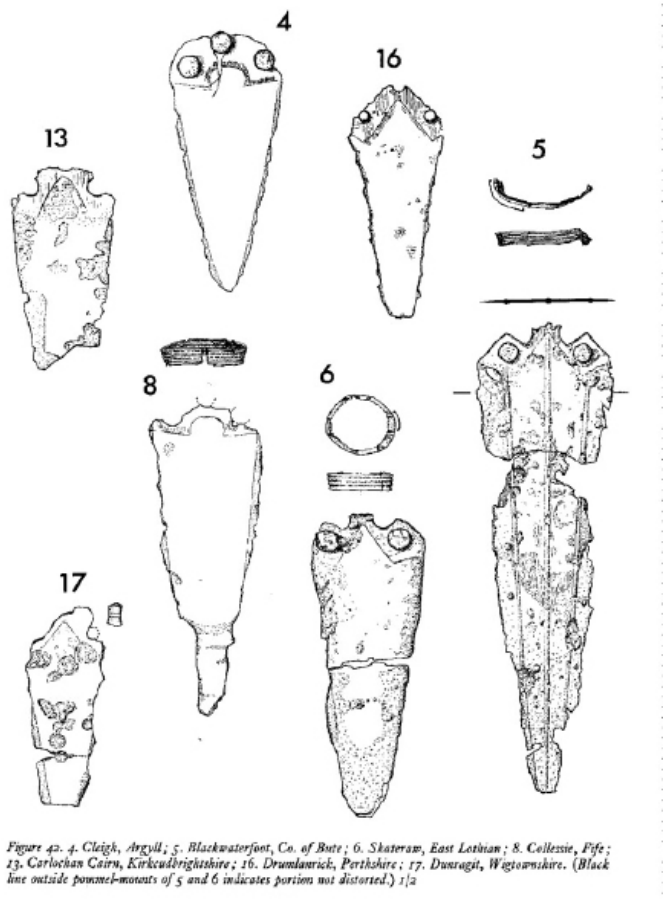

Figure 42. 4. Cleigh, Argyll; 5. Blackwaterfoot, Co. of Bute; 6. Skateraw, East Lothian; 8. Collessie, Fife; 13. Carlochan Cairn, Kirkcudbrightshire; 16. Drumlanrick, Perthshire; 17. Dunragit, Wigtownshire. (Black line outside pommel-mounts of 5 and 6 indicates portion not distorted.) 1/2

Figure 69: Copper alloy dagger blade from Cleigh. From Henshall 1968

There is also evidence for Early Bronze Age settlements, principally at Kilellan and Ardnave on Islay. The archaeological record for the succeeding centuries between 1900 BC and c 1100 /1000 BC is thinner, with no sign of a continuation of the conspicuous consumption that marked the preceding centuries, although some trends in funerary and monumental practices, and some changes in material culture can be discerned. While there is a marked hiatus in activity in Kilmartin Glen from around 1000 BC – the possible reason for which is discussed below – elsewhere there is evidence that the inhabitants of Argyll and Bute were playing an active role in the extensive Atlantic Late Bronze Age network, in which bronze artefacts, and acts of competitive conspicuous consumption that involved them, featured prominently.

6.4.1 The first centuries of the Early Bronze Age – a 'golden age' for Argyll and Bute (and especially Kilmartin Glen), 2200/2150–1900 BC

As explained in detail elsewhere (principally Sheridan 2012a), this was the time when the elite of Argyll and Bute were able to profit from controlling the north-easterly flow of copper from Ireland (and possibly of bronze as well) as it passed up the Great Glen to the Migdale bronzeworking 'industry' of north-east Scotland. They may also have controlled the easterly flow of this metal towards northern England. Some insights into the nature of this movement are clear from graves around Inverness that have strong links with Ireland: the pair of graves (male and female?) at Seafield West (CANMORE ID 13393), comprising a logboat-shaped coffin (which may actually have functioned as a logboat, for travelling up the loch) containing a bronze dagger made using Irish copper, and a wooden 'cist' beside it containing an Irish Bowl Food Vessel (Cressey and Sheridan 2003); and a rich Beaker-associated grave from Culduthel (CANMORE ID 13519) , whose adult male occupant has been shown from isotopic analysis to have originated on the Antrim Plateau (Sheridan 2012b).

The prosperity that resulted from the inhabitants' control over the movement of metal was expressed in terms of conspicuous consumption on prestige items such as daggers (for men: Figure 69), fancy spacer-plate necklaces of Whitby jet, sometimes accompanied by bracelets or (at Melfort CANMORE ID 22872) bronze bangles (for women: Figure 70) and new-style Food Vessel pottery of Irish style (for both sexes: Figure 71), and on the construction of imposing funerary monuments. The material culture demonstrates clear connections with Ireland, with north-east Scotland and with northern England – the latter clear not only from the imported Whitby jet spacer-plate necklaces, which cluster in Argyll and Bute (and not just in Kilmartin Glen: Figure 70, but also from an unique footed Food Vessel found at Upper Largie (CANMORE ID 39486) (Figure 72), its upper part a classic Irish-style Bowl Food Vessel and its lower part characteristic of Yorkshire footed Food Vessels.

The Irish ceramic link, clear not only from Bowl-shaped Food Vessels but also from Vase Food Vessels (Young 1951), may have involved the manufacture of pottery by skilled Irish potters, either in Ireland or as visitors to Argyll and Bute (and especially Kilmartin Glen): the quality of the manufacture of many of these vessels, most notably the Glebe Cairn (CANMORE ID 39537) Food Vessel (Figure 73), speaks of specialist expertise. The decision to use the novel Food Vessel style – which superseded the use of Beaker pottery in popularity, even though the use of the latter tradition persisted alongside the use of Food Vessels – was a clear example of the deliberate use of exotic novel design ideas to underline the status, wealth and power of the elite.

The ostentatious competitive conspicuous consumption was also, as noted above, expressed in the funerary monuments that the inhabitants constructed for the highest echelon of Early Bronze Age society. While Chalcolithic graves may have been covered by modest mounds, now very large stone cairns were erected to cover the graves of one or two individuals.





Figure 70 (above): Distribution of spacer-plate necklaces of jet and jet-like materials in Scotland and northern England, and examples from Mount Stuart, Bute (top), Monybachach (middle) and Melfort (bottom). Also one of a pair of bronze bangles found with the necklace components at Melfort. Map © Alison Sheridan; photos © NMS

Figure 71 (left): Irish Bowl Food Vessel from Dunchraigaig. © NMS







Figure 72 (above, left): Upper Largie: top, plan of the grave (at the right of the image) that had contained the footed Food Vessel (bottom). Bottom right: view of the feet on the Food Vessel. Plan © AOC Archaeology; photographs © NMS

Figure 73 (above, right): Irish Bowl Food Vessel from Glebe Cairn. © NMS

Figure 74: Kilmartin Glen linear Early Bronze Age cairn cemetery. Photo: David Lyons, from Kilmartin: an Introduction and Guide. © Kilmartin Museum

The linear round cairn cemetery of Kilmartin Glen (Figure 74) – a dynastic cemetery, perhaps? – was constructed now, as were large round cairns elsewhere in Argyll and Bute; and it is highly likely that the henge at Ballymeanoch (CANMORE ID 39458) (Figure 75, at the eastern end of Kilmartin Glen, was also constructed during this period as a prestigious novelty; this monument is a westerly outlier of a type of monument found elsewhere in Scotland (including north-east Scotland) and England, and the decision to build it in Kilmartin Glen probably served to underline the well-connected, cosmopolitan character of the elite (Sheridan 2012a, 177). Not only were new monuments built: ancient Neolithic monuments were now radically remodelled to suit the new ideology of power.

The ancient Clyde-type chamber tomb of Nether Largie South (CANMORE ID 39460) had its original rectangular or trapezoidal long cairn reshaped into a round cairn (Figure 76). Temple Wood South (CANMORE ID 39504) stone circle was converted into a ring cairn – a monument type that may have been modelled on the Clava ring cairns at the north-east end of the Great Glen around Inverness (Bradley 1993) – with an imposing stone cist constructed in its centre for a local member of the elite (Figure 77). It is also highly likely that the Temple Wood North (CANMORE ID 39504) stone circle was dismantled at this time and its long stones were taken for reuse elsewhere: to create the cists, with unusually massive and/or long slabs, found inside the Temple Wood South ring cairn and inside Ballymeanoch henge (CANMORE ID 39458) (Figure 75 and Figure 77), and to form a grave marker at the grave subsequently covered by a cairn at Nether Largie North (Figure 78).

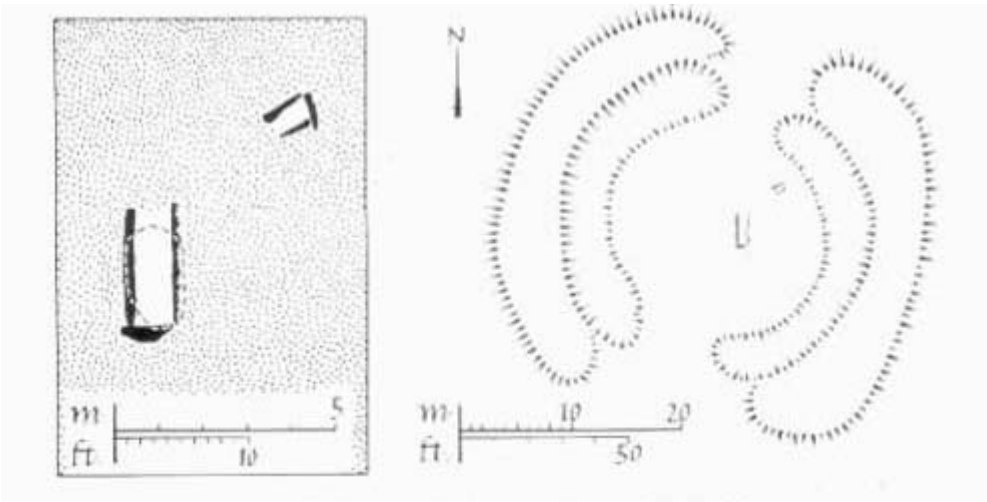

Figure 75 (top): Plan of Ballymeanoch henge and its cist. From RCAHMS 1988; Crown copyright © copyright

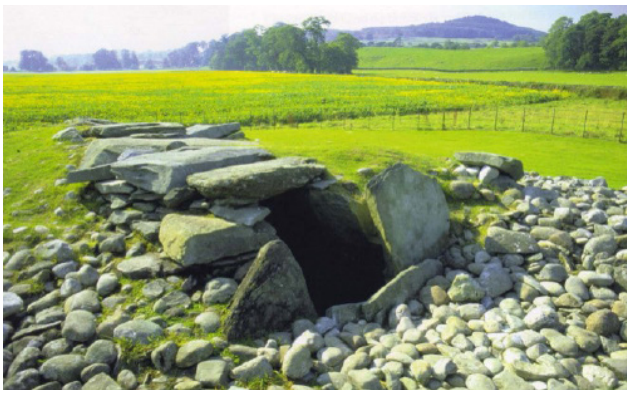

Figure 76: Nether Largie South: Clyde cairn whose cairn was remodelled during the Early Bronze Age. Photo: David Lyons, from Kilmartin: an Introduction and Guide. © Kilmartin Museum



Figure 77: Central cist in Temple Wood South stone circle. © Alison Sherida



Figure 78 (above, right): Stone found used as a grave marker in Nether Largie North cairn; possibly taken from Temple Wood North. © Alison Sheridan/NMS

Furthermore, at Nether Largie North (CANMORE ID 39482), a slab of by-then ancient and probably sacred cup-and-ring rock had been prised from bedrock for use as the capstone of an important person's cist, its marks overlain by carvings of flat metal axeheads (Figure 79 ibid, 177). And at Badden (CANMORE ID 39384) and Carn Bàn (CANMORE ID 39587), slabs decorated with Late Neolithic, Grooved Ware lozenges were re-used in cists.

While inhumation was the predominant funerary practice during this period, cremation as a rite had also started to be used, as seen for example at Scalpsie (CANMORE ID 40232) on Bute (Sheridan 2013: here, cremated remains were buried in a cist, and were accompanied by an offering of food or drink in a Food Vessel.

That it was not simply the elite of Kilmartin Glen who were enjoying a period of prosperity is clear, for example, from the distribution of Whitby jet spacer plate necklaces (Sheridan 2013; Kranioti and Sheridan 2012), bronze daggers (Baker et al. 2003) and large cairns (RCAHMS 1988), all of which are found more widely. And despite the obvious expressions of status, the number of Early Bronze Age metal objects from Argyll and Bute is strikingly small (as seen, for example, in John Coles' distribution maps: Coles 1969).

Invaluable evidence relating to the everyday life of the inhabitants of Argyll and Bute is provided by the settlements at Kilellan (CANMORE ID 37496) and Ardnave (CANMORE ID 37488) on Islay (Gibson 1982; Ritchie 2005; Ritchie and Welfare 1983). These have produced very large assemblages of 'domestic' Food Vessel pottery (Figure 80) and evidence for a mixed agro-pastoral subsistence strategy. Pollen evidence, discussed in Section 4, supports the view that both cereal cultivation (principally of barley) and the management of domesticated animals was the general subsistence strategy. Some use of wild resources is also likely.



Figure 79: Underside of capstone of Nether Largie North cist, showing ancient cup-marks and Early Bronze Age axeheads. From RCAHMS 1988; Crown copyright © copyright

As for palaeoenvironmental and climatic developments, the marked climatic deterioration that has been claimed for other parts of Europe between 2200 BC and 1900 BC (as detailed in Section 4) clearly did not impact on activities in Argyll and Bute, despite claims for an 'Armada' of icebergs as far south as the Irish coast c 2200 BC; as Tipping has pointed out, any cooling and/or increase in precipitation may have been far less marked in Britain than on the Continent.

Key research questions for this period include the following:

1. Where did the people who were buried in the ostentatious graves live? (Once again, it appears that Kilmartin Glen was used just as a place of burial and ceremony.)
2. And was there a hierarchy of settlement, reflecting an inegalitarian society?
3. Was there regional variability in subsistence activities during this time? How typical is the evidence from Kilellan (CANMORE ID 37496) and Ardnave (CANMORE ID 37488)?
4. Was control over the flow of metal the only source of wealth and power in this part of Scotland at that time?
5. Was the incoming metal just Irish copper, or were bronze items or ingots also coming in? And was there any local exploitation of copper?

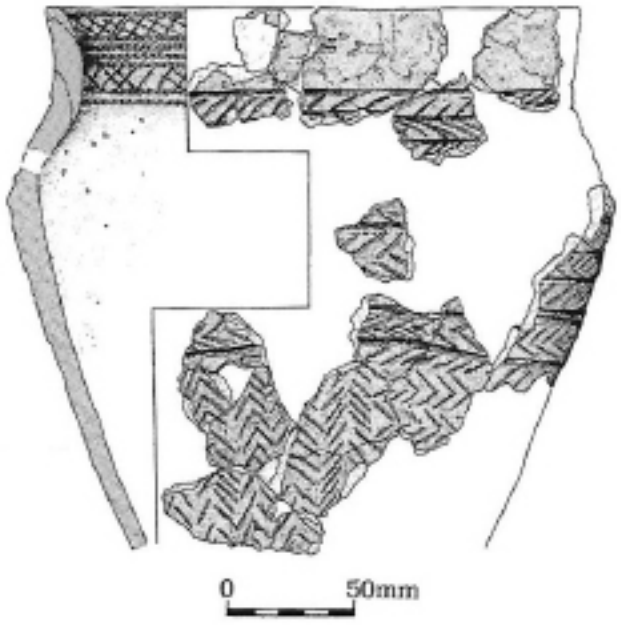

Figure 80: Food Vessel from Early Bronze Age settlement at Kilellan, Islay. From Ritchie 2005 © copyright

Once again, field survey (including fieldwalking) to locate settlement evidence – and any evidence relating to metal prospecting – is required, and palaeoenvironmental investigation is needed to shed light on both vegetation cover and farming practices. The work undertaken by the Southern Kintyre Project (Cummings and Robinson 2015b) revealed some lithic scatters that are believed to be of Bronze Age date, but further fieldwork would be needed to obtain a more precise date for these, and to assess whether they are evidence for settlement sites.

6.4.2 The rest of the Early Bronze Age and the Middle Bronze (1900 – c 1100/1000 BC)

Our understanding of this period is dominated once again by funerary evidence and by other monuments; not enough is known about where and how people carried out their everyday lives, although important evidence for Early/Middle Bronze Age field walls, later covered by peat, has been recovered from Arran (Barber 1997) and in the Moss of Achnacree. Details of the material culture in use during this time (other than funerary pottery) are somewhat sparse, as revealed for example in John Coles' distribution maps for Middle Bronze Age metalwork in Argyll and Bute (Coles 1964).

Developments between 1900 BC and 1500 BC include the switch to cremation as the predominant funerary rite by around 1900/1800 BC, with burial of the cremated remains usually in ceramic cinerary urns, starting with Vase Urns and progressing chronologically through Collared and Cordoned Urns to Bucket Urns (Figure 81 Longworth 1984; MacGregor 1998; Cook et al. 2010; Sheridan 2007; 2012a; 2013). In Kilmartin Glen a timber circle was constructed

at Upper Largie (CANMORE ID 39486) between 1600 BC and 1400 BC; a timber post-hole row, between 1870 BC and 1650 BC; and an enigmatic monument, bearing some formal similarities to the much earlier Beaker grave, probably during the first half of the second millennium (Sheridan 2012a, 178–9).

There is no evidence for a continuation, much beyond c 1900 BC, of the conspicuous consumption noted for the preceding centuries. This could be due to a relative decline in the significance of the Ross Island source of copper and to the opening up of new copper mines elsewhere in Britain and Ireland – thereby diluting the inhabitants' ability to control the metal supply system.

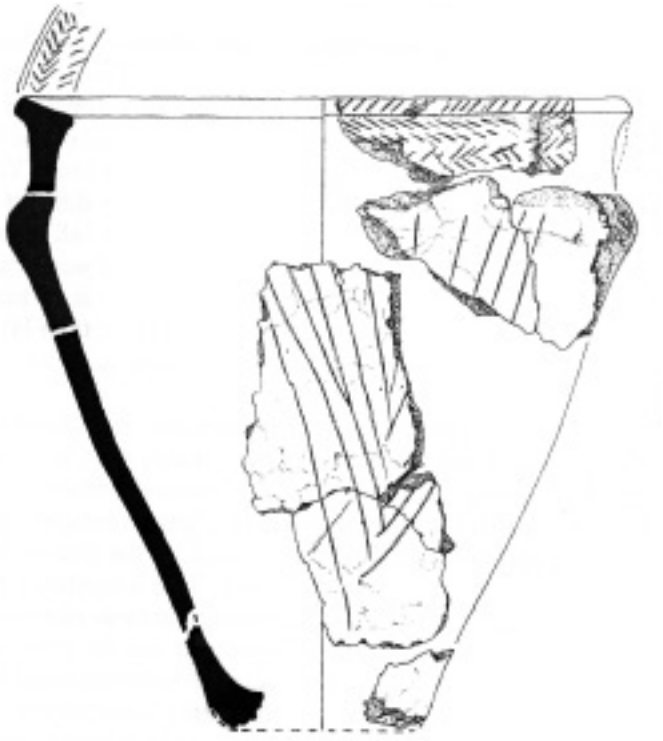

Figure 81: Encrusted Urn from Glenvoidean, Bute. From Marshall and Taylor 1977 © copyright

For the period 1500BC–1000 BC, we see the establishment of the short stone rows of the west of Scotland (Figure 82; Martlew and Ruggles 1996; Ruggles 1999) and probably also of the more complex setting at Nether Largie (CANMORE ID 39471) in Kilmartin Glen (Figure 83). These, as Clive Ruggles (1999) and Douglas Scott (2010) have demonstrated, relate to marking the position of the moon at its southern standstill position – something that happens every 18.4 years. The use of some of the monuments for marking other astronomical phenomena as well has been claimed by Scott (2010; cf. Hawkins 1983). Some of these monuments incorporate slabs with cup-and-ring designs, which must have been over a millennium old when they were prised up and erected as parts of the standing stone settings (Figure 84); this demonstrates an appropriation of ancient sacred sites within the belief system of the Middle Bronze Age inhabitants of Argyll and Bute.

Another novelty of this period was the use of kerb cairns – a distinctive type of funerary monument, described and discussed by Lynch and Ritchie (1975), and found not only in Argyll but also in north-east Scotland, Wales and Ireland. The associated funerary rite is cremation. Two examples that were constructed within the Temple Wood South (CANMORE ID 39504) monument have been radiocarbon-dated to between 1450 and 1200 BC – a date range matched at Claggan cairns 1 and 3 (CANMORE ID 22436) and at Strontoiller (CANMORE ID 23205) (Sheridan 2012a, 180). The incorporation of a south-east facing 'false portal' in these monuments indicates that they were designed with an astronomical alignment (Figure 85), and the proximity of the Ballymeanoch (CANMORE ID 39458) example to two short stone rows suggests that these contemporary monuments played complementary roles in the belief system, with the observance of the moon's standstill position a key element in the rituals.

Some evidence for deteriorating climatic conditions,and consequent expansion of peat, has come from John Barber's excavations on Arran where it appears that various attempts to continue cultivating the land were made in the face of peat expansion (Barber 1997).

Key research questions for this period include the following:

1. Is the downturn in expressions of ostentation







Figure 82 (above, left): Short stone row (with kerb cairn in the foreground), Ballymeanoch. Photo: David Lyons, from Kilmartin: an Introduction and Guide. © Kilmartin Museum

Figure 83 (aboev, right): Stone setting at Nether Largie. Photo: David Lyons, from Kilmartin: an Introduction and Guide. © Kilmartin Museum

Figure 84 (left): Orthostat in the Nether Largie setting, showing ancient rock art on it. Photo: David Lyons, from Kilmartin: an Introduction and Guide. © Kilmartin Museum

really related to a decline in the ability of the inhabitants of Argyll and Bute to control the flow of bronze and/or copper, once sources other than Ross Island began to be used?

2. The choreography of climate change and its effects on human behaviour needs to be refined for this period. How, if at all, did settlement and land use change?
3. What was responsible for the shift to cremation as the normative funerary rite over this period?
4. Where did the people who built the monuments in Kilmartin Glen live?

To address these questions, a combination of fieldwork and palaeoenvironmental investigation is needed, together with further analysis of metal objects (especially the rare gold items).

6.4.3 Late Bronze Age (c 1100/1000–800 BC)

From around 1000 BC there appears to be a hiatus in activity in Kilmartin Glen that lasted for over a millennium, and this may well relate to further climatic deterioration and the expansion of the Mòine Mhòr: as noted in Section 4, more palaeoenvironmental analysis of that peat bog needs to be undertaken. Elsewhere in Argyll and Bute, however, during the Late

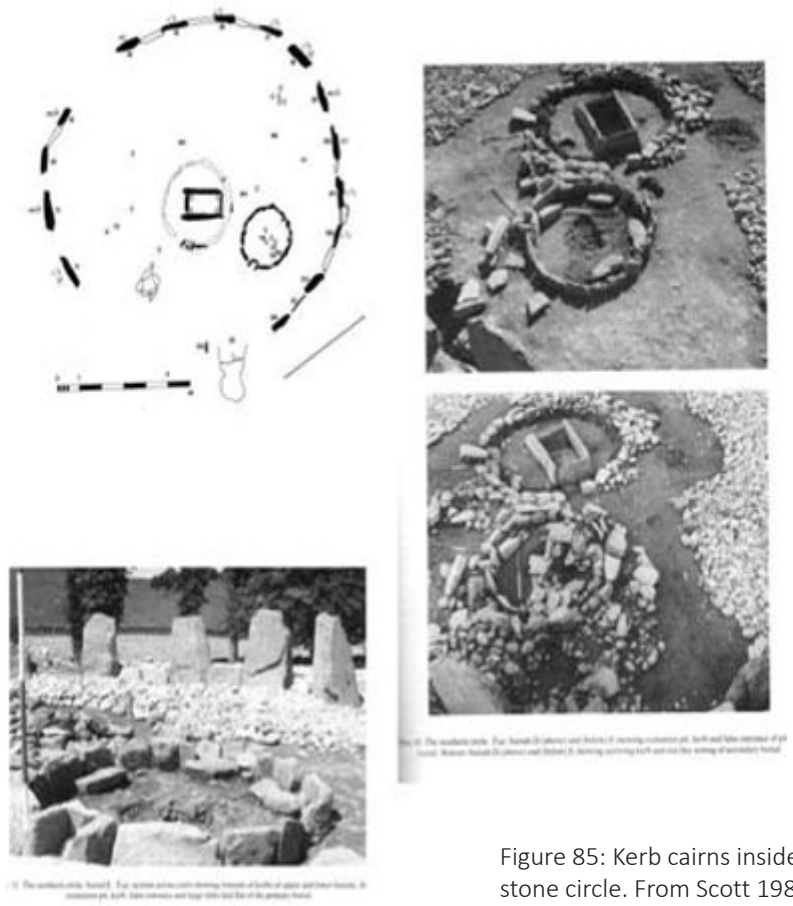

Figure 85: Kerb cairns inside Temple Wood South stone circle. From Scott 1989 © copyright

Bronze Age there is evidence for participation in a flourishing and extensive Atlantic Europe network of elite contacts (including, once more, Irish contacts), with the associated lifestyle of feasting and actual (and stylised) combat. This is reflected, for example, in the flesh hook from Inveraray (Figure 86; Needham and Bowman 2005), the hoard of swords and other weaponry found at Torran (CANMORE ID 22803) (Figure 87; Campbell and Coles 1963) and Killeonan, and various ornaments of bronze, gold and amber found in Argyll and Bute, eg at Croig Cave on Mull (Figure 88) Mithen and Wickes 2012, and see Coles 1960 on the distribution of Late Bronze Age metalwork and Eogan 1994 on gold finds). Bronze artefacts played a key role in the operation of this system, as a symbol and expression of status and wealth and as a kind of currency, to be accumulated and given away to the gods in lavish ceremonies.

An end to this particular lifestyle (involving a collapse of the 'bubble' of competitive conspicuous consumption) around 800 BC has been identified, and described in compelling detail, by Stuart Needham (Needham 2007). While the fortunes of the elite will have been significantly affected by this, nevertheless life did not cease – as is revealed, for example, by the Early Iron Age wooden figure that had once stood, around 600 BC, overlooking a perilous stretch of water at Ballachulish (CANMORE ID 23569) (Figure 89: Coles 1998). Evidence relating to settlement and subsistence strategy at this time is not abundant, although it is quite possible that many of the small circular structures in the upland areas date within this period – as discussed in Section 7.

The many research questions pertaining to this period include:

1. The choreography of climate change and its effects on human behaviour needs to be

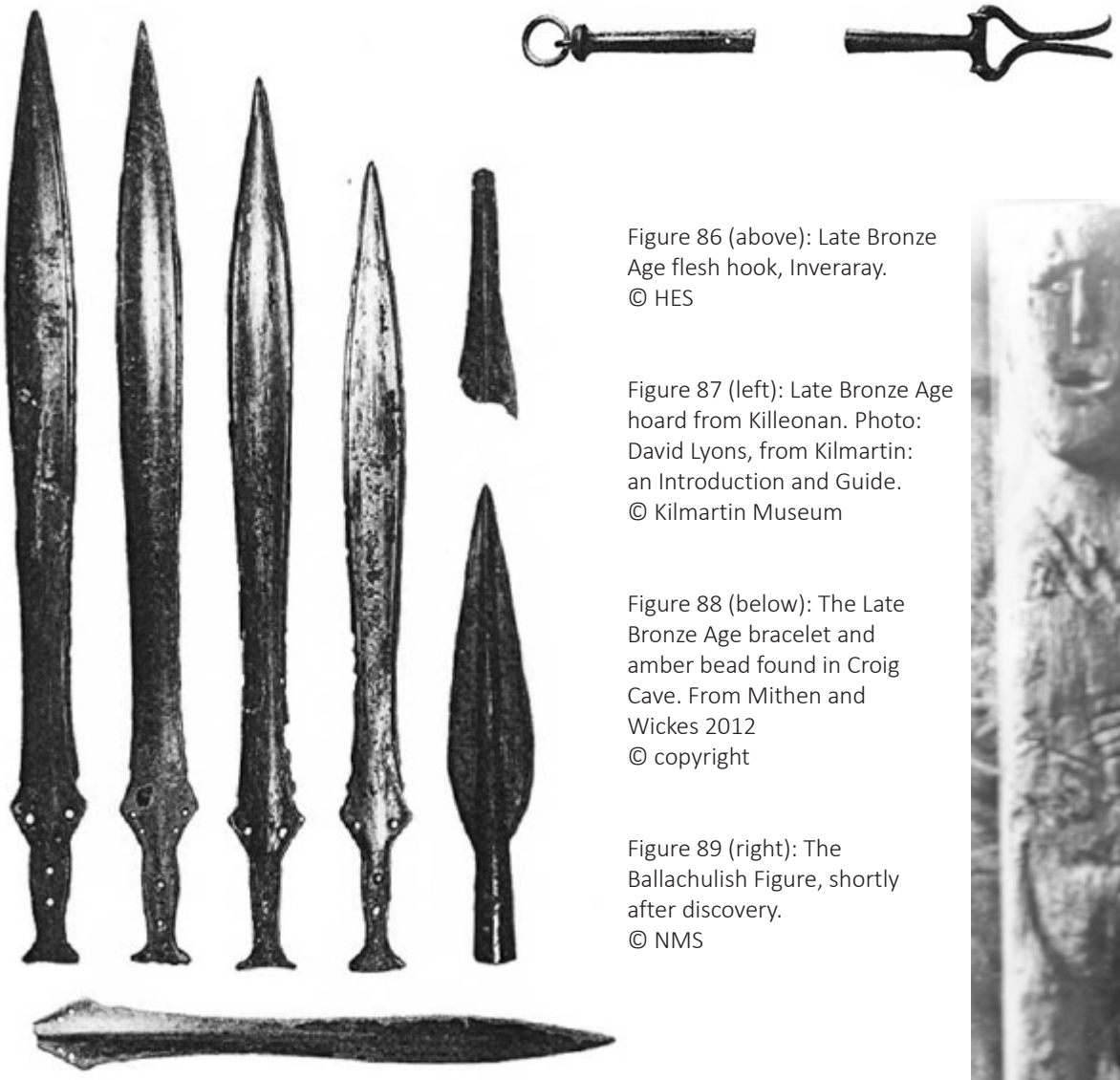

Figure 86 (above): Late Bronze Age flesh hook, Inveraray.
© HES

Figure 87 (left): Late Bronze Age hoard from Killeonan. Photo: David Lyons, from Kilmartin: an Introduction and Guide.
© Kilmartin Museum

Figure 88 (below): The Late Bronze Age bracelet and amber bead found in Croig Cave. From Mithen and Wickes 2012
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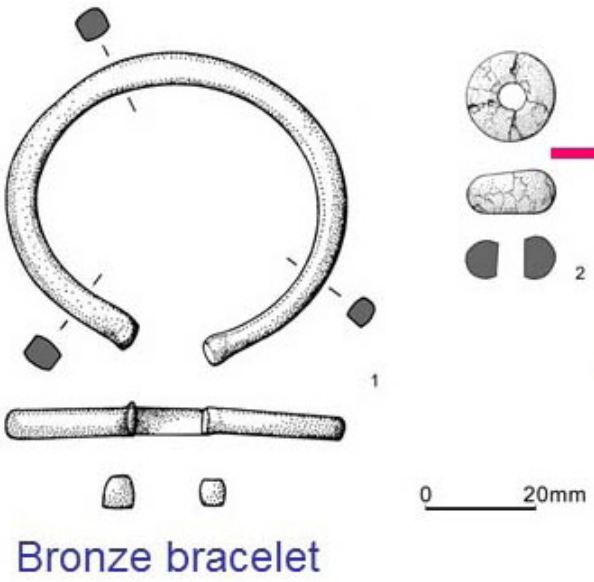

Figure 89 (right): The Ballachulish Figure, shortly after discovery.
© NMS



refined for this period. How did settlement and land use change?

2. What was the nature of farming activities at this time?
3. When precisely did the Mòine Mhór expand?
4. How did social organisation change over this period? Does the apparent proliferation of weaponry during the Late Bronze Age relate to an increased incidence of conflict?
5. From where was the metalwork being obtained over this period?

To address these questions, a combination of fieldwork and palaeoenvironmental investigation is needed, together with further analysis of metal objects (especially the rare gold items).

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