Putting capes into context: Mold at the heart of a domain

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Frances Lynch has made a phenomenal contribution to our understanding of the Neolithic and Bronze Age of Wales and the West. Her especial focus on the burial and ceremonial monuments of those periods has been paramount, for it is these often durable constructions that still provide the basis for understanding demography and social structure in this period, settlement sites remaining elusive, sparse or difficult to evaluate. It is in fact a burial monument in Frances's home territory that serves as my focus here, but this one tends to be remembered not for the type of site it represents and instead for the spectacular and unparalleled object it yielded—the Mold gold cape (Fig. 1). I shall look in greater depth at how this celebrated find relates to the regional picture with the aim of furthering understanding of its social, economic and ideological backgrounds.

The broad cultural context of the cape has been understood since Terence Powell's seminal publication (1953); Powell argued that, despite its technical complexity, the Mold cape must belong somewhere in the middle of the Bronze Age, not towards its end or even later. This view was rapidly accepted and has allowed later writers, especially Frances herself, to draw the Mold find into its regional context. For her, the Mold cape was a priestly garment and epitomised the overwhelmingly non-martial character of grave groups in the region (Lynch 1991, 74–6; 2000b, 138; 2003, 29). Her reiteration of a possible parallel for the cape from Wrexham, fleetingly described towards the end of the seventeenth century (Lynch 2000b, 138; Davies 1949, 457), emphasises the obvious, that the cape is highly unlikely to have been unique in actuality, and at the same time it hints that the type may have been the ultimate symbol of power in this part of Britain. Frances acknowledged that certain elements of the Mold grave suggested an Early Bronze Age date, but was hesitant to accept this unequivocally (Lynch 1991, 74–6; 2000b, 102). Such hesitancy was an understandable reaction to a continuing debate among metalwork specialists as to which phase of the Bronze Age the cape belonged, but it inevitably limited the extent to which the cape and its context could be integrated within a contemporary landscape.

Some scholars have adhered to Powell's Middle Bronze Age dating, albeit favouring varied positions within (e.g. Taylor 1980, 51–2; Eogan 1994, 72; Northover 1995; Gomez de Soto 2001; Gerloff 2003; 2007, 144), but the present writer is amongst those who have taken the view since the early 1980s that the *context* has to be Early Bronze Age (Burgess 1980, 115; Needham 1984, 63–4; also Morgan 1990, 4; the cape was displayed in the British Museum galleries as an Early Bronze Age piece from about 1980). This is not the place for an extended re-discussion of this matter, but the dating is self-evidently vital to attempts to give the find its proper contextual background. The discovery in 1994 of the Lockington armlets in Leicestershire stimulated the definition and explication of an Early Bronze Age embossed goldworking tradition (Needham 2000a) and this presented the opportunity to summarise the reasons for placing Mold in the Early Bronze Age. Knowledge of this goldworking tradition has been further expanded by the subsequent find of the Ringlemere cup, Kent (Needham *et al*. 2006).

Fig. 1. The Mold gold cape as restored in 2002; 75–80% of the original survives.

The arguments put forward for backdating Mold to the Early Bronze Age do not hang on context alone (Needham 2000a, 43–5); there are also diagnostic features of the associated objects (none of which Gerloff addresses in her subsequent papers) and key stylistic differences between the cape itself and the continental crowns (*kegeln*) so often cited as close parallels. Moreover, it is patently a very different manifestation of embossed goldworking practice—a distinct choice of garment for symbolising authority. Gerloff's fanciful belief (2003, 190 abb. 9) that the cape wearer must also have worn a crown (a type not known from Britain) is in denial of the existence of two distinct pathways to creating a spectacular body ornament out of embossed sheet gold. The continental crowns have been argued to symbolise a divine status with connections running through to the Near East (Schauer 1986; Gerloff 1995; Kristiansen and Larsson 2005, 281, 291—'pointed hats'). In contrast, the Mold cape represents in skeuomorphic form the obsession in Early Bronze Age Britain for large arrays of beads strung around the shoulders.

It is now clear that embossed sheet-metal working (in bronze as well as gold), as a technique, has a long history through much of the Bronze Age, so the dating of individual pieces must pay close attention to the specifics of style and context. There are now several examples from Britain datable to the Early Bronze Age and starting early within the period, around the turn of the third/second millennia BC. It is hard to find comparably early comparative metalwork away from the east Mediterranean (where object styles are utterly different). With such a long history as well as clear finesse in craftsmanship

at an early stage in Britain—as witnessed by the Lockington type armlets (*c.* 2100–1900 BC) and the Ringlemere and Rillaton cups (*c.* 1950–1650 BC)—the complexity of the Mold cape in itself is not sufficient grounds for arguing lateness. A fuller exposition of existing and new evidence relating to dating will be presented elsewhere.

TOPOGRAPHIC AND FUNERARY CONTEXT

Mold lies on the small river Alun which flows between two major topographic zones— the Welsh uplands and the Cheshire Plain. The burial mound yielding the cape lay on the edge of a low river terrace; its levelled site is marked by a plaque alongside the modern Chester Road. The Alun is a small river which initially flows north from its headwaters just north of Llantysilio and Maesyrychen mountains (Fig. 2). It turns sharply to the south-east before reaching Mold, and then veers to the east just north of Wrexham, before meeting the Cheshire Dee. The latter river flows more or less north and, after a short distance, into the Irish Sea alongside the Wirral peninsula. A ridge of hills formed of Carboniferous Coal Measures and up to about 150 metres altitude, separates the reaches of the Alun

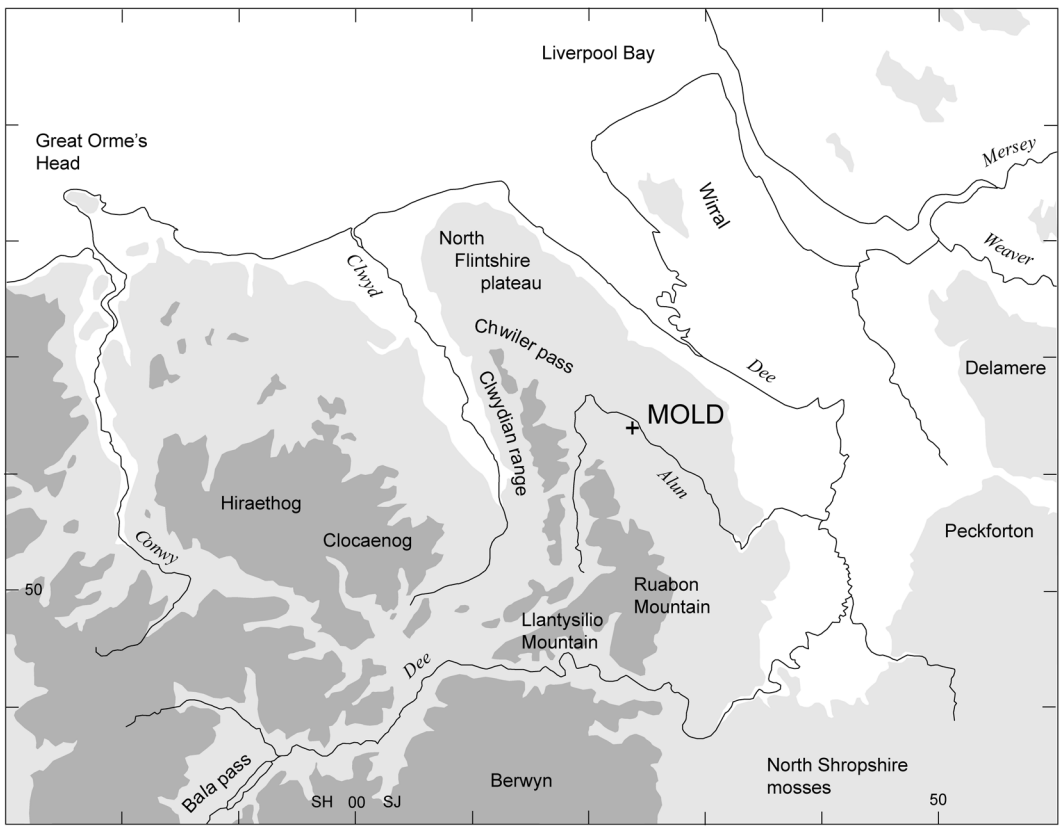

Fig. 2. Main features of topography and drainage in and around north-east Wales. Land over 61m (200ft) and 305m (1000ft) shaded.

around Mold from the Dee valley. In contrast, the land to the west and north can be much higher and includes the steep, north-south aligned Clwydian range of Silurian rocks and the more undulating north Flintshire plateau of Carboniferous limestone and Millstone Grit. This combined upland block ends abruptly on the west as the land falls into the Clwyd valley, another river draining north into the Irish Sea. The headwaters of the Clwyd rise not far from the upper Dee at Corwen, hence the two rivers effectively enclose the zone described; on the east and west these valleys cut down into Bunter Sandstone, but have a mantle of drift, chiefly boulder clay. The southern part of the Clwydian range, including the peaks of Moel Famau and Moel Eithinen, and hillforts at Moel y Gaer (Llanbedr), Moel Arthur and Moel Fenlli, separate the upper Alun and upper Clwyd valleys.

What is known of the context of the cape has been well covered by Ellis Davies (Davies 1949, 12, 256–63) and Powell (1953), so a brief résumé will suffice here. While details are scant, because of its accidental discovery by labourers quarrying for stone in 1833, what we do know is helpful. Unsurprisingly, no one with special knowledge was present at the point of discovery, but the spectacular nature of the gold inevitably ensured that locals interested in antiquities were quick to the scene. The most complete information resulted from enquiries of the labourers by the local vicar, the Reverend Charles Butler Clough, and this was to appear in print three years later in *Archaeologia* (Gage 1836).

There was clearly a mound of some description and, while no dimensions were given at the time, Ellis Davies later observed 'about half of a circular mound, probably a tumulus, which had a diameter of about 30 paces and a height of 2½ or 3 feet' (Davies 1949, 261); this remnant was subsequently destroyed. The mound was said to comprise stones of greater size than the underlying gravel and Davies also noted 'well-worn stones' built into the walls of the adjacent garden of 'Winllan', suggesting they had derived from the cairn (ibid.). This implies that the mound was not just thrown up from material quarried on the spot, but was potentially gathered from a wider area, perhaps selecting appropriate stones from boulder clays or stony uplands. It is not known whether the stones were only one component of a multi-layer mound, for example, the inner core. More significantly, the mound contained some large blocks or boulders which each weighed 'from eight to ten hundred pounds, or more' (Gage 1836, 425), thus between a third and half a ton, and apparently lying close to the remains of a body; it is probable that they represented a cist or a boulder-defined grave. It is clear that substantial effort was expended to create a stone tomb and then cover it with a cairn. The mention of a 'quantity of wood-charcoal' (ibid.) might also suggest the decayed remains of a wooden coffin, lining or chamber, burnt or not.

The burial itself was stated to have been extremely poorly preserved with just small fragments of bones within the crushed cape and some fragments of the skull. This is enough to suggest it was probably an inhumation, rather than a cremation deposit, but we will never know the sex of the individual empirically. Aside from a spurious suggestion that the ornament adorned a pony (British Museum 1904, 149–50 fig. 143), it has always been assumed that it was worn by a man. However, in 2005 we went against conventional wisdom to suggest a female burial (British Museum 2005). This speculation was based on comparanda for the grave goods rather than on the size of the cape, for the object has been shown to fit shoulders of moderate build which does not exclude either sex (Fig. 3); the thickness of the original backing would obviously have some effect on the fit.

Although the grave yielded other finds in addition to the cape, they have tended to be overshadowed by that dazzling ornament. The full inventory reported is as follows:

- Three large and several small pieces of sheet gold, all belonging to the cape (British Museum and Grosvenor Museum Chester)
- A second gold object represented by some smaller pieces of sheet gold (BM and GMC)
- A fragment of a bronze knife (BM)

- Fourteen surviving pieces of sheet bronze, believed to represent backing strengtheners for the top and bottom of the cape (BM)
- Many amber beads—said to be as many as 2–300 in one account—only one of which is known to survive (BM)
- Remnants of a woven fabric (nothing survives)
- A pottery vessel containing burnt bones (again, nothing survives). Described as having been found two or three yards away from the main burial, this is likely to have been a separate interment.

Fig. 3. Modelling the cape: controlled enrobing to assess the fit. © *The British Museum.*

The high labour investment in cist and mound construction is absolutely characteristic of many Early Bronze Age burials and rich accompaniments are also recurrent in this period, whereas neither of these features is definitively known in later Bronze Age burials. Inurned cremations in this part of the world are also invariably Early Bronze Age in date, although it should be noted that Middle Bronze Age urn burials are known a little further south in the Welsh Marches (e.g. Bromfield, Shropshire; uncertain examples at Whitewell in the extreme south-east of Flintshire—Davies 1949, 207–9; Lynch 2003, 30 —and Gloddaeth, western Denbighshire—Lynch 1993, 39). Context alone is therefore rather persuasive regarding which side of the Early/Middle Bronze Age divide the Mold grave and mound should belong. It is worth mentioning briefly, however, the significance of the knife fragment. Powell had believed it to be part of a sword or rapier (1953, 166), but it is in fact recognizable as part of a very small broad-tanged knife, a type that appears in a good number of Early Bronze Age graves.

THE MONUMENTAL AND LANDSCAPE BACKGROUND OF MOLD

It is, then, the Early Bronze Age scene that will put the Mold grave and cape into proper context. North-east Wales is not very well known on the national stage for its Early Bronze Age funerary assemblages and near-contemporary ceremonial monuments. There are, though, some important sites, some areas dense with monuments and some noteworthy patterning. The key source for the following summary is the regional Historic Environment Record maintained by the Clwyd-Powys Archaeological Trust, recently enhanced as a result of fieldwork undertaken as part of Cadw's 'Prehistoric Funerary and Ritual Monuments' scheduling enhancement programme. The data for the counties of Denbighshire and Flintshire have been synthesised in two published articles by Frances Lynch (Lynch 2002; 2003). Barrows in the western part of Cheshire are based on Mullin 2003 and in the northern part of Shropshire, on Garwood 2007. I have taken a fairly broad chronological bracket for this discussion, for it is useful to consider the Neolithic backdrop to the period of proliferation of round barrows and cairns.

Taking first those monuments that are generally held to be more ceremonial than funerary in function, there is a range of forms and indeed a date range stretching well back into the Neolithic (Fig. 4). Some, however, are uncertainly dated and could equally represent construction or use into the Bronze Age. Standing stones are the most common and while a few are on the highest ground of the Berwyn and Ruabon mountains, elsewhere they tend to occupy valley-side positions. It is of course entirely likely that examples on lower ground will have been preferentially removed by later activities. Stone and timber circles are few and the examples known thus far give the impression of more restricted enclaves, but this could be a rather partial picture; timber examples, although sometimes revealed by cropmarks where post pits are large, are generally dependent on discovery by geophysical survey and excavation. Hence, the timber circle on Hiraethog came to light during Frances's excavations of Brenig barrow 44; its posts were not substantial and were evidently an outer 'façade' to a neatly kerbed ring-cairn (Lynch 1993, 117–9, 133 fig. 11.10). A little east of Brenig, at Clocaenog, are three 'ring' sites, at least two of which appear to have included circles of upright stones that were more than kerbs; the damaged condition of these sites limits our understanding of morphology and potential function (Lynch 1993, 40).

Closer to Mold, near the elbow of the Alun, are two circles, one of timber enclosing an Early Bronze Age grave at Moel y Gaer, Rhosemor (Guilbert 1975), the other of stone and of uncertain authenticity at Penbedw (Lynch 2003, 29). Further north is a probable formative henge at Ysceifiog, Holywell (Fox 1926; Davies 1949, 402–9; Lynch 2003, 26; Burrow 2010, 186–7). Intriguingly, this may have

been linked to the large mound of Gop Cairn by a long linear, but intermittently traced earthwork known as the Whitford Dyke, in the past sometimes seen as part of Offa's Dyke. Alex Gibson has suggested that this dyke could belong to the cursus/bank-barrow tradition of Neolithic monuments (1999, 132, 137, 139), in which case it would pre-date the Early Bronze Age by around a millennium. Certainly the dyke would appear to be contemporary with, or later than the henge-like enclosure. The round barrow in the interior contained at least one definitive Early Bronze Age burial. However, Fox's excavations found a soil mound covering a small oval cairn overlying a pit grave which has since been compared to Middle Neolithic pit graves in the north Welsh Marches (Musson 1994, 103; Burrow 2010, 190). The urn burial, placed towards one edge of the inner cairn, could easily have been a later insertion. Gop Cairn is round, but its enormous size (diameter 67–99m, height 13.8m) likens it to a series of Neolithic round mounds, including the largest Irish passage graves, rather than the more ubiquitous Bronze Age barrows and cairns (Lynch 2003, 24; Burrow 2010, 192). There is now a persuasive case for a set of interlinking Middle Neolithic monuments on the north Flintshire plateau dating to the late fourth and very beginning of the third millennia BC.

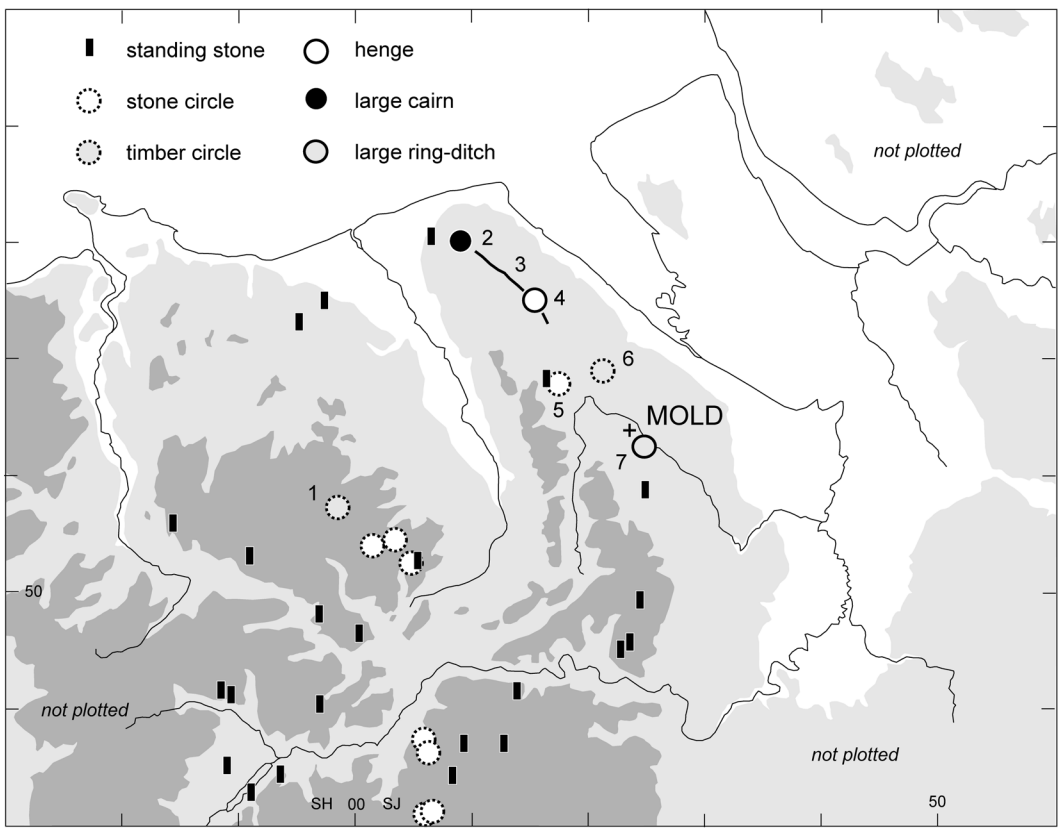

Fig. 4. The distribution of Neolithic and Bronze Age monuments in north-east Wales: enclosures, timber circles, stone circles, standing stones and linear earthwork. Land over 61m (200ft) and 305m (1000ft) shaded. Based upon the regional HER maintained by CPAT. (1) Brenig, (2) Gop, (3) Whitford Dyke, (4) Ysceifiog, (5) Penbedw, (6) Moel y Gaer (Rhosesmor), (7) Pentrehobin.

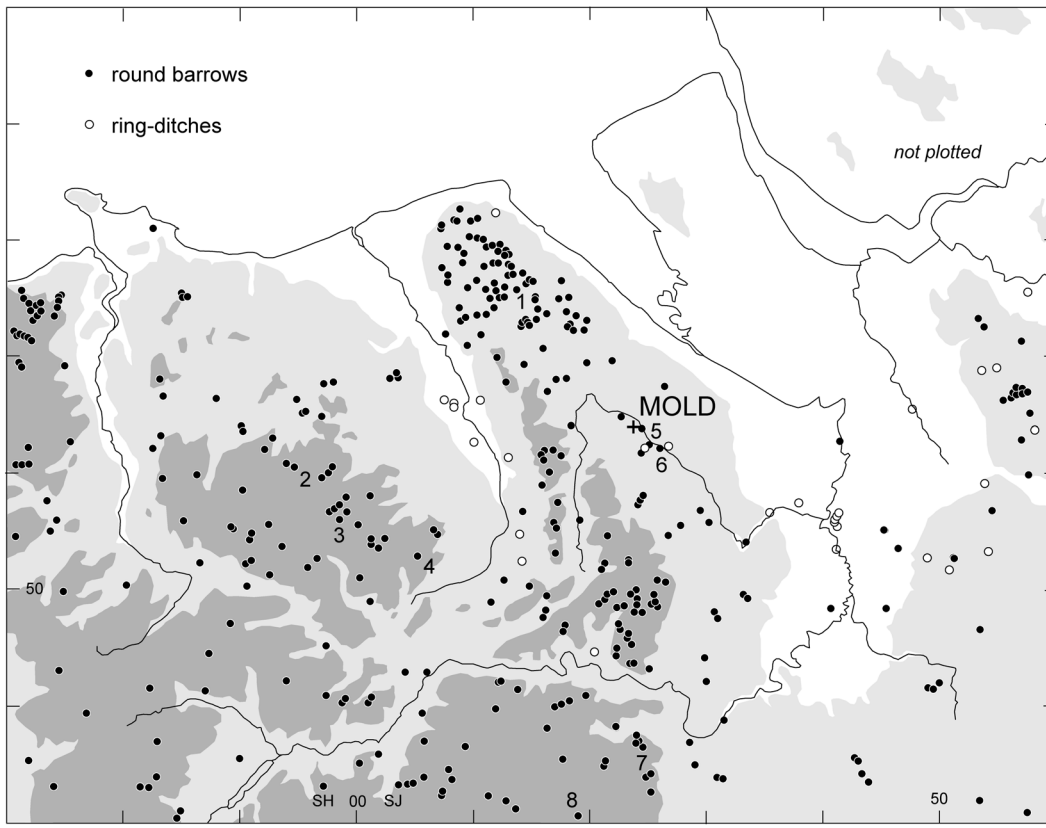

Fig. 5. The distribution of round barrows and ring-ditches in north-east Wales and the adjacent parts of Cheshire and Shropshire. Land over 61m (200ft) and 305m (1000ft) shaded. Cheshire after Mullin 2003; Shropshire after Garwood 2007; north Wales based on the regional HERs maintained by CPAT and GAT. (1) Ffridd-y-garreg-wen, (2) Rhiwiau, (3) Brenig 44, (4) Bryn Beddau, (5) Pentrehobin, (6) Llong, (7) Yr Orsedd Wen, (8) Ysgwennant.

As in many parts of Britain, round barrows and cairns, including ring-ditches indicated by cropmarks, are very frequent in the region (Fig. 5); however, it is immediately apparent that there are strong variations in density. The most pronounced lacunae are the river valleys of the Dee and Clwyd, where, to judge from ring-ditch sites, mounds have suffered destruction over a long period (e.g. Lynch 1977). These valleys have stagnogley soils on glacial drift, chiefly boulder clay (Avery *et al.* 1975), and may not be particularly conducive to revealing cropmarks. This makes it difficult on present evidence to assess the original balance between lowland and upland densities. The uplands are, in general, less likely to have suffered much destruction from arable agriculture and, although there can be robbing for stone, more can be ventured on differences between one upland zone and another. The most striking feature is a cluster on the north Flintshire plateau that is far denser than other areas of upland to the south and west; this should be significant in terms of original upland densities.

A further feature distinguishes the north Flintshire plateau; Frances Lynch had noticed that the mean diameter of Flintshire barrows, and especially those on the plateau, was greater than for Denbighshire

(2003, 28). I have sought to clarify the pattern for smaller regional groups (with information supplied by Clwyd-Powys Archaeological Trust; Fig. 6; Table 1). In fact the propensity for larger diameters seems to extend across the whole of the north-east flank of the area under consideration, for most of the sites around the Alun and Dee valleys are also large. However, there is a cautionary point here: since most of these valley sites are known only as ring-ditches, recorded diameters will tend to be for the ditch, rather than the originally enclosed mound. Nevertheless, there are strikingly fewer mounds of over 20 metres in diameter in the Ruabon, Berwyn and Hiraethog/Clocaenog upland blocks.

The proposed Middle Neolithic complex of Gop–Ysceifiog on the north Flintshire plateau could well have been a major factor attracting the later concentration of barrows and cairns. A pattern of such complexes, revealed by aerial photography and selective excavation, is emerging southwards along the margins of the Welsh upland massif (Gibson 2010, 214 fig. 1). This is not to say that the Early Bronze Age monuments all gravitated towards the earlier ones, for they do not, but rather, that the pre-exisitng complexes could establish a strong physical and occupational presence in an area that then continued to be favoured for settlement and ritual pursuits. We should not underestimate the enduring power of physical presence in giving rise to differential intensities of land-use and associated demography.

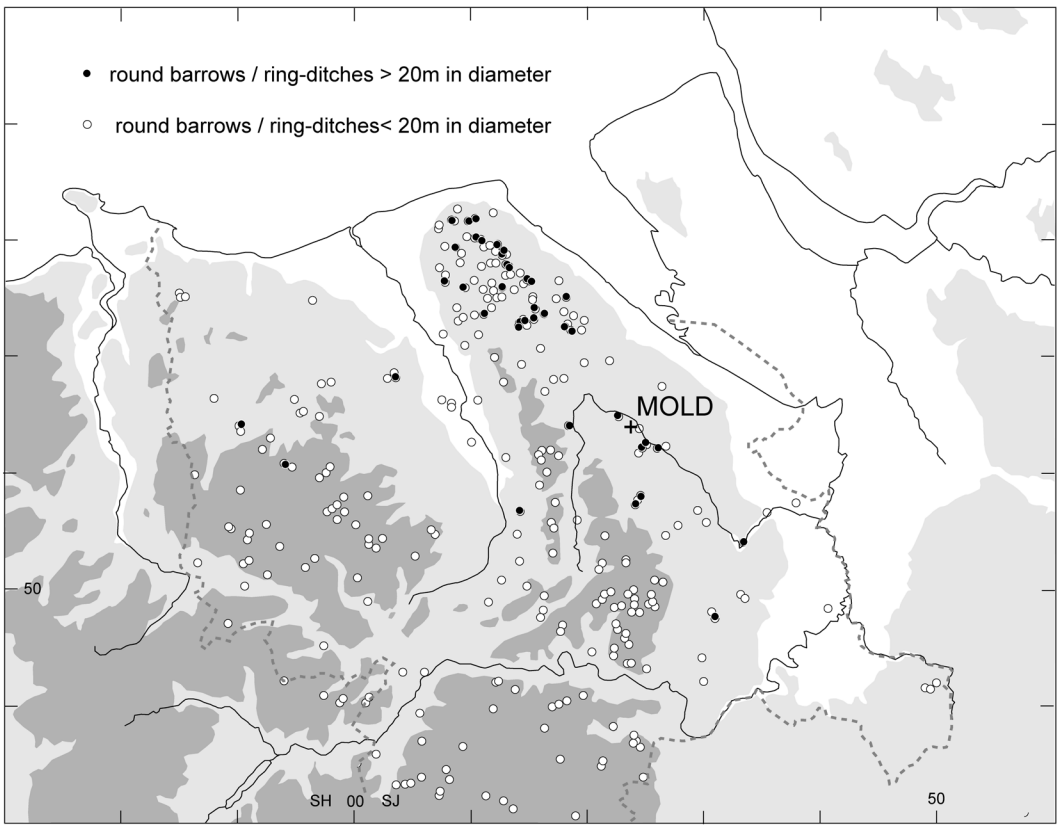

Fig. 6. The distribution of round barrows and ring-ditches in north-east Wales distinguished by diameter. Land over 61m (200ft) and 305m (1000ft) shaded. Based on the regional HER maintained by CPAT.

Table 1: Size distribution of barrows and ring-ditches in sub-regions of north-east Wales (*Information courtesy Clwyd-Powys Archaeological Trust*)

	Region	< 20m	> 20m
1.	Halkyn, Alun and Dee valleys	18	103
2.	Coastal plain and Vale of Clwyd	7	8
3.	Clocaenog, Mynydd Hiraethog	31	10
4.	Berwyn mountains	38	5
5.	Ruabon mountain and Clwydian range	36	11

The Bronze Age tradition of burial does not obviously appear in north-east Wales at the very beginning of the metal age. As is the case in much of Wales and the far west of England, demonstrably early Beaker burials, contemporary with the Chalcolithic (*circa* 2450/2400–2200/2150 BC), are absent (e.g. Griffiths 1957). Yet, despite this, the region was already a recipient of new metal goods, as exemplified by the Moel Arthur hoard and the Shotton halberd (Forde-Johnston 1962; Lynch 1991, 76, fig. 49); indeed, there are good numbers of other finds of copper flat axes and halberds in this region as well as across Wales (Williams and Lodwick in prep.). It seems that only around the transition to bronze-working, though not necessarily connected to that change, was there any significant uptake of the new burial rite (Middle Neolithic 'single grave' burials having lapsed many centuries earlier). Early burials in the local sequence include not only a dagger grave from Yr Orsedd Wen, Denbighshire, but also some classic Long-Necked Beaker burials, most notably that from Ysgwennant, Denbighshire with associated stone 'sponge-fingers', 2 jet button and pulley-ring sets and a strike-a-light set (Clarke 1970, 389 fig. 895; Day 1972).

Although the burial record of the region is not especially well known, there are actually a number of noteworthy grave groups, admirably summarised by Frances Lynch (1991, 67–76). Despite the occurrence of: i) a fair variety of object types reflecting broader repertoires, ii) some individually fine pieces of craftsmanship (for example, the plano-convex flint knife in cremation burial pit 20, Brenig 44) and iii) several finds of exotic materials (amber, faience, jet, gold), Frances at times regarded the funerary accompaniments of the region as relatively poor (Lynch 2003, 29). This may be strictly true (setting aside the obvious exceptions of Mold and Llong), but may actually obscure a more important point about regional variation in funerary expression that had little to do with the availability or otherwise of finery and valuables. Frances herself has made the point that so-called warrior graves, equipped with daggers (as opposed to small bronze knives), seem not to have been a tradition in this region, nor indeed Wales at large. In north-east Wales up to four are known, of which two at least are probably early bronze flat daggers (Yr Orsedd Wen, Denbighshire and Four Crosses, Montgomeryshire; both are fragmentary and the latter had been re-deposited by ploughing, hence not with a burial), dating to the highpoint of dagger burial nationally (*circa* 2200–1950 BC). Thereafter, many regions virtually abandoned the practice of placing daggers in graves. A lost 'dagger' said to be 5 or 6 inches long was evidently found with human bones at the foot of a standing stone around 1813 near Pentrehobin, a short distance to the south-east of Mold (Davies 1949, 249). The remaining 'dagger', that from Ffridd-y-garreg-wen, near Gorsedd, Flintshire, has an unusual form not matched among established dagger types; moreover, its length is marginal to that for riveted bronze knives (Savory 1980, 130–1 no. 328, fig. 27). It accompanied a secondary cremation, bronze awl and Food Vessel Urn. I have discounted a 'bronze dagger' of unknown form and size from a burial at Rhiwiau,

Denbighshire, apparently associated with an inurned cremation (Stanley and Way 1868, 247; Davies 1929, 350); in this context, it is far more likely in fact to have been a bronze knife or razor.

Anglesey, north Wales and the adjacent parts of the English Midlands are the focal area for finds of developed bone pommels (those having strongly expanded lips), examples from our region occurring at Brenig 51, Denbighshire, and Marian Bach, Flintshire (Lynch 1993, 111–2 fig. 10.8; Hardaker 1974, 15 no. 15). As Frances has pointed out from time to time these are often found in contexts lacking any metal blade, whether dagger or knife (Lynch 1993, 112, 154–5). A find from a grave at Bryn Beddau, Clocaenog, may add to this phenomenon of absent blades; a rather corroded strip of bronze has hitherto been identified as a possible pair of tweezers (Savory 1980, 144 no. 399, fig. 50), but this is unconvincing. Instead, the long oval plan that may be reconstructed could have served to bind either a very wide pommel (it would have been one of the largest), or the mouth of a sheath.

Although the immediate environs of Mold are not thick with burial monuments, we cannot know how many were destroyed in antiquity and historical times and fail to show as cropmarks. Nevertheless, in a 20-kilometre reach of the Alun, from its elbow above Mold down to the bend at Wrexham, as many as 14 mounds have survived as upstanding monuments into historical times (Lynch 2003, 23 fig. 1). Noteworthy grave goods include not only the dagger with a burial marked by a standing stone at Pentrehobin mentioned already, but also the jet necklace from a cairn at Llong, just two or three kilometres downstream from Mold; the necklace, comprising no fewer than 959 disc and fusiform beads, lay above the crouched inhumation of a young adult, possibly a female (Lynch 1984; Sheridan and Davis 1998, 150 no. 11).

An unusually large ring-ditch with an external diameter of 44m has been detected as a cropmark at Pentrehobin (Fig. 4) and has since been surveyed by geophysical methods and sampled by limited excavation (Bill Britnell, pers. comm.; Jones 2011). There is evidence that a mound once covered at least three internal features, one of which was partially excavated. Charred oak timbers believed to be from a coffin have been dated to 2400–2130 cal. BC (3810±30 BP, SUERC-32382/GU-22946; note, this may involve old wood). This site lies in the valley roughly half way between the gold cape and jet necklace burials and indicates that this zone once had some impressive barrows.

A PIVOTAL REGION: MATERIAL AND IDEOLOGICAL FLOWS IN THE NEOLITHIC AND EARLY BRONZE AGE

This part of Wales and adjacent England was far from being a backwater in the early metal age and the collective record from these burial sites is not unimpressive for a region that saw no major antiquarian campaigns. It can be suggested that a key factor which helped the region to achieve and sustain a vigorous economy and distinctive culture was its nodal position in networks of communication and exchange. The position of the north Flintshire plateau and the lower ground around it, including the Alun valley, was pivotal in the flow of critical goods and materials, both in the Neolithic and Bronze Age (Fig. 7).

During the Neolithic there must have been a constant flow of Graig Lwyd stone axes (Group VII rock) eastwards along the coast from the source at Penmaenmawr. The main distribution of such axes, away from the immediate hinterland of the north Welsh coast, falls in a south-easterly quadrant from a secondary origin around Flintshire (Fig. 8; Clough and Cummins 1988, 271 map 7). The main concentrations spread from eastern parts of Wales through the English Midlands as far as the Fen Edge, and up to the Peak District and Lincolnshire, with an additional outlying concentration on the Yorkshire Wolds. This has implications for north-east Wales regardless of which mode of distribution

prevailed (directed long-distance trade or the drift of down-the-line exchange) and may help give context to the eclectic lithic assemblage at Prestatyn (Lynch 1993, 33). Interestingly, there is a sharp cut-off from north-west England, where Group VI axes of Cumbrian origin suddenly take over beyond the Wirral. Some have seen the operation of market forces in such exclusive distributions, but in fact such a durable pattern of mutual exclusion (bearing in mind the longevity of the types) is much more likely to be due to engrained axes of social affiliation.

The north Welsh coast, possibly as far as Liverpool, is well known for having certain connections with Ireland during the passage grave period, expressed not only in comparable tomb architecture, but also in the adoption of comparable art to embellish the tombs (Lynch 2000a, 73–7). Less well recognised, because of the small number of known representatives, is a reciprocal contribution, that of Maesmor type mace-heads (Fig. 9). Celebrated examples, such as that from Maesmor itself, from the south of Denbighshire, have long stood out because of their fine, sculpted decoration, but the type is perhaps best defined on the basis of a chunky cross-section with distinctly flattened faces, as originally defined by Fiona Roe (1968, 149–51). This type would appear to be a refinement in certain zones on the western fringes of the more generalised ovoid type which is common in central and eastern regions

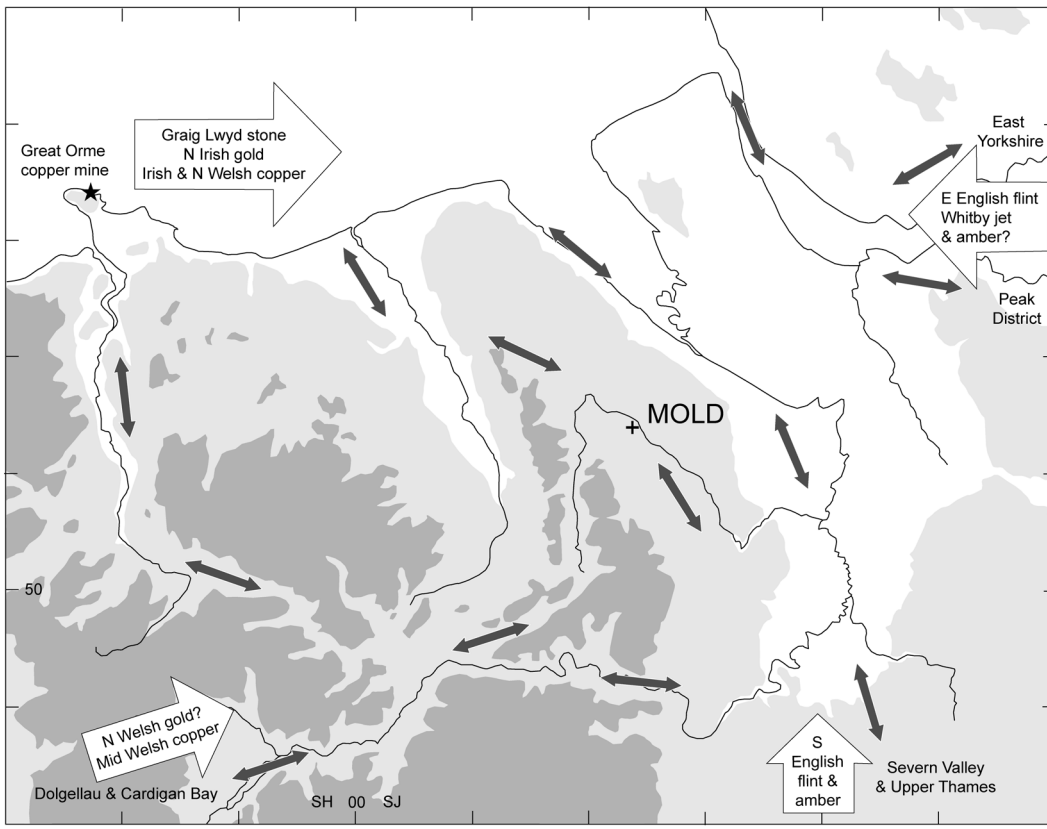

Fig. 7. Schematic map showing the flow of critical goods and materials through north-east Wales during the Neolithic and Early Bronze Age. Note, the ‘copper’ could have been moving in already alloyed form. Land over 61m (200ft) and 305m (1000ft) shaded.

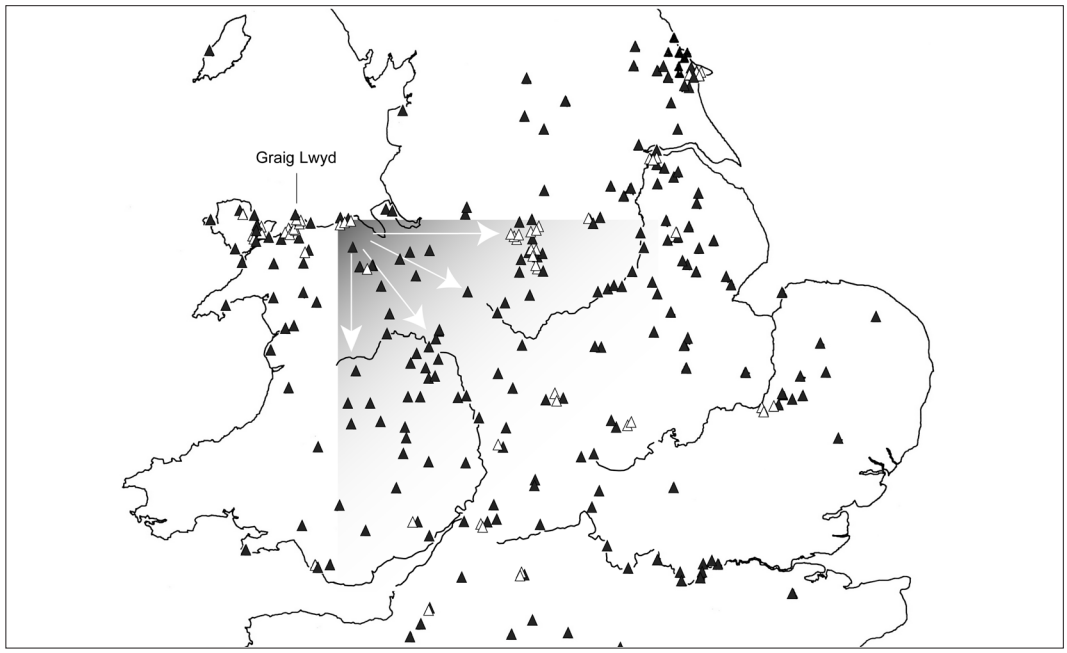

Fig. 8. Map of recovery of stone axes of Graig Lwyd stone (Group VII) showing the importance of Flintshire as the apex of the main distribution in eastern Wales and the English Midlands. Based on Clough and Cummins 1988.

of Britain (ibid., 157 fig. 34). There is a second find from north-east Wales, from Y Fron, near Mold (Davies 1949, 253; Burrow 2003, 96 fig. 50.4), and a third comes from Quarnford, Staffordshire. It may be possible to add another, unfinished example to this regional group; a sub-rectangular block of quartzite from Moel Fenlli, 90mm long, has drill holes started in either face in an off-central position (Smith 1884; Jones 1927; Davies 1929, 190–1). These features are consistent with it being destined for a Maesmor type mace-head; quartzite seems to be recurrent in this group. It is significant that the only example yet known from Ireland, the magnificently carved piece from Knowth, lay not far inland from the Meath coast facing across the Irish Sea to Anglesey and Liverpool Bay. A little further afield, there is a more recent find of the type from Ogmore-by-Sea, Mid Glamorgan (Burrow 2003, 96 fig. 50.1, 339 cat. no. 1203), while another candidate in south Wales is that illustrated by Fenton (1811, 24, pl. I, 4) found within a 'stone circle' at Ffynnon Druidion, Pembrokeshire. It is depicted with the trapezoidal shape and flattened faces and its length was apparently 77mm, which conforms well to others of the type.

As we move into the metal age, the key materials and object types obviously change dramatically, but the primary axes of exchange may have been more durable on account of both geography and the locations of critical resources that came to be exploited. The distribution of copper, later alloyed with tin to make bronze, rapidly became one of the primary concerns of society. At first, during the later third millennium, the great majority of copper used in Britain came from the Ross Island mine in Co Kerry, south-west Ireland—characterised by the composition known as A-metal, or IMPLI 1 (Rohl and Needham 1998, 86–7). The steady flow of A-copper through Ireland and then across to Britain

could have passed along innumerable routes. An attempt to portray this osmotic process (Needham 2004, 242 fig. 19.19) suggests that one major portal for onward distribution in Britain lay along the north Welsh coast and, via the Flintshire area, towards the upper Severn.

The picture relating to copper exploitation changed quite dramatically from around the turn of the millennium. During the earlier half of the second millennium, British dependency on Irish copper was broken by the opening up of copper sources at a number of sites in Wales, Anglesey and the north-west English Midlands. The relatively recent history of the discovery of these ancient mines has been well summarised by Timberlake (2009). Sites include several in central Wales, the most fully excavated being Cwmystwyth (Timberlake 2003); Parys Mountain and perhaps Pant y Gaseg on Anglesey; The Great Orme at Llandudno (only the early phases of a centuries long exploitation are relevant here); Alderley Edge, northern Cheshire, and possibly Ecton, in the Peak District. Mold and its immediate region thus lie in the heart of a large area within which copper extraction became an embedded part of culture and economic life (British Museum 2005). This would certainly have given the wider region prominence as the supplier of fresh metal, though it is not clear that the zones of exploitation themselves saw any boost in prosperity as judged by modern perspectives. Moreover, it seems unlikely that a social elite based in the Mold region would have had direct control over the copper producing zones, the closest being the Great Orme, 50 kilometres away. Again, it may be noted that the richness of the Mold grave is expressed in gold, not copper or its alloy; so, if there is a relationship to the benefits obtained in the wider area from copper winning, prosperity is being expressed through the exchange of copper for gold.

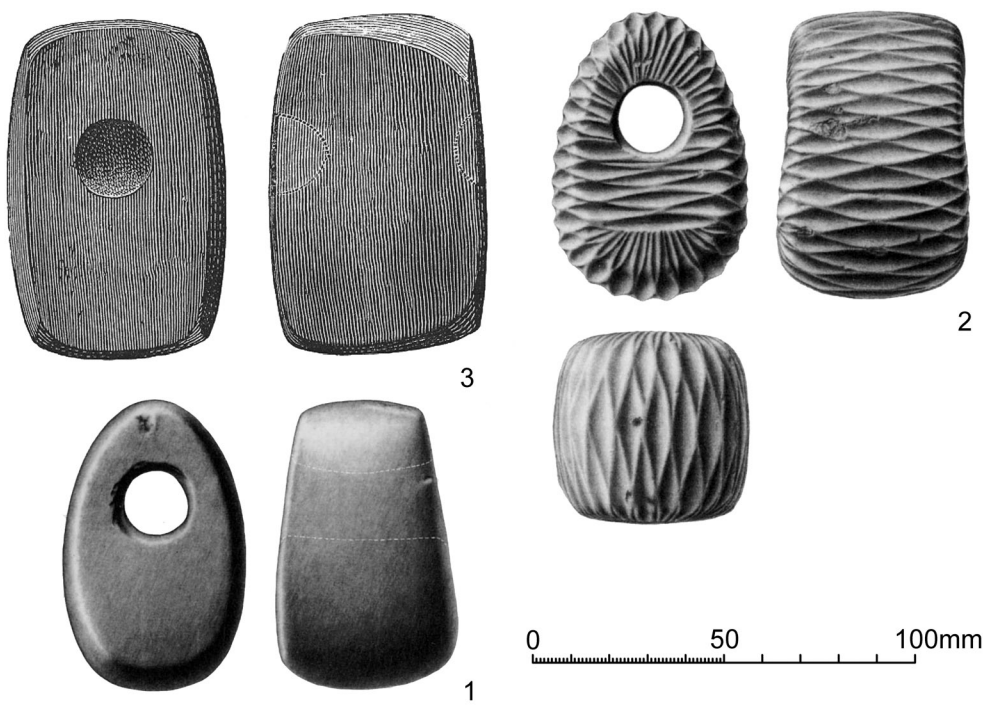

Fig. 9. Maesmor type mace-heads from (1) Y Fron and (2) Maesmor, and the possible unfinished example from (3) Moel Fenlli. After Burrow 2003 (1–2) and Smith 1884 (3).

Notwithstanding the difficulties of recognising enhanced prosperity in the small-scale economics of a pre-monetary and pre-state environment, there is still some virtue in considering the effect of control over the flow of copper and other valuable materials. By the mature Early Bronze Age (Willerby and Arreton metalwork stages, *circa* 1950–1500 BC), there were considerable concentrations of bronze objects in eastern and southern England, from Yorkshire and Lincolnshire through East Anglia to the south coast. Metal analyses have been used to argue that a good proportion of the metal in these objects originated in the Welsh exploitation zones, both north and mid Wales (Rohl and Needham 1998, 91–3, 179). Material destined for inland Britain from The Great Orme and Anglesey's Parys Mountain in particular would most logically pass east by way of rivers such as the Ribble, Mersey, Weaver and Dee, in much the same way as Graig Lwyd stone axes had in earlier centuries (although not the Ribble). Metal could also have been introduced to Liverpool Bay from sources in the Isle of Man which may have been exploited in the Bronze Age (Timberlake 2009).

Other exotic materials may have flowed in the opposite direction. One prime candidate is jet from Whitby on the North Yorkshire coast. Although there are other potential routes involving Pennine crossings, the quantity of jet finds in Peak District burials and the jet-working assemblage at the Swine Sty settlement in that region could suggest that this was the main intermediary for supply to north Wales. The Llong find comprising an astonishing 959 jet beads is only 2 kilometres downstream from Mold. Further to the west are other finds including jet components, not least the spacer-plate necklace from Pen-y-bonc, Anglesey (Sheridan and Davies 1998).

The many amber beads in the Mold grave at first sight present quite different connections, for the main distribution of amber is largely exclusive of that for jet in the early second millennium BC. By far the densest concentration of amber finds occurs in central southern England, but no finds are yet known between the Upper Thames and Mold, making the latter look very isolated if that was the direction of supply. However, a spread of at least eight finds, some new, has emerged between Norfolk and the Peak District and these could conceivably point to the primary axis along which the large quantity of amber was obtained. The East Anglian coast could have been either the immediate source of washed-up amber that was systematically sought on the beaches, or an intermediate staging post for material brought across the North Sea by human agency. The faience found in two graves in north-east Wales need not have been imported as such, but they add to the diversity of materials that local communities were able to exploit.

It has traditionally been assumed that most if not all gold in British objects of the Chalcolithic and Early Bronze Age came from Irish sources. Recent research suggests that the Mourne Mountains of Co. Down were a major source for contemporary Irish objects (Warner *et al.* 2009). For any northern Irish gold brought across to Britain, Liverpool Bay would be a natural funnel to the Mersey and Dee valleys thereby leading to the Trent valley/Peak District and eastwards, or the Severn valley and southwards. Gold of Irish origin could, of course, have been imported to Britain in other directions too. However, there are reasons to question how much of Britain's goldwork was based on material of Irish origin after the earliest phases of metallurgy.

MOLD AND THE PROCUREMENT OF HIGH-SILVER GOLD

There is renewed interest in the study of gold compositions. The earlier and far ranging campaign of analysis conducted by Axel Hartmann (Hartmann 1970; 1982) sought just a handful of impurity elements and the percentages he established for silver, an important characterising element, are often extremely approximate because of the method used (Warner 2004, 72; Warner *et al.* 2009; Warner

and Cahill forthcoming). A subsequent analytical project applied the new technique of laser-ablation induction coupled plasma mass spectrometry (LA-ICPMS; e.g. Watling *et al.* 1994; Taylor *et al.* 1997), but concern has since been expressed as to the usefulness of the results obtained (Chapman *et al.* 2006; R. Warner, pers. comm.; but cf. Ehser *et al.* 2011). Most recently, reliance has been placed instead on scanning electron microscopy (SEM) and electron microprobe analysis (EMPA) to characterise natural gold, including determining inclusions (Chapman *et al.* 2006). Meanwhile, energy dispersive x-ray analysis (EDX) has become the main method for analysing artefact samples (R. Warner, pers. comm.).

In addition to the analysis of grain populations for many gold sources (in Britain as well as Ireland), 400 prehistoric Irish gold objects have been re-analysed (Warner *et al.* 2009). Plots of silver levels against copper have been published to illustrate both gross distinctions between Early, Middle and Late Bronze Age compositions (Chapman *et al.* 2006, 914 fig. 5) and to show in more detail the pattern for lunulae (Warner *et al.* 2009, 24 fig.). The composition ranges for other Irish Chalcolithic and Early Bronze Age types are broadly similar. Although there are noteworthy differences in emphasis according to type (Richard Warner, pers. comm.), very little of this early goldwork from Ireland has silver above 12% and this continues to be the case for earlier Middle Bronze Age goldwork (pre-1300/1250 BC; Chapman *et al.* 2006).

There are not as yet, however, comparable fresh data for the goldwork found in Britain (although the writer is aware of recent EDX analysis conducted on objects from Devizes Museum). While the values for copper and tin obtained by Hartmann are generally thought to be good (Warner 2004; Warner and Cahill forthcoming), the great imprecision in his silver figures (many being determined by specific gravity rather than direct spectrometric measurement) is particularly frustrating since it is apparent that the silver percentage in some British objects differs markedly from the range established for Irish objects. Aside from the Hartmann dataset, silver levels can be gleaned from a number of objects which have been surface-analysed using X-ray fluorescence analysis (XRF) as they passed through the Treasure process (England and Wales Treasure Act, 1997), or occasionally to support research on specific objects. Given the joint problems of the imprecision of some results and the uncertain compatibility between surface and core analyses, it is not sensible at this stage to seek distinctions in silver at more than a coarse level. For present purposes, I will merely distinguish between silver contents below and above 15% to illustrate a significant shift with potentially important implications relating to sources. Hopefully, in time, these patterns will not only be considerably refined for silver, but also supplemented by reliable data on other elements and inclusions.

Amongst the Irish finds, all 40 examples of discs, basket ornaments and lunulae contain less than 15% silver. There are three finds of other types of object potentially of Early Bronze Age date with over 15% (Hartmann analyses), but in all cases they also have significant levels of copper which is abnormal for the period; at least one item (the Deehommed/Benraw basket ornament, or pin; Briggs 2004) may be an import from the Continent. Silver levels in the equivalent types found in Britain show a similar distribution, as also do Scottish dagger hilt-bands and conical or domed button covers from two Scottish sites (the Knowes of Trotty and Barnhill). It should be emphasised that similarity in the silver level alone is not sufficient evidence that all these were made of Irish gold, but this is not the place for further discussion of this particular point.

However, the silver distribution shifts significantly upwards for the more developed traditions in southern Britain—Wessex linear goldwork and embossed goldwork. The phenomenon may be conveniently illustrated here by objects of the embossed goldworking tradition in Britain, most of which have been analysed at the British Museum using surface-XRF (Table 2). The results are accurate and relatively precise (up to $\pm$5% relative for silver) for the point analysed; however, there

is the disadvantage that the silver values determined may actually *underestimate* the true silver percentage because silver can be depleted relative to the gold in weathered surfaces, depending on burial environment. This is potentially the case for the Mold cape and the associated gold object which have recently been re-analysed and shown to contain about 18% and 15–16% respectively (Sue La Niece, pers. comm.; British Museum Laboratory File AR2009/78). From Table 2, it can be seen that of a total of ten components from six objects, only three components have silver lower than 15% (and two of these are only a little lower), the remaining seven ranging up to 27.5%. The corresponding copper contents measured (again, some on surface, some on core metal) are all below 1%, and most range from 0.38–1.0%.

There are indications from Hartmann's crude results that silver levels in Wessex goldwork were also often higher than the contemporary Irish distribution, reaching about 20% (there is even one outlier at 45%!). Warner had previously noted, based on Hartmann's data, that the Wessex gold tends to have higher copper than found in contemporary Irish objects, but he wondered whether that enhancement was caused by slight adulteration with bronze (Warner 2004, 76).

It is not generally considered likely that enhanced silver is due to alloying in this period, not least because silver as a separate metal is all but absent from Early Bronze Age Britain and Ireland (just a cover for an amber bead; Needham 2000b, 179 fig. 18.1). Silver occurs naturally in gold, its level varying according to the particular style of mineralisation (Chapman *et al.* 2006, 907); while it commonly occurs in the range 0–20%, it can reach much higher levels. For example, panned material from Kildonan Burn, Sutherland, has silver ranging between 10 and 40% in individual grains, but fused together randomly, they would tend to produce gold with about 22% silver (Chapman 2007). Some other sites in Scotland yield even higher median silver values (Chapman *et al.* 2000, 251 table 3). There are also some Irish sources yielding gold with fairly high silver, for example, Croagh Patrick, Co. Mayo, where the alluvial gold has a median of 16.1% silver (Chapman *et al.* 2000, 252 fig. 5). However, if exploited at all, Irish and Scottish higher-silver gold does not seem to have made a significant contribution to the earlier Bronze Age circulation pool to judge from the find locations of extant objects.

One plausible source for high-silver gold at this time has been suggested by Ehser *et al.* 2011. In assessing the potential origin of the gold appliqués on the Nebra disc, Sachsen-Anhalt, Germany, which contain *c*. 24–25% silver (first-phase gold; ibid., table 3), those authors were able to show (using highly refined LA-ICPMS analyses) that a range of stable trace elements have similar levels to those in certain Cornish alluvial gold populations, from the Carnon river. Over half of natural grains analysed from the Feock locality contain between 31 and 46% silver. It was noted that the handle of the Rillaton cup (but not its body) features high silver. Only two elements (copper and platinum) differed between the Carnon river samples and the Nebra disc. The sampling of western European sources in this particular exercise was highly selective; nevertheless, despite more extensive analyses for natural gold from central and south-east Europe, none in those regions could be matched to the Nebra gold appliqués, causing the authors to turn to the west. In this context, it may be worth noting that two of the embossed gold cups of Early Bronze Age style on the Continent (Gölenkamp and Eschenz), argued to belong late in the period and to have been inspired by the British embossed goldworking tradition (Needham 2000a; Needham *et al.* 2006, 60–3 fig. 30), are also high in silver (*c*. 24 and 25% respectively). Even if there are other potential sources than Cornwall, circumstantial evidence might certainly favour a southern British source.

The presence of such a large quantity of gold in the Mold cape inevitably raises the question of whether a more local source might have been exploited. There are a number of sources of gold in north Wales, although by no means all will have been accessible to prehistoric communities. Some are

close to Mold and the Alun valley—in the Berwyns and close to Moel Famau in the Clwydian range where Camden reported that gold had been sought and found in his time (cited in Collins 1975, 13). There was a later resurgence of interest in the Clwydian range in the late nineteenth century AD, with mines sunk between Moel Arthur and Moel Famau, but it is not clear that they were economically productive for the time and there may have been some false claims of gold having been recovered (King 2000). It is a tantalising coincidence that Moel Arthur is the site of a hoard of copper axes; it is also crowned by a hillfort, presumed to be Iron Age (Forde-Johnston 1962). These mines were a mere 10 kilometres west of Mold.

The presence of gold in the Berwyns is better substantiated. Modern stream sediment survey has produced panned gold along the Afon Trystion and its tributary, Nant-y-lladron (Cooper *et al.* 1984, 17 fig. 22, 34–7); the Trystion flows into the upper Dee at Cynwyd. This alluvial gold is deduced

Table 2. Silver levels for gold objects of the embossed tradition; the levels are all approximate (see references cited for full results including precision and analytical methods)

Site	Object	Museum acc. no.	silver[a] %	Analytical technique	Reference
Lockington (Leics.)	armlet 1	BM 1996 9-1 1	*13*	surface XRF	Hook and Meeks 2000
	armlet 2	BM 1996 9-1 2	*14*		
Mold (Flints.)	main cape	BM 1836 9-2 1	*18; 19*	surface XRF	British Museum Laboratory unpublished report AR2009/78
		BM 1972 6-1 1	*18*	surface XRF	
		BM 1972 6-1 2	*18; 18*	surface XRF	
		BM 1972 6-1 3	*18*	surface XRF	
		BM 1972 6-1 4	*17; 18*	surface XRF	
		GMC (no. 1)	*c*. 15	specific gravity	Hartmann 1982, 98 Au 2037
	cut-down piece	BM 1836 9-2 2	*15; 16*	surface XRF	British Museum Laboratory unpublished report AR2009/78
		BM 1836 9-2 3	*15; 16*	surface XRF	
		?BM 1836 9-2 3	*c*. 15	specific gravity	Hartmann 1982, 98 Au 2035
	?unidentified frag.	?GMC	*c*. 14	specific gravity	Taylor 1980, 139, no. 86
Rillaton (Cornwall)	cup – body	BM[b]	*c*. 10	specific gravity	Hartmann 1982, 100, tables 6–7, Au 3113, 3114
	cup – handle		*c*. 25	specific gravity	
Ringlemere (Kent)	cup – body	BM 2003 5-1 1	22.9[c]; *18*	surface XRF	La Niece 2006
	cup – handle		27.5[c]; *26*	surface XRF	
	cup – rivet		*23*	surface XRF	
	cup – washer		*21*	surface XRF	

BM = British Museum; GMC = Grosvenor Museum, Chester; XRF = X-ray fluorescence.
a = Percentages given in italics are analyses on unabraded surfaces and may underestimate the true level of silver because of surface depletion relative to gold; b = On loan from the Crown; c = Fresh metal exposed at area of damage.

to have derived from drift deposits rather than directly from the host rocks. The yield from panning today is poor (Rob Chapman, pers. comm.), but we do not know whether past systematic panning has impoverished it; moreover, it should not necessarily be assumed that Bronze Age gold was retrieved solely by panning streams (Warner *et al.* 2009).

Further afield, there are fairly rich alluvial deposits within the Mawddach field, around Dolgellau; these have been panned in modern times. Dolgellau can be accessed directly from the head of the Dee valley via the Bala Pass; hence the possibility of a regular and fairly direct link to the Mold region (Fig. 2). Chapman *et al.* (2000, 243, 246 fig. 2, 248) have microchemically characterised gold grains from several localities within this zone and, while most have modest median silver contents (<12%), a sample of mined ore from Gwnfynydd has 17.5% and panned gold from the Afon Las contains an extremely wide range of silver contents with a median of 26.4%. Obviously, the ore deposits accessed in recent mining may not have been available to prehistoric people, while the Afon Las grains recoverable today are tiny (Rob Chapman, pers. comm.), leaving uncertain whether it could have been a sufficiently productive source for substantial gold procurement in the Bronze Age. Nevertheless, these give important indications that high-silver gold can be found in locations not too far distant from Mold.

This is not the place for an exhaustive summary of Welsh gold sources, but it is worth also mentioning that small amounts of gold (0.13 oz/ton) are among the extensive mineralisation at Parys Mountain, Anglesey (Cooper *et al.* 1990, 5), known to have been exploited for copper in the Early Bronze Age. Gold has also been found in the north-west of the island, though it is not yet clear that there were surface deposits allowing detection by Bronze Age prospectors (Cooper *et al.* 1989, 1).

Only future more refined analyses of artefacts and source material will show whether or not a Welsh or British origin for the gold in the cape, and some of the other objects with high-silver gold, is feasible or probable. It can at least be ventured that the upward shift in silver levels seen in southern British goldwork of the developed Early Bronze Age strongly suggests that a new and probably non-Irish source (or sources) was being tapped. The Mold cape and other fairly large bodies of metal, such as the Ringlemere cup, imply sustained high levels of silver in whatever source or sources were being tapped into, so alluvial sources that only yield a minor proportion of grains with above 15% silver are effectively ruled out. We should not, though, exclude the possibility of gold recovered by mining, in which case the exploitation of a particular rich vein, being the product of a given mineralising event, might well give rise to a sizable body of gold of fairly consistent composition.

AMASSING GOLD

Relating to the question of the source or sources of the gold is the question of how this quantity of gold was amassed. The complete cape is estimated to have consumed around 720g of gold, considerably larger than any other object of the Early Bronze Age (Needham 2000a, 44). While relatively small objects might be produced by either recycling an earlier, defunct ornament or prospecting for fresh gold in an established source, both these routes become more problematic when creating a large ornament.

It is worth considering three main scenarios of accumulation:

1. *Newly won gold from a single source*. Unless an exploited source was especially prolific, there would need to be a sustained policy of accumulation of freshly won material dedicated to the purpose. Theoretically this could have happened either in the source region or at some distance.

In the case of the Mold cape, there are grounds for believing that the form is characteristic of the Mold region, so, if the main source of gold was not close by, it could imply a concerted campaign to acquire gold from a distant source by inter-group agreement or by dedicated expeditions. Alternatively, there might have been a single transaction of the required quantity which has the additional implication that the source region had the capacity to accumulate a fairly large stock ready for bulk exchange (either as raw metal or as one or more objects).

2. *Newly won gold from multiple sources*. Negotiation with several known source areas would make the accumulation of a large quantity of gold potentially quicker. It would not, of course, diminish the need for goods of sufficient exchange value to secure the transactions; we can probably safely assume that the exchange value for gold was high in contemporary value systems. In practice, multiple sourcing seems an unlikely explanation for the cape because of its relatively high silver level. The dominant Irish sources exploited at the time had much less silver (above), so these would have to be compensated by equal amounts with correspondingly higher silver, say 25–30%. There is some evidence to suggest such high-silver gold was circulating in the Early Bronze Age (e.g. the Ringlemere cup compositions; Table 2), but at present it is unclear how much.

3. *Gold recycled from earlier objects.* While the cape could theoretically have been manufactured from gold melted down from a single object of comparable size, this merely shifts the question posed above to an earlier act of creation. On the other hand, if metal had been accumulated from several existing objects, we again have to confront the fact that the resultant mean silver level was high. There would have to have been a bias towards objects containing relatively high-silver gold. Such a bias is not impossible if the material came mainly from objects in the embossed goldworking tradition which are often of moderate size (e.g. 50–300g), but it is unlikely to have resulted from a random mix of gold circulating in the Early Bronze Age.

This discussion suggests that, whatever the specific intermediate histories of the metal contributions, much of the gold embodied in the cape was from a single source zone that was yielding fairly high-silver gold, probably over a period of time. This has the strong implication that it would have been a fairly local source, for otherwise, as stated above, we might expect to have seen some indication of similar compositions in gold objects from closer to gold-bearing deposits in other regions (notably Scotland and Ireland).

The second gold object in the Mold grave group may have implications for this discussion. Although only a fragment of the original object seems to have been present in the grave, it can be suggested that it too was originally a cape (Fig. 10; British Museum 2005; Needham in prep.). We cannot know whether it was of similar size to the main cape, but the sheet metal is thinner, so the likelihood is that the mass of metal was less. Although this object too was made of moderately high-silver gold (Table 2), the level is 2–3% lower than for the main cape. It is feasible that the majority of the former cape was melted down to contribute a large bulk of metal to the new production and, in this scenario, it would have been necessary to top it up with other metal (freshly won or recycled) containing yet higher silver, probably over 20%.

Given these various observations and deductions, it is hard to escape the conclusion that the Mold cape, and its predecessor cape, had a strong component of gold originating in a source within southern Britain. Moreover, this source may have underpinned the embossed goldworking tradition and may also have contributed significantly to the Wessex Linear tradition.

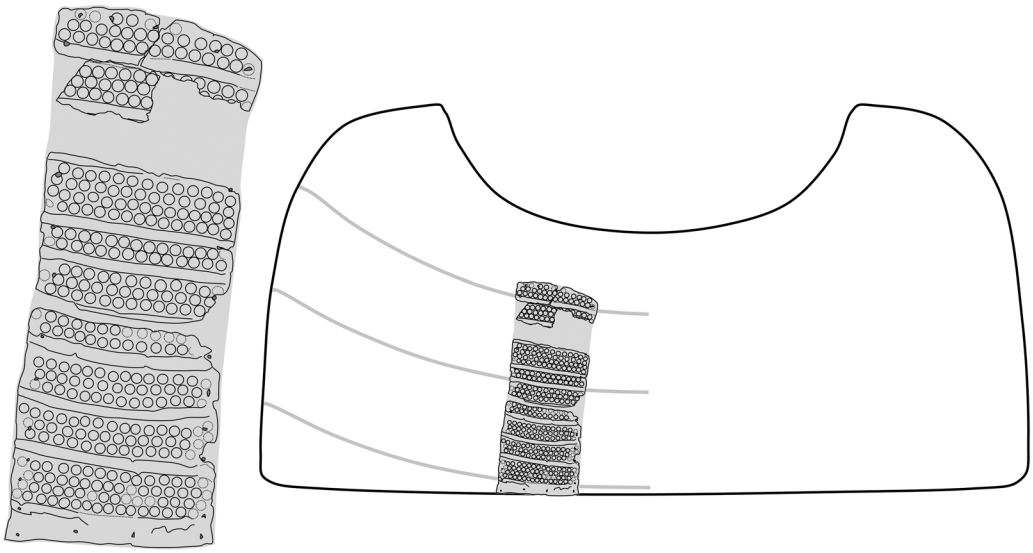

Fig. 10. The second gold object, represented by five fragments reconstructed as a rectangular plaque cut out from a former cape. There is some distortion caused by reworking the plaque's edges. The outline represents the front of the main cape.

REGIONAL ECONOMY AND POLITY

It is then possible to suggest overall that the Dee valley and its estuary, and especially their flanks to the south-west, including the Flintshire plateau and the Alun valley, were particularly advantageously sited in terms of contemporary communication networks. This would explain not only the exotica in certain graves, but also the greater expenditure of effort in constructing mounds generally larger than in other nearby areas. The extent to which the food economy was specific in underpinning success remains uncertain due to the dearth of relevant environmental evidence locally. Palaeoecological studies in the Brenig valley to the west indicated that the uplands supported tracts of grassland, before heather came to dominance, and also yielded evidence of arable agriculture nearby (Lynch 1993, 36), but none of this is unusual for the period.

The geology and soils of the eastern zone are mixed—a base of limestone, gritstone, sandstone, shale/siltstone and boulder clays covered predominantly by brown earths and stagnogley soils with a loamy character and often stoney (Avery *et al.* 1975). These were certainly capable of supporting a healthy agricultural economy for the time (insofar as we understand Early Bronze Age food economies), but they were hardly likely to have given rise to a more productive environment than many other regions. Perhaps the most that can be said on present evidence is that, if there were other economic and political advantages, such as position in exchange networks as suggested, then there was certainly scope for the support of a thriving population using a mixed agricultural regime. If cattle rearing was the dominant aspect of agriculture, as often suspected for the period, it may be noted that there was opportunity for seasonal pasturage in varied ecologies including uplands, valley slopes and the wetter meadows of valley floor and coastal marshes; these various niches could be accessed within relatively restricted transects of the territory.

Implicit in the exchange model proposed above is the importance of sea and river routes for communication and onward distribution. That is probably uncontroversial, but it certainly does not exclude the simultaneous use of upland routes, especially passes. Regular use could, for example, have been made of the Chwiler pass linking the lower Clwyd valley to the Alun valley above Mold (Fig. 2), thus creating a parallel track for the flow of goods from the coast southwards towards the Severn (Fig. 7). Indeed, individual paths of flow need not have followed prescribed routes and the arrows in Figure 7 can only be simplifications of gross processes. Thus, the concentration of monuments on the north Flintshire plateau does not mark out any specific route, for these were not sited with exchange transactions in mind. Nevertheless, collectively they could reflect the physical and spiritual strength of a society with an acknowledged pivotal position in the exchange network.

There is another Early Bronze Age artefact type, not usually regarded as signifying any great prestige, which deserves introduction to this discussion. Perforated stone axe-hammers are well known for their strong representation in Wales, northern England and southern Scotland (Roe 1979, 28 fig. 5). Within this broad zone, they show a particular emphasis on much of the Irish Sea coastland from Cardigan Bay to Galloway. However, there is a conspicuous gap in their distribution in north-east Wales, effectively much of Denbighshire, Flintshire and The Wirrall (Fig. 11). The break in distribution can be seen in Frances Lynch's plot (1993, 38 fig. 5.1), where ten examples occur spread along the Conwy river catchment and crossing into the upper Dee valley, whereas only a single coastal find comes from the area to the north-east. Given the almost universal casual discovery of this object type, it is extremely unlikely that marked changes in finds densities would be due to recovery bias across regions that have similar land-use patterns and it is fair to conclude that this gap in their distribution may define a territory where the type was not adopted, in contrast to neighbouring areas to west, south and east. This may give the best indication of the extent of a regional belief-cum-economic system and, if so, would suggest a regional entity in the Early Bronze Age encompassing much of Denbighshire as well as Flintshire and the borders of Cheshire. This gives a larger territory than identified above on the strength of variations in mean mound diameters. It may be that a 'core' zone attracted enhanced population levels and thus facilitated the construction of larger monuments, commandeered inter-regional exchange and thus had greater capacity or inclination to represent exotics in funerary ritual, and became effectively the powerhouse of the wider domain.

Already the 'domain' I have tried to identify around the presumed economic, social and ideological importance of the Mold cape has become two-tiered; this could be taken further. I have been reticent above to see this particular polity as exerting any direct control over the contemporary copper mines. This may be an over-simplistic deduction, given the nature of the societies involved. We cannot rule out that a successful and regionally powerful group would have taken an interest in, and exerted some influence over primary production of key materials beyond its immediate territory. For example, I have raised the possibility that the procurement of enough gold to make a cape might have involved either dedicated expeditions, or co-opting the efforts of another social group through negotiation. Either strategy could imply a power relationship that favoured the Mold polity over its neighbours; the advantage hardly need have been restricted to acquisition of gold. Such a relationship could result also in the polity having an 'arm's length' effect on the development of the copper production zones.

CONCLUSION

North-east Wales is rarely at the forefront of archaeological syntheses for prehistoric periods. Yet it is apparent that Mold lay within a thriving region in the Early Bronze Age, the seeds of its prosperity

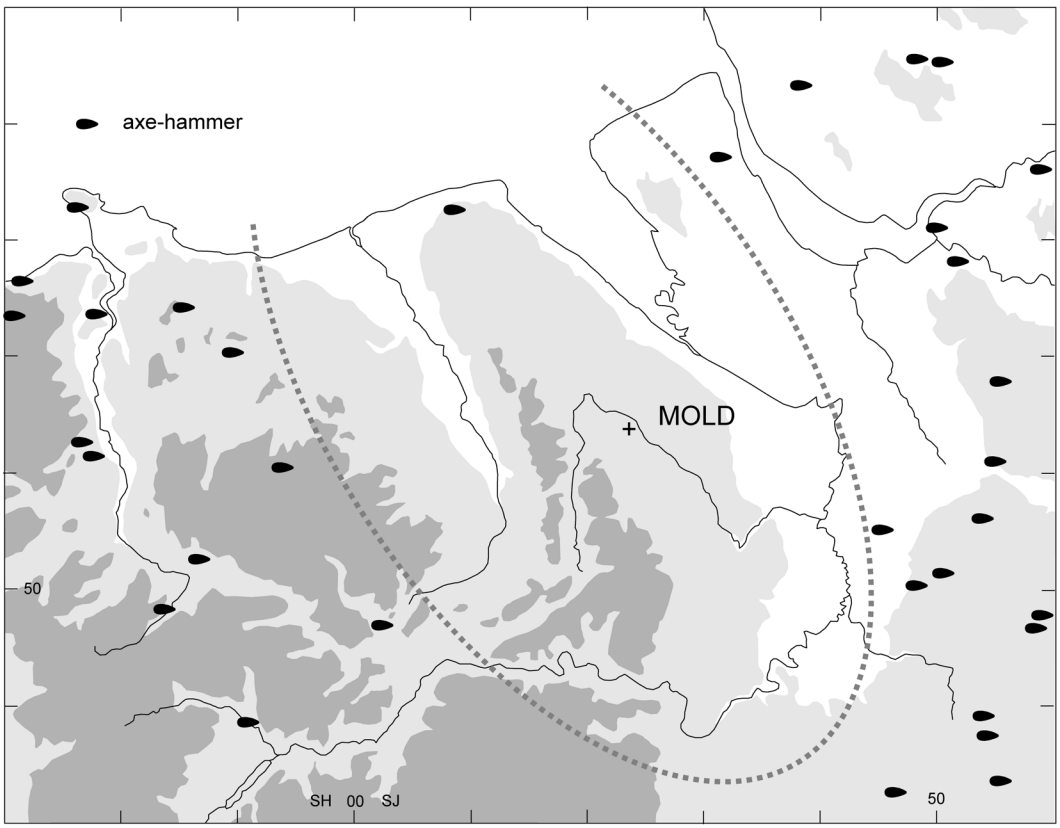

Fig. 11. Map of recovery of perforated stone axe-hammers in and around north-east Wales. Land over 61m (200ft) and 305m (1000ft) shaded. Based on Clough and Cummins 1988, Lynch 1993 and Mullin 2003. The dotted line suggests a possible domain around Mold.

probably sown during the Neolithic. A strategic position within exchange skeins facilitated the passage of stone axes from Graig Lwyd in the west and flint from the east, followed by copper and gold once metal was introduced. A further contributory factor was doubtless the combination of fertile low- and medium-altitude ground with accessible montane zones for summer pasture and relevant spiritual pursuits. The discovery and subsequent exploitation for some centuries of local sources of copper (overlooking for now the unproven case for local gold) added greater diversity to the regional economy—a material with high exchange value to aid procurement of agricultural products, external materials and elite marriage partners. This picture of success did not end at the close of the Early Bronze Age even though the main preoccupations of society changed radically at this time, for there are a number of further finds of gold clustered in the region, not to mention an important distribution of bronzes. The Caergwrle bowl, the Ysceifiog torc, the Acton Park, Burton, Rossett and Llanarmon-yn-Iâl hoards are just a few of them.

I am not suggesting that we can as yet define, or indeed should expect to define, a neatly bounded territory to which the Mold find belongs. The evidence for Early Bronze Age societies points to them having fairly porous, layered and even overlapping geographical boundaries. But there are

many indications from artefacts and ritual practices for particular regional emphases and regional understandings of how to conduct affairs. And I think there is the germ of a case, based on the two capes from Mold and a *very* tentative antiquarian record for one at Wrexham that such a resplendent mantle was the creation of one particular society as they directed their new-found prestige materials to spiritual ends. In this sense then, the Mold cape, undoubtedly the apparel of a very distinguished person, could also be the distinguishing insignia of a particular social group centred on the north Flintshire plateau, the flanking coastlands, the Alun and lower Dee valleys. Thus, in all its radiant glory, it would represent their success, prowess and identity.

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