

10. The Humber, its sewn-plank boats, their contexts and the significance of it all

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Introduction

The world of prehistoric maritime archaeology remains somewhat remote from those practitioners who are safely based with two feet on the land. In recent major contributions to the study of boats (e.g. McGrail 2001), we learn much about the technology of shipbuilding and the practical aspects of using boats in prehistory, but we find very little here on what the significance of boats, transport and seafaring was to past societies in terms of socio-political and economic aspects of life. Conversely, our terrestrial-based colleagues happily discuss the long-distance exchange of prestige goods and the spread of intellectual concepts during prehistory without the slightest consideration for the craft and the mariners that enabled such processes in the first place (e.g. Barrett 1994; Bradley 1984).

This paper attempts to take in both fields of study, i.e. maritime and landscape archaeology. It

revisits the sewn-plank boats of the Humber estuary, in particular those at Ferriby and Kilnsea, and their landscape contexts. In doing so, it aims at gaining understanding the significance of the boats, their use and their relationship to socio-economic change in the Early Bronze Age. This paper addresses the Humber estuary, the sewn-plank boats from the region and their landscape contexts, before considering what new information has been obtained from this approach.

The Humber...

We are most fortunate with the rich maritime heritage from the Humber estuary and its tributaries. Apart from the Early Bronze Age sewn-plank boats from North Ferriby and Kilnsea, which will be discussed in some detail below, it includes an additional Later Bronze Age sewn-plank boat from

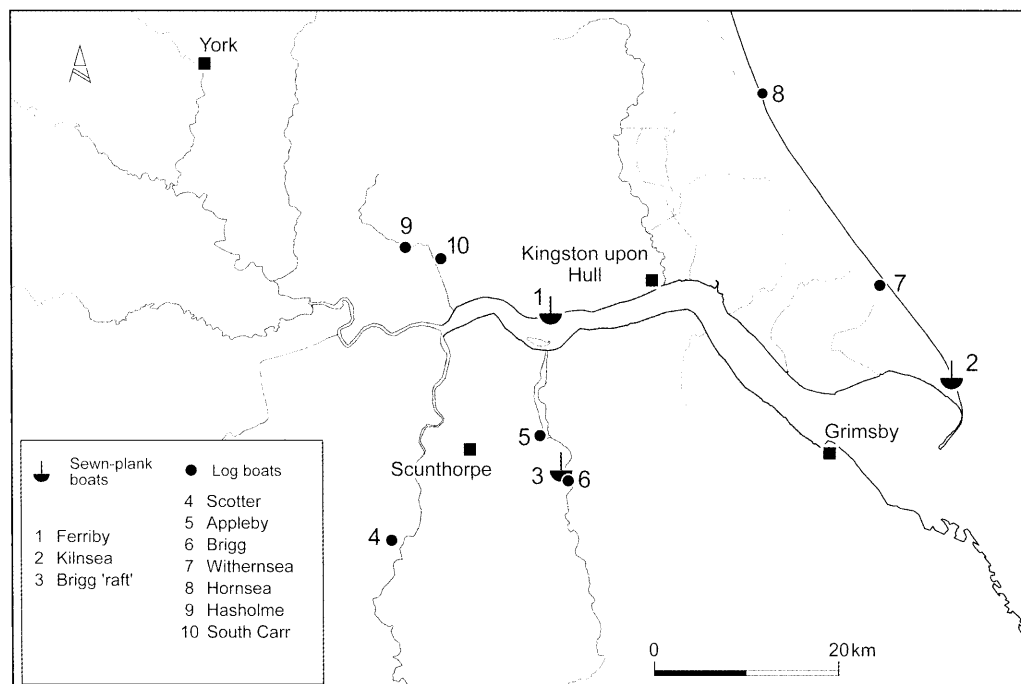


Fig. 10.1 Location of all prehistoric boats in the Humber Wetlands.

Brigg and prehistoric logboats from Brigg, Appleby, Scotter, Hasholme and elsewhere, studied and published to varying standards (Fig 10.1; McGrail 1990; Millett and McGrail 1990). In part, the richness of this resource is the result of the enthusiasm and persistence of local archaeologists, most notably Ted Wright, but natural forces are important here too.

Several research projects under the Land Ocean Interaction Study (LOIS) umbrella have recently addressed the environmental history of the southern North Sea basin during the Holocene period. In terms of the evolution of the Humber estuary and its surrounding wetlands, this research has shown that the Humber became a tidal inlet around 6000 cal BC (calibrated radiocarbon years) and that a range of 'eutrophic' wetlands, including saltmarsh, reedswamp and alder carr, developed on the Humber shores (Metcalf *et al* 2000). By the Early Bronze Age, the highest regularly occurring sea-level (or mean high water of spring tides = MHWS) was at or around modern Ordnance Datum (OD) (e.g. Long *et al* 1998). Subsequent sea-level rise resulted in further marine transgression during the first millennium BC, thus burying the older 'eutrophic' wetlands. The sewn-plank boats from North Ferriby and Kilnsea were found just below modern OD. With reference to the Bronze Age period sea-level, these boats were submerged by tidal water and the sediments it contained during high- or spring tides. In other words, these boats did not sink, but were overwhelmed by the water whilst resting at their natural landing places. Archaeological evidence, as presented below, corroborates such an interpretation.

Apart from the discoveries of the boats over a period of 60 years, and the research by the LOIS group, another research project has been active in the Humber estuary; the Humber Wetlands Project. As part of this English Heritage funded research, sites such as the North Ferriby foreshore were further investigated, the boat plank from Kilnsea was studied and additional research was undertaken on the beach where the plank was found. It also provided a framework for the re-dating of the Ferriby boats (Wright *et al* 2002), and of more extensive research in the region including extensive field survey and the collation and re-analysis of previous archaeological work and discoveries (e.g. Van de Noort and Ellis 1995; 1999).

...its sewn-plank boats...

The discovery of the Ferriby boats between 1937 and 1963 and, in particular, the remains of what have become known as Ferriby 1, 2 and 3 (or F1, F2 and F3) have been well-documented by the discoverers themselves and many others (McGrail 2001; Wright and Wright 1939; Wright 1990). The

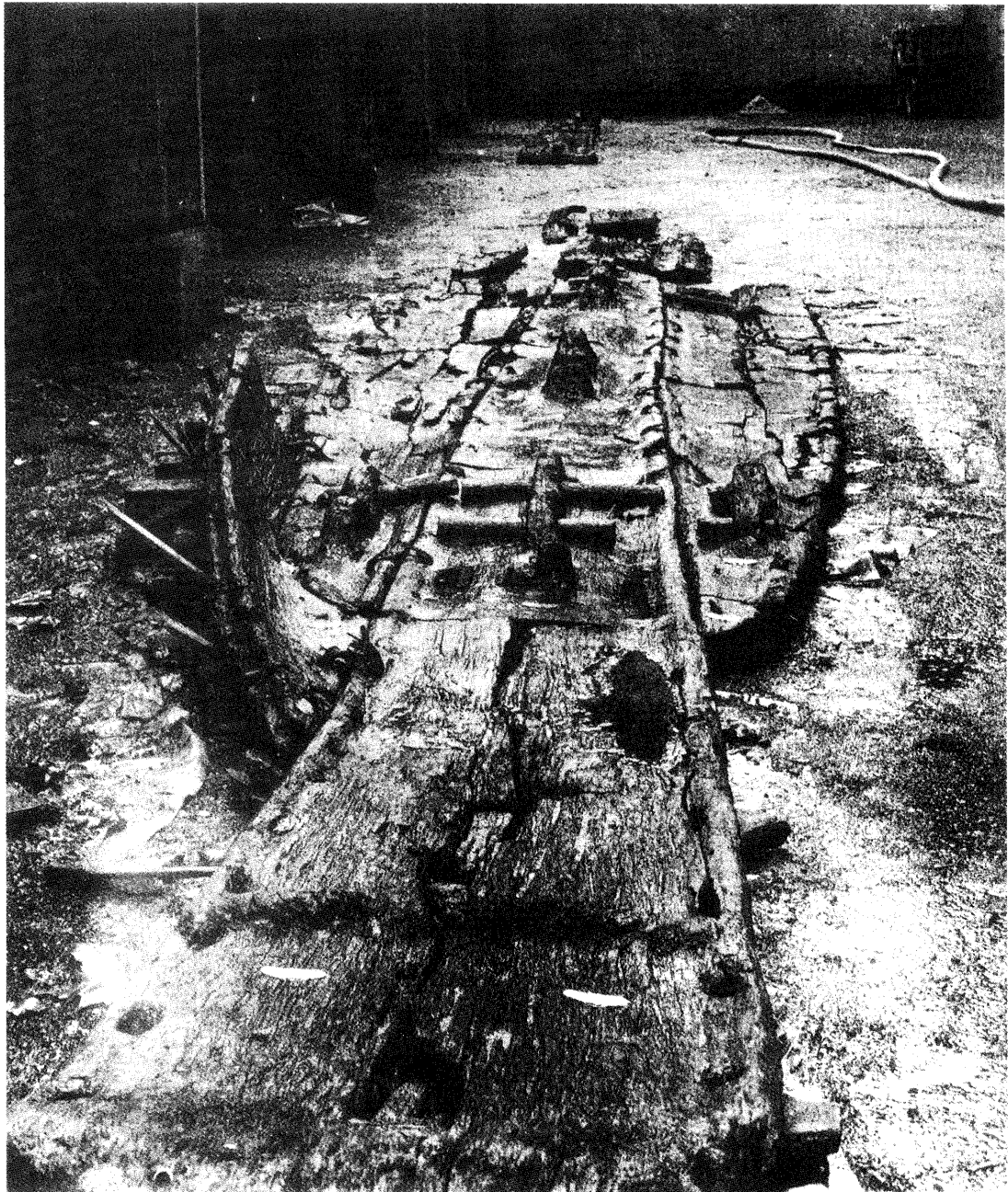
boats are all of the same principle design. They are made of oak planks with bevelled edges, sewn together using individual stitches of yew withies and with an internal system of integrated cleats and transverse timbers that provide rigidity to the hull. The remains of F1 are the most complete and, fittingly, this boat has received most attention from maritime archaeologists (Fig 10.2). Debates on the exact technical details of the boat, its reconstruction and its performance are ongoing and will probably never be resolved to the full satisfaction of the participants to this debate. Nevertheless, it may be worth repeating here some figures from John Coates (1990), who on the basis of one of his theoretical reconstructions calculates that the boat could reach a maximum speed of 6 knots, and could have carried a maximum load of 11 tons. F2 comprises a near-complete keelplank, and F3 consist of the remains of an outer bottom plank stitched to the remains of a lowest side strake.

Recently, we successfully re-dated the Ferriby boats (Wright *et al* 2001). The quest to obtain accurate dates for F1, F2 and F3 became an important issue with the growing realisation that cocktail of chemicals, used during the last six decades to conserve the Ferriby boats, made previous radiocarbon dates unsafe and unreliable. The re-dating places F1, F2 and F3 in the early second millennium BC, the Early Bronze Age, rather than the Middle Bronze Age. F3 is now the oldest known plank-built boat in Western Europe, with a date range of 2030–1780 cal BC.

The Kilnsea boat plank was discovered in 1996 during a fieldtrip of the Hull Natural History Society on the beach of Kilnsea, c. 4 km north of Spurn Point in Holderness. The plank is probably part of a keel plank or lower bottom strake and the remains of the integral cleats are well preserved. The edges of the plank, on the other hand, were badly eroded, and we could not determine whether this plank had been stitched to another. The plank closely resembles, in terms of its size and the dimensions of the cleats, the lower bottom strakes of F1. The Kilnsea boat plank was dated by radiocarbon assay to 1750–1620 cal BC (Van de Noort *et al* 1999). McGrail (2001, 190–1) argues that we must question the identification of fragmentary remains such as that from Kilnsea as the remains of a sewn-plank boat. However, as cleats have as yet never been found on other Bronze Age wetland sites in Britain or abroad, and considering that such a construction would not be particularly useful in standing structures, this concern may be misplaced.

Discussions whether the boats from Ferriby and Kilnsea, and others in this group including Caldicot 1 and the Dover boat (Fig 10.3), could have been used for seafaring, or were merely used for cross-estuary and riverine transport, are ongoing. If the seafaring capacity of the sewn-plank boats is tested

Fig. 10.2 F1 stored at the National Maritime Museum, Greenwich.



against modern concepts of health and safety, than these boats will plainly fail. But if we ask whether these boats could have occasionally crossed the North Sea, under the right weather conditions, than the answer is most probably affirmative. Given the reconstructed performance of F1, with a speed of 6 knots, it could reach the Dutch coast in just over 24 hours from Spurn Point. The shorter crossing from the East Anglian coast would last merely 15 hours. If the crew waited for favourable wind, the latter journey could be readily achieved during the hours of light on a suitable summer's day.

What kind of cargo could these boats have carried? We know that people crossed the North Sea to trade or exchange goods, ideas and possibly people with Continental Europe ever since Britain became the British Isles, after *c.* 6000 cal BC. The introduction of early farming must have involved the transport of seedcorn for crops and domes-ticated animals, alongside the ideas for the production of new tools and the construction of buildings and long barrows. The dearth of Neolithic craft that could have been used for this transport must be attributed to a bias in the archaeological record.

By the late Neolithic and the Bronze Age, people continued to exchange goods, ideas and probably people across the North Sea, but the character of the long-distance exchanged commodities had changed. In this period, it included a range of prestige items, such as Beakers, elaborate flint daggers and early bronzes, and jewellery of gold, amber, jet and faience, recovered from burials from both sides of the North Sea (Cunliffe 2001, 213–60). The emergence of the ‘rich burials’, a term coined by Flemming (1973), in late Neolithic and the Early Bronze Age Britain has been equated with the rise of new elite groups in prehistoric communities, or their manifestation in the material culture (Bradley 1984). The matching development of the Beaker on either side of the North Sea has been frequently invoked as a demonstration of the exchange of ideas and of elite networks that developed over much of western Europe. At the start the second millennium BC, we note an important ‘step-change’ in the deposition of these exotic artefacts, with the wealthiest graves becoming richer still; the richest graves from southern England dated to 2000–1400 BC, and these provided the basis for Stuart Piggot’s concept of the ‘Wessex Culture’. Within these graves, amber from the Baltic Sea has been found repeatedly, and also early bronzes of apparent Continental origin (Beck and Shennan 1991; Rohl and Needham 1998). Rich burials have also been found in most regions of England and Scotland.

The re-dating of the Ferriby boats provides now a convincing group, together with the boats from Kilnsea, Dover and Caldicot 1 (Clark 2004; McGrail 1997), suggesting that the appearance of plank built boats in the early second millennium BC is more than a coincidence. If this group represents an important stage in maritime development technology, adopting the sewing of parts from hide boats, but with more robust hulls and possibly of greater capacity (McGrail 1993), then what was the reason for this? It is plausible that the new type of boat was developed to enable the expansion or maintenance of the elite networks across the North Sea and the English Channel. Hide boats, despite their absence from the archaeological record, were likely to have been used for travel during exceptionally favourable weather. The more robust plank boats, however, would have extended the windows of opportunity to gain access to the goods and ideas that facilitated the expression of rank and status around 2000 BC.

...their context...

North Ferriby is situated at the southernmost point of the Yorkshire Wolds (Fig 10.4). As its name indicates, it functioned in the Middle Ages as one of the main cross-estuarine natural harbours, and it



Fig. 10.3 Location of sewn plank boats in England and Wales.

seems probable that it was used as such for much of the prehistoric period. It was well situated for contact with people living on the Lincolnshire Wolds on the opposite side of the Humber estuary. F1, F2 and F3 were found in intertidal creeks in what was a saltmarsh environment. Despite the standing of F1, the contexts of F2 and F3 are more relevant to the discussion presented here. The remains of these appear to have been carefully put aside; F2 was found on a single alder roundwood and F3 on top of a bundle of alder logs, as if they were stored there awaiting reassembly with the rest of the boat. What exactly happened with these remains, we will never know; maybe the part of the boats known to us as F2 and F3 were simply not good enough for reuse; or maybe they were lost in a storm or during an unanticipated spring high tide. But what makes these contexts significant is that this indicates that boats were built, repaired or refashioned at North Ferriby. This, and also the frequent finds of oak wood chips with evidence of bronze axe facets from the area, makes the North Ferriby foreshore the oldest known shipyard in the world.

The location of the North Ferriby foreshore reinforces the sense that this is an important place. The Yorkshire Wolds is a region where elite formation in the Early Bronze Ages is exemplified by the set of ‘Great Barrows’ and some early

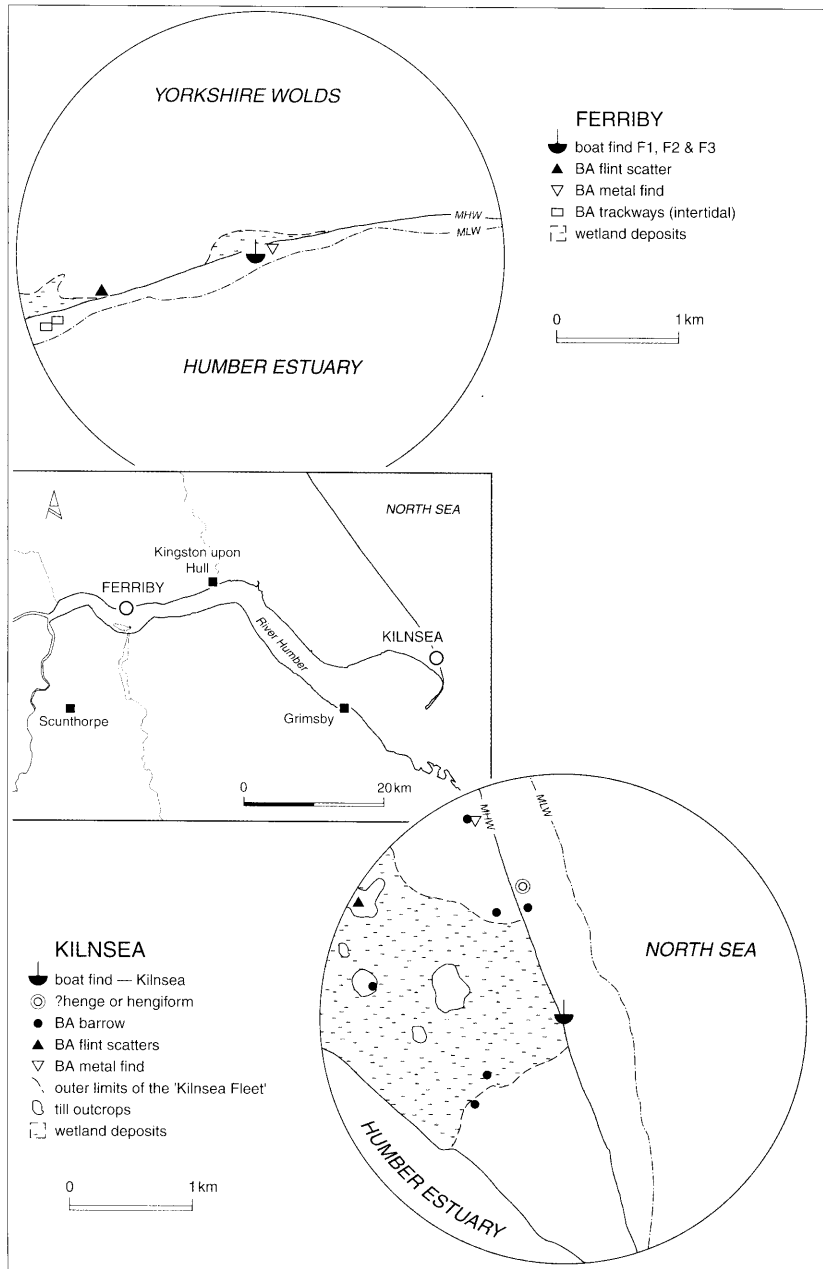


Fig. 10.4 The North Ferriby and Kilnsea sites in their landscape context.

ringforts, and where during the Early Bronze Age rich burials were created (Manby 1980; 1988a). Some rich beaker burial graves, containing amber, are also known from the Yorkshire Wolds, for example at Acklam Wold and Kellythorpe (Beck and Shennan 1991, 145, 160). This evidence points once more at the emerging elite in Yorkshire, and their contacts with Continental Europe.

However, in terms of archaeological remains, the landscape context of the North Ferriby foreshore is surprisingly bare. In contrast to the central and northern parts of the Yorkshire Wolds, its southernmost parts which form the hinterland of

North Ferriby contain little in terms of significant monuments, including barrows. Nor do we have any evidence of the practice of votive deposition of metal artefacts which at this point in time emerges elsewhere in Britain, albeit not yet at a significant scale in the Humber Wetlands (*cf* Needham 1988). Could it be that this area had been set aside, or was treated differently, because of its important functions in trade and exchange? Suggestions that farming was not undertaken here, for example to retain woodland resources, appear unfounded. Pollen analysis from North Ferriby indicates that by *c.* 1700 cal BC, tree pollen were relatively rare and woodland was not extensive in this area, reflecting the general picture of the Humber Wetlands (Wright and Churchill 1965).

Remains of hurdle trackways had been noted by Ted Wright (1990) and dated to the 17th century BC. A reconstruction drawing of the North Ferriby foreshore in the Bronze Age shows the arrival of Ferriby 1 (Fig 10.5). The drawing shows trackways, made of woven hurdles of hazel, which provide a semi-permanent landing place, reinforcing the suggestion that the North Ferriby foreshore was one side of the cross-estuary traffic. I would like to question this representation.

During the Humber Wetlands Project, similar trackways were excavated on the nearby Melton Foreshore, and likewise dated to the Middle Bronze Age, in this case the 15th and 14th century BC. These latter trackways were found to have been staked into the ground at angles across former intertidal creeks. Our interpretation of this landscape is that the trackways provided an effective way to evacuate livestock to higher and dryer ground during spring high tides, when the saltmarshes, excellent feeding grounds, were flooded (*e.g.* Van de Noort and Fletcher 2001). In the past, this interpretation has been attacked on the basis that cattle would never walk over hurdle trackways. It is true that the trackways were practically undamaged, but this is due to their very short functional lifespan; one period of high tide could be enough to bury the trackway beneath sediments and render it invisible and useless to the Bronze Age farmers. However, following recent experimental archaeology trials undertaken by Exeter student Sarah Bidgood, it is clear that modern Dexter cattle, without ever having seen hurdle trackways or without any encouragement from the farmer, can use and probably used such structures without hesitation to travel over boggy and muddy areas.

Our understanding of the North Ferriby foreshore, and *ergo* the landscape context of the Ferriby boats, should be reinterpreted in the light of new research. The trackways from North Ferriby did not form part of some kind of waterfront facilities; the re-dating of the Ferriby boats and the very short life-span of such structures below



Fig. 10.5 The arrival of *V1* at North Ferriby; reconstruction drawing by John Craig (in Wright 1990).

MHWST proves that the trackways were never contemporary with the boats. Nor do we have any other evidence of maritime structures on the foreshore. However, if the trackways from North Ferriby were used in a way similar to those at Melton, it means that by the 17th century BC the North Ferriby saltmarshes were probably used for grazing.

To all sense and purpose, we must conclude that the landscape context of the North Ferriby boats does not contain any significant indication that the activity of boat building or the daily operation of the boats in cross-estuarine traffic was considered special; in this landscape, we cannot identify any activities as such. We have no monuments, no deposition of valuable goods, and no exclusion of daily farming practices that could indicate this. All this, despite the undoubted importance of trade and exchange to the elite groups of Yorkshire and thus, one might expect, the importance that was attributed to the boats, the boat builders and the mariners. In other words, we must conclude here that the boats were perceived as tools in the everyday existence of the Bronze Age community, and that the use of the

boats was part of everyday life.

The Kilnsea plank was found on the beach, seaward from a developing dune system, but this coastal location is due to more recent marine erosion of Holderness (Fig 10.4). On the beach are both clay and peat deposits visible during low tide; these deposits are of estuarine rather than marine origin, with the clays containing numerous fossils of the *Scrobicularia* mollusc, and the Kilnsea plank must have been preserved in these deposits. They belong to the Kilnsea Fleet, a natural elongated depression in the till clays of southern Holderness. Sometime before c. 4000 cal BC, this and similar large elongated glacial and glaciofluvial depressions in Holderness became estuarine wetlands, following sea-level rise, linking them with the Humber estuary (Dinnin and Lillie 1995). In terms of navigation, after c. 4000 cal BC, the Kilnsea Fleet was the outermost navigable inlet of the Humber estuary, the ideal location for boats departing to cross the North Sea. Alternatively, it was the first inlet safe for landing boats on the north bank of the Humber estuary when arriving from the east.

Whereas little more can be said about the boat remains from Kilnsea, its landscape context, and particularly the north bank of the Kilnsea Fleet, is rich and diverse. This is somewhat surprising, as the Holderness region it forms part of is particularly poor in terms of prehistoric monuments (*cf* Manby 1988). The prehistoric landscape at Kilnsea embodies up to 1500 years of human activity. This activity is represented in the archaeological record by a Neolithic house and several hearths (Mackey 1998), a late Neolithic or Early Bronze Age small henge, hengi-form monument or other circular structure, and two Early Bronze Age barrows, one on exactly the same location as the Neolithic house, the other overlying one of the Neolithic hearths. This group of sites does not equate to a form of continuous settlement or occupation; rather the landscape on Hasington Beach appears to have been used, modified and reused according to prehistoric people's perception of their past. Radiocarbon dating has put the Neolithic phase around *c.* 3800 cal BC, whilst the circular henge or hengi-form monument was dated by a cremation burial in the outer ditch to *c.* 2600–2000 cal BC.

The two burial mounds on the beach were built around *c.* 2000 cal BC, again dated by radiocarbon assay. The structures themselves contained individual graves with grave goods, including Beakers and in one instance a jet button. Several more circular burial mounds can be found in the landscape context of the Kilnsea boat, but none has been excavated. The area was extensively inundated by the estuarine Kilnsea Fleet. With only the tentative evidence of a single sherd of unstratified pottery dated to the first millennium BC, this event appears to have taken place sometime in later prehistory. The inundation resulted in the deposition of grey clay within the ditches of the small henge or hengi-form monument and its partial destruction, and the discontinuation of monument building in the area.

In terms of context of the Kilnsea boat, to all sense and purpose this landscape appears to be dominated by ritual activities. By the Early Bronze Age, these are directly expressions of a manifestation of inequality in the form of individual burials beneath earthen barrows, using monuments for social reproduction. In terms of everyday activities, pollen analysis from the area suggests that by the Early Bronze Age, much of the forest remained intact, although clearances in the woodland were increasingly extensive (Lillie and Gearey 2000).

...and the significance of it all

The landscape contexts of the Ferriby boats and the Kilnsea boat provide us with stark contrasts. The landscape of the Ferriby boats is that of the activities of everyday life, without any indication in terms of

monuments, finds or agricultural activities (as far as we can tell) of anything extraordinary happening here. On the other hand, the landscape context of Kilnsea boat is that of monuments and ritual activities, and within the wider context of the Holderness region where such monuments and activities appear absent, one is surely justified to call this area a small 'ritualised landscape'.

Of course, this understanding of the landscape context of the two boat sites could be to a degree coincidental. It may be, for example, that future archaeological discoveries will bring to light new evidence from North Ferriby which requires a comprehensive re-evaluation of the evidence, and maybe the location where the Kilnsea boat finally came to rest was the consequence of an ancient accident. However, if our current knowledge of the contexts of these two archaeological sites is correct, then we should consider the significance of it all.

The landscape context of the Ferriby boats indicates that what happened here in the Early Bronze Age was not embedded with any 'special' meaning, but the activities formed part of the rhythm of daily life; the cross-estuarine exchange that was enabled by the boats formed part of this. Crafts of varying types had been used from the Mesolithic through to the later Iron Age for daily transport, and in the Bronze Age this must also have been the case. However, traffic across the North Sea was loaded with meaning and significance. This form of transport enabled elite groups in Yorkshire and further afield to express and manifest their status in death, as shown in the archaeological record by the amber, bronzes and beakers, and most likely also in life. The importance of this aspect of early Bronze Age communities is reflected in the landscape context of the Kilnsea boat; the landing place chosen for the seafarers was imbedded with references to the ancestors and their monuments, with the burial mounds of the emerging elite superimposed on this landscape, sometimes directly on top of the Neolithic remains.

Conclusion

The argument put forward here may be summarised as follows. Around 2000 BC, a new innovative technique of boat building was pioneered in the British Isles. Planks, rather than hides, were fastened together using yew withies through individual stitches. A system of integral cleats and transverse timbers provided rigidity to the hull; this method too may have been adopted from existing traditions of boat building. The period in which this innovation is introduced around the coast of England and Wales coincides with the increased inclusion of exotic and prestigious items in 'rich burials'; items included bronze tools and jewellery made from gold, amber, jet and faience that were important from Continental

Europe, and frequently Beakers. It is suggested here that the introduction of sewn-plank boats played a role in the development or maintenance of the expanding elite networks across Europe, which is reflected in the imported goods that found their way into the 'rich burials'.

Analysis of the landscape context of the boats has shown that the Ferriby foreshore was not, in any way, referring to monuments of the ancestors or charged with any special or religious meaning. The landscape contains neither monuments, nor any votive depositions, but the archaeology suggests that everyday farming activities took place here. Considering that this is the only known Bronze Age boat builder's yard, we may assume that the sewn-plank boats, their makers or their crew did not receive exceptional treatment. The landscape context of the Kilnsea boat, on the other hand, includes ample reference to ancestral monuments and contains several Bronze Age barrows including at least one with a Beaker burial. If Kilnsea was indeed the sheltered harbour chosen by the seafarers, as argued here, then it appears that these journeys across the sea, undertaken to acquire exotic goods and maintain networks across Europe, were loaded with distinctive meaning expressed in the reference to the ancestors and their monuments (cf Bradley 1998).

If this interpretation is not too wide off the mark, this could indicate that by the Early Bronze Age, seafaring was not, or no longer, perceived as an everyday activity. Possibly, the reinforcement of the elite networks and the acquisition of the foreign prestige goods that signalled the wearer's status formed parts of a rite of passage for young men. The dangerous, or at least perilous, nature of the journey would be compatible with such rites, and the sea was a liminal place, only to be entered on distinctive occasions and with clear reference to the ancestors.

I admit that this interpretative archaeology presented here includes several issues that are not without a degree of supposition and conjecture. Nevertheless, I hope that this innovative approach of 'seamlessly' integrating practical and theoretical aspects of maritime and landscape archaeology opens up fresh avenues for research that addresses the role of boats in the wider socio-political, economic and religious aspect of prehistory.

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