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Location, Location: A landscape based study of early Neolithic longhouses in Britain.

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Abstract

This paper applies a landscape archaeology approach to the locations of timber longhouses in the British early Neolithic. Rather than concentrating solely upon the themes of domestication, and the cultural versus economic change debate, which some studies of early Neolithic longhouses have tended towards, this paper attempts an understanding of how people viewed the world around them based upon data collected from examining the characteristics of longhouse locations.

Introduction: the aims of this study.

This paper seeks to examine the phenomena of early Neolithic longhouses (timber halls) in mainland Britain from a landscape archaeology perspective. In many cases the topic of longhouses has been seen as a side issue to those of mobility and economy in the early Neolithic (e.g. Richmond 1999; Rowley-Conwy 2003; Thomas 1996a). On one hand, parallels with *Linearbandkeramik* (LBK) longhouses, and the discovery of relatively large amounts of charred cereal at some longhouses (Fairweather & Ralston 1993, 316; Garton 1987, 251), has been used to portray the British examples as the domestic habitations of settled farmers. On the other hand, the scarcity of known longhouses and the perceived lack of evidence for farming (Richmond 1999) have been used to suggest that longhouses were *special* places more concerned with formal ritual and ceremony than day to day living (Thomas 1996b; 2004). While this argument is undeniably of prime importance to understanding the early Neolithic, it does deflect from study of the longhouses themselves. Therefore, this paper initially puts aside the issue of

domestication in order to ask what the longhouses can say about the way in which Neolithic people viewed the landscape around them.

The nature of the subject.

For the purposes of this paper a longhouse is assumed to be a wooden rectangular or sub-rectangular structure that was at least five metres long and had a roof. As this paper is concerned with the longhouses' relationships to their landscapes, those that may have been incorporated into larger structures, such as the Hembury longhouse (Liddell 1931), have not been included. Neolithic longhouses tend to date from the first half of the fourth millennium BC and in mainland Britain there are around 25 known examples (see Fig. 1 and Table 2).

With virtually no surviving floor levels, knowledge of the layouts of these structures is often based upon the lower remains of postholes, wall trenches and possible fire pits. These buildings appear to have been based around a framework of timber uprights that were sunken deeply into the ground, often steadied by post packing. Walls are defined by rows of postholes and, infrequently, wall base slots. Where slots exist, for instance at White Horse Stone (Hayden & Stafford 2006), it has been postulated that planking was used for the walls. In other cases the walls may have been of wattle or wattle and daub. The surviving ground plans of larger English and Welsh examples, such as White Horse Stone and Lismore Fields (Fig. 4), tend to suggest a roof design of five longitudinal poles (purlins) supported by uprights, and supporting the latitudinal roof rafters. A purlin would have sat atop each long wall, another would have formed the roof's ridgeline and two more would have been mid-way between the ridge and sidewalls. The smaller English examples, such as Padholm Road, appear to have followed a three-purlin design, and the larger Scottish structures (Claish and Balbridie) a seven-purlin design. End wall layouts suggest that the roofs were gable ended, although the southern end of White Horse Stone might conceivably have been hipped. Based upon the strength of the conflagration that destroyed it, the roof at Claish was probably of thatch (Barclay et al. 2002, 98), and there is no reason

to assume that roofs at other examples were not also thatched. There is sometimes a difficulty in identifying entrances due to the lack of surviving floors. The majority of the sites have been interpreted as having had internal partitions, often incorporating the uprights that supported the roof.

Megaw and Simpson (1979, 86) stated that it was likely that a large number of longhouses originally existed. Their current, relatively small representation in the archaeological record could be due to a number of reasons. Compared to other roughly contemporary structures, such as barrows and causewayed enclosures, longhouses were relatively fragile and did not incorporate major earthworks in their design, thus they would not be expected to survive as well as these other more solid erections. Until excavated they can easily be mistaken for later buildings, for example, based on aerial photography Balbridie was thought to be of much later origin (Barclay 1996, 75). Megaw and Simpson (1979, 86) suggested that many are now buried under deep alluvium in river valleys, although Thomas (1995, 2) disagrees, citing the Raunds Project as a wide scale excavation where more tombs but no longhouses were found. Some longhouses may have been covered by later monuments; this seems to be the case at Gwernvale (Britnell & Savory 1984) and Hazelton North (Saville 1990). The nature of British field archaeology may also limit the numbers found; in Ireland, where much larger areas are opened for investigation, more longhouses have been discovered (Rowley-Conwy 2003, 125) and the same appears to be happening in northwest Wales (Jane Kenney pers. com.). Nonetheless, one cannot escape from the possibility that they have been found in such small numbers largely because they were only built in small numbers. After all, Neolithic pits containing structured deposition are even less substantial than longhouses but have still been found in great numbers. A list of known examples of probable longhouses is given in Table 2.

The case studies and methodology.

Six case study landscapes (see Table 1), incorporating a total of eleven longhouses, were used. The case studies were chosen to give a relatively

good coverage of the whole of Britain, and because they represented the most convincing examples of longhouses due to superior preservation.

The study used two digital methodologies. The first was a landscape approach using a Geographical Information System (GIS), and the second a digital modelling approach using 3-D reconstruction to attempt to experience how the architecture of the buildings structured movement through, and perception of, these longhouses. It is the first approach that this paper will concentrate on.

The landscape approach was based around a bespoke GIS package, using topographical data acquired from the Ordnance Survey via its DigiMap service, to model the area of each case study. An area around each longhouse, or pair of longhouses, was examined to determine the attributes of its physical characteristics, and to compare these to the siting of the longhouse(s). From this it was hoped to attempt an understanding of why particular locations were chosen. The siting of the longhouses was also compared to the siting of roughly contemporary man-made features in the landscape to identify the relationships between the longhouse(s) and the cultural landscape, and also the differences in siting characteristics between the longhouse(s) and local monuments. It is unfortunate that many of the surrounding monuments, used in the case studies, have not been precisely dated and so may only have been broadly contemporary.

The terrains and watercourses of the case study areas will have changed over time. The in-depth environmental work required to accurately model these was far beyond the scope of this paper and so the modern data is used virtually as is. Watercourses such as canals have been removed but as can be seen in the Lismore Fields case study the effects of quarrying are retained. Likewise, the changes in vegetation cover remain a problem when trying to determine both what could be seen from a particular location, and the ease of movement across a landscape. The pitfalls of viewsheds have been covered many times in the past (e.g. Wheatley & Gillings 2000, 11). In this paper the

viewsheds demonstrate the lack of views from the longhouses, thus changes in vegetation cover have a reduced effect, but should still be borne in mind.

Results of the analysis.

A number of interesting trends can be picked out in many of the case studies concerning the positioning of the longhouses. There are pitfalls of adopting a pattern identification approach (Gaffney 1995, 373), however if anything is to be learnt from the data then a certain amount of controlled normalisation will always be called for.

The first trend is that of the elevation characteristics of the longhouse sites compared to the surrounding areas. At Balbridie and Warren Field, Claish (Fig. 2) and Lismore Fields (Fig. 3) the longhouses are situated in some of the lowest ground in the whole area. Taking the Balbridie and Warren Field pair as an example, the study area ranges from just above sea level to over 600 m OD, with an average of around 160 m OD and a mode of around 100 m OD. The longhouses are situated at around 50 m OD: substantially below both the average and the mode. One might suggest that this is just a reflection of the builders' attempts to be near to the river, but there is a further element concerning location with respect to elevation that should be noted. Not only did the builders choose some of the lowest ground available, but they also seem to have chosen a particular area of low ground that allowed the best access (in terms of proximity, and accessibility in sometimes difficult to traverse areas) to some of the area's highest ground. The Balbridie and Warren Field longhouses could have been built further to the east on slightly lower ground but this would have taken them away from the higher ground of the area. They could have been built a little nearer to the higher ground but this would have meant building at an elevation much nearer the average for the area.

This characteristic is clearly repeated at Claish (Fig. 2) and Lismore Fields. At Llandegai the situation is not so clear-cut as there is lower ground, equally proximal to the higher ground, available for several kilometres northeast along

the coast. Despite this, the trend might still hold true as the Llandegai longhouses were situated on one of the main route ways into the Snowdonia mountains, thus they were still on low ground that offered the best access (as demonstrated by the historical routeway next to them) to the higher ground even if they were not as close to the high ground, as the crow flies, as some other locations in the local area. The White Horse Stone and Pilgrim's Way pair were also not on the lowest ground available but were still on lower than average ground, and in ideal positions to access the area's higher ground. Lack of elevation variation around Yarnton makes it difficult to fit it to the trend.

The long barrows near Balbridie and Warren Field, Claish (Fig. 2) and Lismore Fields tend to be at a greater elevation than the longhouses and are found around, or much higher than, the averages for their areas. In the White Horse Stone and Pilgrim's Way area and Yarnton area, the local barrows are grouped into a more compact cluster but are still, on average, at a slightly greater elevation than the longhouses.

A second apparent trend is proximity to water. Not only are the longhouses in many of the case studies closer to watercourses than the average for the surrounding area; it is the area's main river that they are close to. Balbridie and Warren Field are sited either side of the River Dee, Claish stands next to the River Teith, the Lismore Fields longhouses are near the River Wye, Yarnton is next to the River Thames, and White Horse Stone and Pilgrim's Way are on the valley side of the River Medway (although not as close as the others, the arid nature of the chalk-lands makes the longhouses much closer than the average for the area). These sites average a distance of around 0.5 km to the modern course of the nearby river, and are often on the edge of the flood plain. Only the Llandegai longhouses are not next to a major watercourse, if one discounts the Menai Straights, however they do stand within 0.5 km of the stream flows runs down from the heart of the Snowdonia mountains.

When compared to the local barrows' average proximity to all watercourses, there is little difference to that of the longhouses. However, the barrows tend to be near smaller watercourses, such as mountain streams, rather than the main river of the areas. Furthermore, whereas access to the river from the longhouses would have been across very gently sloping or almost flat land, access to the streams from barrows was often over much steeper and harder to negotiate ground.

A third trend is that of alignment. Initial inspection suggests that the longhouses were built with their long axes aligned in random directions. However, when compared to the direction of nearby watercourses this does not seem the case. The longhouses of the majority of the case studies tend to be aligned such that their long axes were roughly parallel to the nearby major river or river valley. The two longhouses at Lismore Fields were aligned on each other, as were the White Horse Stone and Pilgrim's Way longhouses, further underlining the intentionality behind longhouse alignments. The Llandegai longhouses were not built parallel to the streams that flowed on either side of them, but were built roughly parallel to the Menai Straights.

The fourth trend is that of the visibility characteristics within the case studies. Generally, visibility from the longhouses to the surrounding landscape was somewhat limited. At a number of sites, such as Lismore Fields, moving less than 1 km away could have increased the visibility dramatically. Of course it is impossible to model the exact viewshed properties of the ancient landscape due to changes in the local vegetation cover, but it does seem that there was little desire to make the longhouses prominent in the landscape. This suggestion is further supported when their viewsheds are compared to those of some of the surrounding long barrows. Although the viewsheds of the long barrows are variable in their extents, on the whole they tend to be noticeably wider than those of the longhouses. A number of these, for instance Five Wells near Lismore Fields, were sited on prominent highpoints in the landscape, and as such vegetation cover may have had a lesser impact.

Intervisibility between longhouses and long barrows is also limited in most case studies. Claish is only a little over 1 km across the valley floor from the massive Auchenlaich long mound, yet there is no intervisibility between them. White Horse Stone stands less than 1 km from a number of possible long barrow sites known as the Medway Megaliths, but the three most convincing of the long barrows are not visible from the longhouse. At the other case studies the only barrows that are visible are at such a distance that it is questionable whether the sites could be made out.

Discussion.

Hodder (1994, 77), Whittle (1997, 20) and Bradley (1998, 36; 2003, 220) all see the origin of continental long barrows stemming from the remembrance of ancestors via the decaying remains of LBK longhouses: on the death of the head of the household the house was vacated and left to die also. A new house was built nearby, but never over the decaying building, and as the old structure crumbled it formed a long mound that was associated with, initially, the deceased head of the household, and later with the ancestors in general. However, the only areas where long barrows were found close to longhouses, both physically and chronologically, in the LBK was in Poland and possibly Northern France (Bradley 1998, 38; 2003, 220). It is suggested that this progression from longhouses to long barrows allowed the people to regain a mobile lifestyle. Where the longhouse gave residential permanence, the long barrow would have offered tethered mobility (Thomas 1996a, 318). If long barrows, and causewayed enclosures, represented a way of marking the place where the ancestors lived then could the British longhouses be used in the same way? A LBK inspired longhouse to long mound metamorphosis is problematic due to the large spatial and chronological distance between the British Neolithic and the continental LBK.

The people of the British Neolithic would not have had longhouse dwelling ancestors to remember unless either there was a mass migration of barrow builders from the continent, for which there is little supporting evidence, or the

native population were attempting to build a new history that declared that they were Neolithic just like the assumedly small number of continental travellers that they had contact with. This phenomenon could be viewed in much the same way as elements of the native population of early Roman Britain building Roman style villas to create new identities for themselves (Millet 1990, 82). Therefore, if long barrows were adopted from the continental practice of ancestral remembrance to proclaim identity, then longhouses could also have fulfilled this role as a reflection of either appropriated folk memories of LBK longhouses, or of the contemporary, but scarcer, post-LBK continental longhouses. That British longhouses are sometimes placed on sites used for occupation in their pasts adds further weight to this having been an attempt to display identity through a remembrance of or reference to ancestors.

But, when the positioning of long barrows is compared to that of longhouses it seems that there are differences. Proximity to long barrows varies amongst the case study longhouses. The White Horse Stone longhouse is almost between two of the eastern Medway Megalith group, less than 100 m from the closest. But Lismore Fields and Llandegai are situated around 4 km from their respective nearest barrow. Nonetheless, despite their differing proximities all of the case study longhouses are situated on or near to the edge of a group of barrows. With the exception of White Horse Stone, the relationship that the longhouses have with the landscape seems to differ to that between the long barrows and the landscape when elevation, views, proximity to major watercourses and steepness of ground are taken into account (above). This suggests that although remembrance of the ancestors may have had an influence upon the longhouses, it was not the primary reason for construction in the same way that it might have been with long barrows. Furthermore, the finds from the longhouses rarely contain human remains, so tend to differ from those of the barrows; despite the lack of surviving floor levels being detrimental to the survival of bone at longhouse sites both animal bones and plant remains have managed to survive at several. Thus, as longhouses and long barrows each appear to have specific positional characteristics and contain a different array of material culture, it does not seem that there was a

straight choice of structure type for the same purpose: longhouses and long barrows were not interchangeable as *special* places.

After several possible longhouses went out of use, long barrows were built over them. The Gwernvale structure has a Cotswold Severn barrow partially over it but it is unclear whether the six large postholes are part of the original structure or part of the barrow's façade (Britnell & Savory 1984). The line of postholes and hearth that may represent a longhouse at Hazelton North (Darvill 1996) also have a Cotswold Severn barrow placed over them. In both of these cases it seems clear that the barrows were erected with respect to the earlier structure and thus were indeed a remembrance of the past; of a time when the site was occupied by the living ancestors.

After long barrows, causewayed enclosures are probably the most numerous type of major construction in the early Neolithic of Britain. In her work on competitive feasting Cross (2003, 211) suggests that the longhouses of Britain and Ireland served the same function as causewayed enclosures: that of housing ritual feasting and aggregations. She bases this on the similarity in *status* foodstuff remains found at some longhouses and at some causewayed enclosures, and on what she sees as the mutually exclusive distribution of the two structures: longhouses being more prevalent in Ireland and causewayed enclosures in England. Where they are found in close proximity, for instance White Horse Stone and Burham causewayed enclosure which are around 3 km apart, she suggests chronological separation.

The landscape position of the two site types does appear to show similarities. Oswald et al. (2001, 91) divide causewayed enclosures into riverine and upland types, the riverine class being further divided into those on slight rises in valley floors and those on valley sides. Those of the valley floor variety were virtually all built near watercourses, sometimes even incorporating the watercourse into their perimeters. Those that were not next to major rivers were usually within a few kilometres of a confluence with one. In many cases higher ground was available nearby but the lower areas were deliberately chosen (*ibid*, 95). The valley-side causewayed enclosures also eschewed the

nearby higher ground and were oriented towards the valley and river rather than potentially wider vistas in other directions (*ibid*, 97). Thus, it seems that the locations of several longhouses matched closely the ideal situation for riverine causewayed enclosures, for example White Horse Stone was on a valley side overlooking a major watercourse but had a limited view despite its elevation. Claish, Balbridie and Warren Field were near the valley floors and, again, near major watercourses. Several of the lowland causewayed enclosures also had a position that focuses in a slightly upstream direction (Oswald et al. 2001, 96); a characteristic found at longhouses such as Lismore Fields and Balbridie. Several causewayed enclosures were sited on the interfaces between ecological zones; a common occurrence with longhouses, the majority of which in the case studies were sited in the marginal areas between upland and lowland areas.

But do these similarities mean that the two types of structure served a common purpose? Cross's suggestion that they were mutually exclusive is questionable. There is a causewayed enclosure at Burham, near White Horse Stone, and at Bryn Celli Wen, just across the Menai Straits from Llandegai. Likewise the Chelmer and Padholm Road longhouse sites have causewayed enclosures relatively nearby too (Oswald et al. 2001, 80). The distribution of known causewayed enclosures does favour southern Britain whereas the distribution of longhouses is a little more uniform across the whole of the country, making northern longhouses more likely to have been a greater distance from them. Where there is evidence for timber buildings within causewayed enclosures there is often a problem assessing the relationship between the earthworks and the possible longhouses (Oswald et al. 2001, 125) making a significant chronological separation possible; thus one could have been built to mark an ancestral special place rather than to carry on the function of the other.

There is also the question of scale: even for quite large numbers of people the causewayed enclosure could have been a fairly inclusive structure, but the longhouse was comparatively exclusive as it could only contain a relatively small number of people, suggesting different social practices were carried out

at each. Cross (2003, 211) counters this argument by proposing that longhouses suited smaller linage groups with tight kinships and causewayed enclosures suited larger groups with looser kinships. Cross's association of longhouses and causewayed enclosures based upon the existence of *status* food stuffs at both only holds true if those food stuffs were indeed regarded as status items. Rowley-Conwy (2003, 122; 2004, 90; Jones & Rowley-Conwy 2007) suggests that the evidence for cereal and other domesticates being associated with special places is not as straight forward as thought by some (e.g. Thomas 1999, 62-88; Richmond 1999, 35).

So, perhaps it is the case that these two types of site, longhouse and causewayed enclosure, had similar positional characteristics not necessarily because they served the exact same purpose, but because they were both built by people who viewed, used and moved through the landscape around them in a similar way. That the longhouses, and a number of causewayed enclosures, were close to relatively major watercourses suggests that these watercourses presented key corridors through the landscape. This may have been either through the use of simple craft combined with portage, or as a navigational aid: in a heavily forested landscape both movement and navigation would have been difficult especially if that movement were over any great distance beyond the locally known paths through the forest. The importance of rivers is further shown when the orientation of the longhouses is examined. One might expect the longhouses to be oriented east-west if they were lived in during the winter, thus allowing maximum warming by the sun along their long axes. There certainly seem to have been many east-west aligned examples in Ireland (Cooney 2000, 62). However, of the case study longhouses only Balbridie and Warren Field are aligned roughly east-west and that may be coincidental. As outlined above, all of the case study longhouses are aligned parallel to the nearby major watercourse or general direction of its river valley except the Llandegai longhouses which were built roughly parallel to the Menai Straights. This alignment cannot be explained as an attempt to build with respect to the land's riverside contours - at some examples the slope is unnoticeable and at others, Llandegai 2 and White Horse Stone, it appears that the builders went to the trouble of constructing a

terrace to allow their desired alignments. Instead, it might be suggested that movement through the longhouse paralleled movement through the landscape.

The positioning of the longhouses on the interface between low and high ground (above) meant that they were ideally placed to access several varied ecologies, and thus resources. In the summer the uplands would have been ideal grazing for both domesticated cattle and sheep, and for migratory animals such as deer. It is likely that the higher ground in several of the case study areas may have had lesser tree cover in places, making it good for summer pasture and the growth of wild plants that would have attracted grazing animals. Even if not naturally clear, the lesser cover in these areas of rock outcrops and thinner soils might have been easier to clear. In the winter the denser forest of the lower areas would have offered more shelter, and the lesser elevation a longer growing season for plants utilised by people and animals. Growing cereal (whether as a staple or exotic foodstuff) would have required a period of sedentism for at least part of the group while the crops were tended. If other parts of the group were leaving the cultivation site to acquire wild resources or move animals between grazing areas, a central location within this territory might have been preferred for the cultivation site. A point near to the area's major watercourse and with the best access both to the lower and higher ground seems ideal for this central point.

Although no remains of field boundaries or ploughing have been found at longhouses, Robinson (2000, 89) points out that for small scale cultivation, as is likely in the early Neolithic, ploughing is not needed and field boundaries could have been in the form of hedges rather than walls. Indeed, some pollen diagrams show a rise in hawthorn, sloe and hazel at this time (Gibson 2003, 139) and recent environmental work at the Warren Field longhouse site has demonstrated that cereal was grown nearby (Murray et al. 2009, 14). It must also be remembered that large amounts of cereal grain are not easily transported, thus it seems probable that the relatively large quantities of cereal found at the Balbridie and Lismore Fields longhouses were from the local area. This does not necessarily mean, however, that longhouses were

permanently occupied farmhouses; at some of them, Lismore Fields and Padholm Road for example, the poor drainage may have made them far from ideal places to be during the winter.

Even if domesticates were not grown at all longhouse sites, their positions would still have been ideal for a group operating partial tethered mobility. As outlined by Whittle (1997) and Pollard (1999), the early British Neolithic may have seen, at least among some groups, cyclical return to one or more places, either based upon seasonal or social time. The main group itself may have broken up into subgroups, one of which could have stayed at the tethering site, and others of which would have moved out into the landscape to collect resources or tend animals. This model is similar to the world of the North American Dakota Indians, where longhouses located next to the summer planting areas were used by part of the population, while others ranged around the landscape on hunting and trapping expeditions; after the growing season the longhouses were left and tepees were used elsewhere (Spector 1993, 71). There is little evidence for how long the tethering site would have been occupied in each visit, it may have been anything from a season to a generation; therefore this way of living within the landscape does not easily fit into explanations of the early Neolithic as either strictly sedentary or strictly mobile.

As an occupied tethering point the longhouse would fulfil a number of functions. It would provide a shelter for those that did not move out to satellite camps and it could have provided storage for the foodstuffs that were either grown on site or brought back from the wider landscape. A similar system of base camp and satellite sites is postulated to have been used in the later Mesolithic (Young 2000) but without the need for longhouses, or other monuments, to mark the tethering point – so why were longhouses built in the early Neolithic? As discussed above, this may have been due to the growing of crops, either as special status foodstuffs or as staples, at the tethering points. It would seem logical to reuse the same area each season rather than clearing a new area. Although there have been arguments against this on grounds of soil degradation, Jones (2000, 83) suggests that early, non-

intensive forms of agriculture would not have rapidly damaged the soil. If the longhouses were not (solely) built to mark a site where crops were grown they may still have been built to mark sites of, or house ceremonies of, aggregation - it would seem that in the early Neolithic display of status and identity became more formalised with new media of expression such as pottery and new forms of lithics, leading in turn to the formalisation of meeting places, for instance the building of enclosures. These aggregations could have consisted of either sub groups coming together to reform the main group, or of visits from outsider groups. Space inside longhouses was smaller than that within causewayed enclosures, was often linear in nature and was divided by internal walls, suggesting that fewer people attended ceremonies in longhouses than in causewayed enclosures, and that there may have been an element of social ranking based upon where each individual could position themselves within the longhouse. Therefore, it is more likely that the longhouse would house a reuniting of a single group or extended family rather than the meeting of different groups. This, in part, is a return to Cross's (2003, 211) point that longhouses suited linage groups with tight kinships and causewayed enclosures suited those with looser kinships. Yet there is no reason why all of the attendees at an aggregation would have been expected to be within the longhouse.

Spikins (2000, 110) suggests that in the later Mesolithic aggregation took place in late summer and early autumn. It is not unreasonable to suggest that social practise in the early Neolithic would have carried on many traditions from the later Mesolithic even if the economic basis may have differed to some extent. That the remains of some foodstuffs found at longhouses tend to suggest late summer and early autumn occupation adds further weight to this group aggregation model. However, one should note Rowley-Conwy's caution in viewing foodstuff remains in this way: hazelnuts shells, the prominent marker for autumn, tend to survive better than most other plant remains (Rowley-Conwy 2004, 90).

An alternative, or addition, to the tethering point explanation for the positioning of longhouses, is that of a transitional or transformative place. Many of the

case study longhouses were placed in a position that despite being in lowlying areas, were very close to high ground (above). Furthermore, they are often found near rivers or routeways that offered easier passage between areas of different elevation - the case study rivers, flowing from areas of high ground, tend to offer a less severe climb up to the high ground from the longhouses, and, of course, they would also have offered navigational benefits in dense forest. It could be suggested that longhouses were located to mark boundaries between different worlds, both in terms of physical landscape and spiritual meaning. High ground and the interfaces between low and high ground were often seen as spiritually and socially important in many past societies (Bradley 2000, 26). An ethnographic parallel might be drawn from the Kets of western Siberia (Zvelebil 2003). The Kets used major watercourses as a means of travelling across the landscape, just as has been postulated from the longhouse case studies above. Their belief system involved a three layered universe: the underworld, the earth and the sky, all linked by a cosmic river just as the varying parts of the landscape; seaunderworld, lowlands-earth and highlands-sky, were linked by major rivers. The transitional places between these worlds were seen as liminal and dangerous places of transformation, sometimes marked by a shrine and ceremony to allow safe movement across thresholds. In the British early Neolithic, the positioning of several longhouses suggests that they were in pre-eminent locations for such ceremonies to have been held as people left the low lands and started the climb upwards towards the heavens.

The importance of these sites might be further heightened by folk histories and traditions that dated back to the later Mesolithic when a seasonal round was enacted between lowlands and highlands. Young (2000, 189) suggests that the Mesolithic late summer residential base camps that served the upland logistical camps were actually situated on the lower parts of the uplands rather than in their centres. This allowed easier access to the base camp by following the minor rivers and streams that flowed out of the high ground. The idea of the importance of this type of location may have been carried forward into the Neolithic to mark these positions as special places even if the mobility models had changed; indeed, Thomas (1999, 223) feels that mobility patterns

with aspects not dissimilar to those of the Mesolithic may have still been in place at the time that the longhouses were built. The tradition of remembering places of ancestral importance is demonstrated at Hazelton North (Gardiner 2003, 106) and Gwernvale (Britnell & Savory 1984), where longhouses were built upon previous Mesolithic occupation sites and, even later, when long barrows were built over the longhouse sites.

Indeed, that several longhouse sites (for instance: White Horse Stone and Pilgrim's Way, Yarnton, Lismore Fields and Claish) also lie on the edge of groups of barrows, either grouped closely together such as in the Medway Valley or just north of Yarnton, or in a wider distribution such as the Peak District, might further support the suggestion that these structures were placed in liminal locations between worlds, in this case perhaps between the worlds of the living and the ancestors. There is no requirement that the worlds for which the longhouse may have marked the borders (low ground – high ground, earth – heaven, winter – summer, living – dead) had to be mutually exclusive as the relevance of each would depend upon context: time of year, people present, reason for attendance, direction of movement, and so forth.

Conclusion.

The debate as to whether longhouses can be viewed as a sign of an economic change to full sedentism and use of domesticates as a staple, continues. However one can still glean certain information regarding how people of the early Neolithic understood and used their landscapes from the study of longhouses. The view that watercourses had long been important for moving around the landscape (Darvill 1987, 44; 2003, 98; Richards & Schulting 2003, 122; Noble, 2007) is further supported by the locations of the longhouses. Indeed, Noble's (2007) work on other monument types might suggest that the longhouses were on routeways that passed over areas of high ground that divided territories, further underlining the suggestion that longhouses were places of movement and transformation. The notion that watercourses might have become important in a spiritual sense (Thomas

2003, 70) might also be supported by this data as there seems no practical reason for aligning the longhouses parallel to the nearby major rivers.

Longhouses and long barrows were regarded in different ways. If barrows were special places concerned with the dead and the ancestors then it might be inferred that longhouses were special places concerned with the living. Being concerned with the living, perhaps they reflect better the lives of the living? Ascribing the phrase 'special place' to them does not deny their potential to represent the day-to-day or domestic lives of their builders. To reuse a later example: some of the earlier villas built in Roman Britain were seen as very 'special places' by the native population, but they also represented a way of living a practical day-to-day life for others. Bradley (2005, 9) uses Galician storage buildings to demonstrate a similar argument in the historical period; despite being functional storage buildings these structures also demonstrate *ritualistic* features in adornment and location.

The longhouses, then, present a view of a world that was oriented on the flow of the major river that ran through it. The longhouses were positioned near these rivers, were built parallel to them and often contained a central linear passageway along the house's long axis, possibly reflecting the flow of the river. Often the rivers also linked the highlands and the lowlands; the longhouses were placed at a position where this transformation in landscape took place, inferring a further importance upon this location. Thus, in the early Neolithic, the builders of a longhouse may have regarded their world in terms of downstream and upstream; of downhill and uphill; of earthward and heavenward, and of many transitions between different worlds - a history that revolved around place, movement and transition rather than time (Morphy 1995, 187). Movement around, and positioning within, the landscape would have been thought of in terms of relationships to the watercourses and the hills. A centring of oneself within the world, or between the many worlds, may have occurred at the longhouse site itself.

Finally, returning as one inevitably must to the debate concerning the economic-change verses cultural-change nature of the British early Neolithic,

the evidence gathered from writing this paper does not tend to sway one wholly to either side of the argument or the other. Indeed, perhaps for the communities studied here, this is the answer - the early Neolithic, to them, could not be defined as either a change to full domestication or as only a cultural change that carried on Mesolithic derived subsistence practise. Instead it was a combination of elements of both; a combination that could change and change back over time. Many still thought of the landscape as a place to move around making use of the varying resources, but part of a group would remain at a specific point for periods of time. Part of the community continued to hunt and gather wild resources from the landscape around them, but they also moved around the landscape to graze animals, and part of the community would become sedentary while it tended crops. The cereals that they grew and meat that they reared could have been viewed as special or status foods, but that does not mean that they were not also staple foods. Indeed, to separate foodstuffs merely into two categories: wild/staple and domestic/status, seems a little too simplistic as each individual foodstuff would have been seen as special in its own way. An example of this can be seen among the Australian aboriginal people who have songs and ceremonies unique to each specific foodstuff (Mears & Hillman 2007, 38).

Thus, a foodstuff would not merely be either exotic or mundane, rather each would have been special to some extent, and thus would have conferred status and identity in its own way depending upon the time of year and the context of consumption. Just like the longhouses could be both a day-to-day habitation and a special place, a particular food type would present a combination of staple and status depending upon the occasion and the attendees. The status of a foodstuff might even change with processing, for instance Dinley & Dinley (2000) suggest that ale might have been malted at longhouses, thus it could have been this transformation that marked the significance of cereal, a transformation that took place at a location where the landscape also transformed from lowland to upland.

It should, however, be noted that explanations given within this paper are not proposed as a general solution to the question of the early Neolithic of Britain.

Not all longhouses fit the patterns described by the case studies. The cases chosen were based partly upon best preservation of the evidence, and this might skew the data towards a specific set of longhouses near upland areas where good preservation was more likely than in less hilly areas that have undergone more intensive farming and development. But, could it be argued that some of the lowland longhouses, such as Padholm Road or Chelmer, might mark places that are also transformative, not between lowland and upland, but between wetlands and dry land? Yarnton might, thus, mark a further transition that is no longer apparent in the archaeological record. One aspect of the Neolithic may have been a tendency to appropriate common cultural objects or forms, and give them localised meaning, therefore allowing longhouses to mean different things to people in different places. Thus, there is still much to be gained by applying landscape archaeology approaches to the remaining and new longhouse sites.

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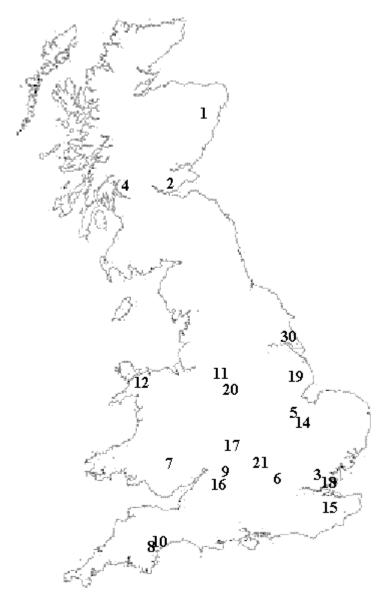


Figure 1: locations of probable early Neolithic longhouses in mainland Britain. Numbers refer to Table 2.

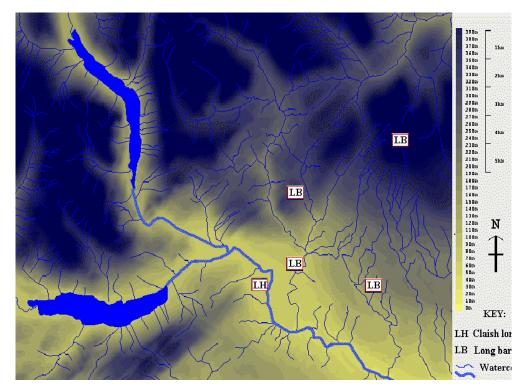


Figure 2: Landscape around Claish longhouse. Topographical data: © Crown Copyright/database right 2005. An Ordnance Survey/EDINA supplied service

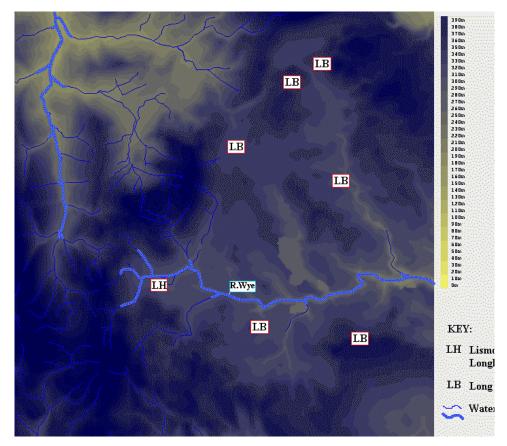


Figure 3: Landscape around Lismore Fields longhouses. Topographical data: © Crown Copyright/database right 2005. An Ordnance Survey/EDINA supplied service.

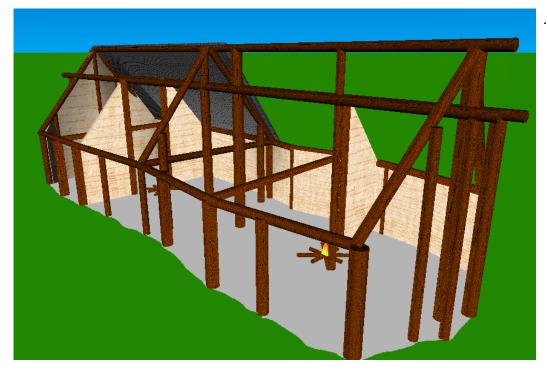


Figure 4: cut away model of Lismore Fields longhouse

Table 1: a list of longhouses used in the case studies.

Area	Longhouses
Grampian Region of Scotland	Balbridie
	Warren Field
Near Callander, Stirling, Scotland	Claish
Buxton, Derbyshire, England	Lismore Fields 1 (possibly two
	separate buildings)
	Lismore Fields 2
Near Bangor, North Wales	Llandegai 1
	Llandegai 2
Medway Valley, Kent, England	White Horse Stone
	Pilgrim's Way
Thames Valley, near Oxford, England	Yarnton

Table 2: a summary of possible longhouses found in mainland Britain.

The table below summarises possible longhouses of early Neolithic Britain. Those highlighted were used as case studies in this paper.

Name	Location	Description	Probable	References
			date	
Balbridie	1km south of	Post built	3900BC -	Barclay et al.
(Fig. 1: 1)	River Dee,	rectangular	3500BC	2002.
	Grampian	structure		Fairweather &
	region of	around 24m		Ralston 1993.
	Scotland	by 12m with		Ralston 1982.
		several		
		interior		
		partitions.		
		20,000		
		charred		
		cereal grains		

		largest		
		Neolithic		
		assemblage		
		in Britain.		
		Design		
		remarkably		
		similar to		
		Claish.		
Balfarg	Fife, Scotland.	Two post built	Early	Barclay &
Riding		structures	Neolithic.	Russell-White
School		similar in		1993
Structure 2		outline to		Barclay 1996
(Fig.1: 2)		Balbridie,		Barclay 2002
		24m by 10m.		
		Debate as to		
		whether the		
		structures		
		were roofed.		
Chigboroug	Maldon, Essex.	8m by 7m	Early	Adkins &
h		rectangular	Neolithic	Adkins 1991
(Fig. 1: 3)		structure.	based on	Darvill 1996
		Possibly two	ceramic	Brown 1997
		smaller	types.	
		structures as		
		west wall		
		alignment is		
		poor in		
		centre.		

Claish	On flood plain	Post built	3800BC -	Barclay et al.
(Fig. 1: 4)	of the River	rectangular	3500BC	2002
	Teith, near	structure 24m		Barclay 2002
	Callander,	by 9m.		
	Stirling,	Design		
	Scotland	remarkably		
		similar to		
		Balbridie but		
		smaller		
		assemblage		
		of finds.		
Etton	Near Maxey,	Post built 7m	Early	Pryor 1988;
(Fig. 1: 5)	Cambridgeshire	by 4m timber	Neolithic by	2003
		structure.	association.	Darvill 1996
		Situated		
		inside a		
		causewayed		
		enclosure.		
		Described as		
		"Gatehouse"		
		by Pryor.		
Gorhambury	Hertfordshire.	9m by 7m.	3696BC -	Neal et al.
(Fig. 1: 6)		Posts and	3389BC	1990
		bedding		Darvill 1996
		trenches.		
		Wattle and		
		daub found.		

Gwernvale	Black	Post and	c. 3100BC	Britnell &
(Fig. 1: 7)	Mountains,	trench		Savory 1984
	Wales.	structure,		Darvill 1996
		11m by 6m.		
		Covered by		
		later		
		Cotswold-		
		Severn		
		barrow, part		
		of the		
		assumed		
		longhouse		
		could, in fact,		
		be a forecourt		
		structure for		
		the barrow.		
Haldon	Devon	Trapezoid 6m	Dating	Willock 1936;
(Fig. 1: 8)		log by 5m	difficult –	1937
		tapering to	probably	Piggott 1954
		4.5m wide.	later early	Griffith 1995
		Stone based	Neolithic by	Darvill 1996
		with wall	association.	
		posts and		
		central post		
		row.		
Hazelton	Gloucestershire	Collection of	3780BC -	Saville 1990
North		postholes,	33690BC	Darvill 1996
(Fig. 1: 9		10m in		
		length, below		
		barrow. Also		
		contains		
		hearth. Plan		
		not		

		conclusively a		
		longhouse.		
Hembury	Devon	Sub	Early	Liddell 1931
(Fig. 1: 10)		rectangular,	Neolithic by	Piggott 1954
		7m by 3.6m	association.	Darvill 1996
		post		
		structure.		
		Plan not		
		conclusively a		
		longhouse.		
Lismore	Buxton,	LF1: 15m by	LF1:	Darvill 1996
Fields 1 & 2	Derbyshire,	5m, possible	3800BC -	Garton 1987;
(Fig. 1: 11)	England	plank walling,	3650BC	1991
		three internal	LF2:	
		partitions and	3650BC -	
		two hearths.	3350BC	
		LF2: 5m by		
		5m, possible		
		plank walling		
		and one		
		internal		
		partition. LF1		
		may be a		
		modular		
		building or		
		two non-		
		contemporary		
		structures.		
		Large amount		
		of charred		
		plant remains		
		were		
		recovered		

			from both		
			buildings		
			including		
			cereal and		
			chaff, flax		
			seeds,		
			hazelnut		
			shells and		
			crab apple		
			fruit and		
			seeds.		
Llandegai 1	Near	Bangor,	13m by 6m	4000BC -	Lynch &
(Fig. 1: 12)	Wales		timber	3600BC	Musson 2004
			structure with		Darvill 1996
			possible		Gwynedd
			internal		Archaeologica
			partitions.		l Trust 2005
			Site partly		
			damaged by		
			later Neolithic		
			ceremonial		
			site.		
Llandegai 2	Near	Bangor,	12m by 7m	Early	Gwynedd
(Fig. 1: 12)	Wales		timber	Neolithic	Archaeologica
			structure with	based upon	l Trust 2005
			possible	ceramic	
			internal	types.	
			partitions.		
			Overlooked		
			site of		
			Llandegai 1.		
			Better		
			preservation		

		than		
		Llandegai 1.		
Mill Street	Driffield,	8m by 7m.	Later early-	Dent (no date)
(Fig. 1: 13)	Humberside.	Postholes	Neolithic.	Darvill 1996
		and		
		correspondin		
		g area of		
		disturbed soil.		
		Lots of lithic		
		finds.		
Padholm	Fengate,	7m by 8.5m	3140BC -	Pryor 1974;
Road	Peterbough,	rectangular	2920BC	2001; 2003
(Fig. 1: 14)	England.	structure with		Darvill 1996
		wall bedding		
		trenches.		
		Reinterpreted		
		from house to		
		ritual		
		structure by		
		Pryor based		
		upon flooding		
		and		
		alignment		
		among other		
		factors.		
Pilgrim's	Medway Valley,	10.5m by		Hayden &
Way	Kent, England	3m+ cluster	Neolithic	Stafford 2006
(Fig. 1: 15)		of postholes.		
		Only traces	comparison	
		remain.		
		Layout		
		vaguely		
		similar to		

		White Horse		
		Stone.		
Sale's Lot	Gloucestershire	Collection of	Early	O'Neil 1966
(Fig. 1: 16)		postholes	Neolithic	Darvill 1982;
		below barrow	based on	1987; 1996;
		and in	relationship	2004
		forecourt.	with	
		Plan not	barrow.	
		conclusively a		
		longhouse.		
Stretton-on-	Warwickshire	Disturbed	Dating	Gardiner et al.
Fosse 5		collection of	uncertain,	1980
(Fig. 1: 17)		postholes, at	probably	Darvill 1996
		least 5m by	later early-	
		3m with wall	Neolithic by	
		slot, possible	association.	
		internal		
		partitions and		
		hearth.		
The	Maldon, Essex.	7m by 5m	Later early	Wilkinson &
Stumble		posthole	Neolithic.	Murphy 1985;
(Fig. 1: 18)		structure. In		1986; 1987
		inter-tidal		Darvill 1996
		zone. Plan		
		not		
		conclusively a		
		longhouse.		
Tatershall	Lincolnshire.	Partial	4782BC –	Chowne et al.
Thorpe		remains of	4609BC	1993
(Fig. 1: 19)		post and slot		Darvill 1996
		structure.		
		Evidence		
		heavily		

		truncated and		
		thus hard to		
		judge size		
		and layout.		
Warren	1km north of	Post built	3800BC -	
Field	River Dee,	rectangular	3700BC	
(Fig. 1: 1)	Grampian	structure		
	region of	around 24m		
	Scotland	by 8.5m with		
		several		
		interior		
		partitions.		
		Design		
		dissimilar to		
		nearby		
		Balbridie.		
White	Medway Valley,	18m by 8m	3980BC -	OAU 1999;
Horse	Kent, England	timber	3630BC	2000
Stone		structure,		Hayden &
(Fig. 1: 15)		possible		Stafford 2006
		plank walling,		
		with internal		
		partitions.		
		Situated very		
		close to		
		eastern group		
		of Medway		
		Megaliths.		
Willington –	Derbyshire	Post built 8m	Early	Wheeler
Α		by 4m	Neolithic	1972; 1979
(Fig. 1: 20)		structure. A		Vine 1982
		number of		Darvill 1996
		structures at		

		site, mainly		
		dated to later		
		Neolithic.		
		Plan not		
		conclusively a		
		longhouse.		
Yarnton	Thames Valley,	Complex 20m	3950BC -	Hey 2001
(Fig. 1: 21)	near Oxford,	by 10m	3640BC	
	England	timber		
		structure.		
		Both lithic		
		material and		
		cereal		
		remains were		
		found on the		
		site, with		
		what appears		
		to be		
		Neolithic		
		bread found		
		in an isolated		
		pit.		

Recent discoveries.

Three more longhouses have been discovered since the research for this paper was done. The first is a further example in north Wales, excavated by Jane Kenney of the Gwenydd Archaeological Trust, at the Parc Cybi site, Holyhead. The second is another large Scottish longhouse at Lockerbie Academy, Dumfries and Galloway, excavated by CFA. The third is at Horton in Berkshire.

Unlikely timber long halls.

Darvill (1996) lists a number of potential longhouses that are omitted from the above list, such as Chew Valley (Rahtz & Greenfield 1977), Carn Brea (Mercer 1981; 2003), Crickley Hill (Dixon 1988), Kemp Knowe (Mortimer 1905; Piggott 1935; 1954), Eaton Heath (Wainwright & Donaldson 1972; Wainwright 1973) and Windmill Hill (Smith 1965). These are omitted from the above list due to lack of size, the unconvincing layout of the remains or because they appear to be part of a larger structure.

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