The Social History of a Medieval Fish Weir, c. 600-2020

Thomas Pickles

University of Chester

t.pickles@chester.ac.uk

Abstract

This paper presents the *longue durée* social history of a medieval fish weir. It reveals

the significant role of fishing and fish weirs in the construction and reconstruction of

social structures and cultural identities. It focuses on an enigmatic annual ceremony –

the construction of the Horngarth or Penny Hedge at Whitby, North Yorkshire. It

begins by arguing that this descends from the construction of a medieval intertidal

fish weir. It then explores the possible social and cultural contexts in which it

originated and the social and cultural circumstances that perpetuated its construction

to the sixteenth century. It proceeds to consider the social and cultural changes that

undermined its original function and transformed its significance in the sixteenth,

seventeenth, and eighteenth centuries, and how an invented tradition about it became

important to the local identity and national reputation of the town.

Keywords

Fishing; weir; society; culture; identity.

If you visit Whitby, North Yorkshire, over the feast of Ascension you will witness a

fascinating medieval ceremony. On Ascension eve at 09:00 the Bailiff of the nearby

manor of Fyling constructs a hedge, known as the Horngarth or Penny Hedge, in the

upper harbour on the mudflats of the River Esk. This comprises nine stakes of

1

hazelwood hammered into the mud with a ceremonial hammer, braced by stowers, woven with nine yethers, and filled with brushwood. The Bailiff then gives three blasts on a ceremonial ram's horn and cries 'out on ye' three times. Tradition dictates that the hedge must survive three tides. This ceremony – as we shall see – may have been performed continuously since the twelfth century, though, in common with many local customs and ceremonies, it only emerges into the historical record occasionally, and does so in charters, antiquarian works, and newspaper reports which can sometimes be suspected merely of reproducing older accounts.² The only two circumstances in recent memory which have prevented its construction are a high tide in 1981 and the COVID19 lockdown of 2020. To date, no convincing explanation has been offered. This paper has two purposes. First, to argue that it descends from the construction of a medieval intertidal fish weir. Second, to write the *longue durée* social and cultural history of a medieval fish weir.

<Insert Figure 1>

Historians and archaeologists recognize the importance of fishing to medieval society. Fish was a food staple crucial to sustaining population growth and a luxury contributing to distinctions between social groups.³ Inland freshwater and coastal saltwater fishing required collaboration, organization, and specialist skills, with the potential to foster and maintain social hierarchies and cultural identities – for observing the behaviour of fish, the construction of weirs, the making and mending of tackle, the taking and preserving of catches, the policing of rights to fishing and their obstruction of traffic, and the selling and transportation of surpluses. Hence from medieval fishing tackle Steane and Foreman identified four regional fishing traditions and concluded that 'Fishing ... had wider repercussions on the nature of society and the communities working within it.' More recently, Aidan O'Sullivan constructed a

powerful argument from the archaeology of fish weirs that 'estuarine landscapes [were] storehouses of cultural values and traditions', and that 'medieval fish weirs [were] the expression through material culture of the identities of local fishing communities', such that

These people, through their daily work and practice within estuarine environments, their knowledge and understanding of place and their perception of the past, could have used these structures to construct, negotiate and even resist changing social identities within the worlds in which they lived.⁵

Yet we have faced significant problems in analyzing the relationship between fishing, societies, and cultures, which highlight the exceptional nature of the evidence for the Horngarth. A rich range of historical evidence for medieval fishing survives – laws, charters, estate surveys, records of dispute, accounts, literary representations, and place-names. An equally rich archaeological record exists, including zoo-archaeological collections, material culture, boats, and weirs. Nevertheless this provides a partial picture. The historical evidence is helpful on responsibilities for construction, regulation, taxation, rents, sales, and transportation, but provides snapshots in time, and rarely presents detail on the nature of individual structures, the logistics of building and maintaining them, or the experiences and perceptions of the people who constructed them. The archaeological evidence supplies the missing information on the nature of individual structures, the logistics of building and maintaining them, and their lifespans, but it has rarely been possible securely to connect a particular structure with the people who built it. Therefore we have had to fall back on hypotheses about the associated social dynamics and cultural effects.

The historical evidence reveals a range of potential social contexts for the organization of fish weirs, from peasants holding in common, to professional fishermen, to noble, monastic and royal lords. 8 An expanding number of sites with physical remains allow us to plot the locations of weirs on the ground and consider landscape contexts, investigate construction and function, and assess regional variation. Yet the limits of our knowledge about the relationship between particular fishing practices and specific local societies and cultures often precludes a fuller exploration of the social dynamics. It is plausible that Steane and Foreman's four regional fishing traditions were associated with variations in the social organization of fishing and the cultural identities of fishermen, but we do not know. 10 Royal or monastic estates might be the context for the early Anglo-Saxon fish-traps on the River Thames, on the River Solent, on Holme Beach in Norfolk, and on the Blackwater Estuary, but no certain connection can be established.¹¹ The activities of reformed monastic communities could explain the construction of fish weirs from the twelfth century onwards at a range of locations in Britain and Ireland, but there is rarely any direct link between a community and an excavated example. 12 Urbanization may have driven an expansion in the number of fish traps in the Severn estuary from the twelfth to the fourteenth century, but we cannot be sure. 13 When the links between particular fishing practices and specific local societies and cultures can be made, this is usually for a brief time period, preventing full consideration of the long term dynamics. An Old English estate memorandum for the Bath Abbey property of Tidenham in Gloucestershire locates the construction of fish weirs within the obligations of lordship – peasants known as *geburas* were expected to cut and/or carry '40 larger or one load of poles, or build 8 yokes (sections) for three tides' - and names two types of weirs – cytweras and haecweras; it thereby seems to identify a

tradition of fish weir construction that persisted for centuries. ¹⁴ Even then the social and cultural dynamics are only partially visible. Exceptionally, the evidence for the Horngarth seems to allow us to write the *longue durée* social history of an individual fish weir, considering its relationship to local social structures and cultures.

<Insert Figure 2>

What was the Horngarth?

The earliest evidence for the Horngarth derives from the Abbey of Whitby, refounded c. 1078 and dissolved in 1539. It is preserved within the 'Abbot's Book', a cartulary in the North Yorkshire Record Office at Northallerton. ¹⁵ The Abbey believed the Horngarth to be a right of service due from lands held by some of its tenants since at least the twelfth century. This is demonstrable from three charters entered into the Abbot's Book. In the first, Abbot Benedict (r. c. 1139-1148) confirmed that William de Percy should inherit land held from the Abbey by his father, rendering 2 marks at Whitsun and Martinmas in lieu of service, 'except for Horngarth, as much as pertains to his land' (excepto Hornegarth, quantum ad terram suam pertinet). 16 In the second, Abbot Richard II de Waterville (r. c. 1176-1189) granted to William de Everley land at Ugglebarny and Everley, 'Rendering annually 11 shillings and one request in August for sixteen men from Ugglebarnby and eight from Everley and doing its part within the Horngarth' (Reddendo annuatim xi s. et unam precationem in Augusto de vi decim hominibus in Ugelbardeby et viii in Everley et faciendo partem suam in Horngard). ¹⁷ In the third, Roger Brown granted to Abbot Roger de Scarborough (r. c. 1223-1244) land in North Fyling, stipulating: 'I Roger, and my heirs, will fully discharge for the rest of our tenancy the fee and service of

Horngarth, and the ploughing and mowing and all other services which belong to that bovate of land' (*Et ego, Rogerus, et haereditates mei, firmam et servitium de Hornegarth, et carucam et falces, et omnia alia servitia quae pertinebant ad illam bovatam terrae, plene persolvemus de residuo tenement nostro*). ¹⁸

To these charters may be added the fourth article amongst memoranda from a dispute between Abbot Thomas de Marton (r. 1305-22) and Alexander de Sneaton. Unfortunately, this language of this article is far from straightforward, so the Latin and translation need some attention. With generous and invaluable assistance from Nick Karn, the Latin may be rendered as follows:¹⁹

Cum sepe homines dicti Alexandri facientes le Horngarth plus quam necesse esset de nemore Abbatis accipere soliti sunt, et residuum sive superfluum in villa vendere solebant, et inde ad attachiamenta²⁰ citari et amerciari, sic quievit ut dicti homines liberationem sibi a ministris Abbatis gratis accipientes, [nec] plus nec minus petentes. Et si defectus in factura dicti Horngarth occasione minus liberati inveniretur, non eis imputaretur, sed talis defectus, si defectus esset, noster erit et non illorum. Sed cum tertium diem in quo dictus Horngarth fieret sepe vindicarent, ²¹ aliter non est eis responsum nisi quod legitime fuerint premoniti, ²² [sci] licet vigilia Assensionis Dominicae, in qua fieri deberet, postulaverint: cum aliter factum fuerit, eo quod aliquando dies S. Johannis de Beverlaco, dies feriatus [vel]²³ dicta vigilia evenerit, in qua factus non fuerit.

A plausible, but not definitive, translation may be offered, which also owes an enormous amount to Nick Karn:

Because frequently the men of the said Alexander making the Horngarth were accustomed to take more than had been necessary from the wood of the

Abbot, and they are accustomed to sell the remainder or surplus in the town, thence are summoned for seizure of goods²⁴ and fined; so it was settled that the said men are accepting [accepted?]²⁵ the release (of wood) for them from the servants of the abbot through kindness, asking [neither] more nor less (wood). And if a defect in the making of the said Horngarth is found, through the cause of less (wood) having been released, it shall not be charged to them, but such a defect, if it is a defect, will be ours and not theirs. But since they often claim the third day from which the said Horngarth was made; otherwise that they do not have to respond except when they were lawfully forewarned, that is, they have claimed, by the Vigil of the Ascension of the Lord, on which it should be made; when it is done otherwise, it sometimes happens on the day of St John of Beverley, the feast day itself [or] or the vigil, on which it was not done.

Together, these documents establish certain fundamental points. The Horngarth was a wooden structure. From the etymology of the second element of its name, it was a hedge – either Old English *geard*, or Old Norse *gardr*. Its construction was an obligation of lordship, using the lord's timber resources, assessed on the land, and rendered in terms of labour, perhaps for individual sections. The charters suggest that the obligation fell on Dunsley, Fyling, Everley, and Ugglebarnby, and the dispute adds Sneaton. It was valuable; its labour services were reserved even when others were remitted. The element of collaboration and the number of lands on which it fell imply a much larger hedge than is now constructed. The volume of wood was sufficient for the men of Sneaton to use it as cover for stealing a surplus to sell in the town. Where the occasion was specified, the obligation was associated with Ascensiontide, but there could be some variation.

A note on a flyleaf near the beginning of the Abbot's Book, in a late sixteenthor early seventeenth-century hand, sheds further light:

Everie year the Hornegarth service ys to be doone upon Hollie Thursday evne. Tho. Cockrill being baylyf to the abbot did meete by sonn Rise the Conieres, the Strangwayes, the Eldringtones, and Allettson, who were bound to this service, in the Strye-head hard by Lyttell-beck, and the said Cockrill did see every one cutt downe with a knife, he appointing the wood, so muche as should serve. From thence they caym not the nearest way, but bringing theym upon theyr backe, went a good way before they caym in to the way. So comminge to the water at the towne end they maid the hedg which should stand three tydes, and then the officer did blow owte upon they. ²⁶

In line with the article from the memoranda between Abbot Thomas de Marton and Alexander de Sneaton, the Abbot's Bailiff, Thomas Cockerill, organized the service: he met all those bound by the obligation at the Abbot's wood near Littlebeck and selected the necessary wood. At this time, the obligation fell on land at Fyling (Alletson), Ruswarp (Conyers), Sleights (Cockerill), Sneaton (Strangeways), Stakesby (Conyers), and Ugglebarnby (Elrington). The tenants carried the wood by a specified route ('not the nearest way') to Whitby and constructed a hedge close to the current location of the ceremony, conceived as the town limit. The completion was signaled by a blast on a horn and a call of 'out on ye' and it was supposed to last for three tides.

It remains a possibility that the obligation referred to in the charters differed in significant ways from the arrangements glimpsed in the fourteenth-century memoranda and the retrospective account of early sixteenth-century practice; or that the form of the hedge differed from that constructed today. Nonetheless, the evidence

from all periods has always been considered together as relating to the same phenomenon. This seems justifiable. The charters provide only passing references but are consistent with the obligations discussed in the article from the memoranda and since this was the outcome of a dispute between two parties over a customary obligation it is unlikely that either side was inventing the details from the passing references in earlier documents. The charters and the article from the memoranda, contained within the cartulary, could have been a source for whoever wrote the note on the flyleaf, but it does not seem likely that the author invented the form of the ceremony from these documents. Though there is overlap in the lands to which the cartulary documents, and the note, referred, they are not identical, and the note refers, not to lands, but to tenants. Though the article in the memoranda refers to the arrangements for cutting and carrying, which could have informed the writer of the note, it leaves ambiguity about the timing, refers to customs ignored in the note, and does not specify the location, the ritual aspects accompanying construction, or the association with three tides. The writer of the note seems more likely to have been recording, than inventing, local traditions, because it is otherwise difficult to know why a particular group of tenants would have been singled out, or where the appropriately historical idea of three tides would have originated. Support for the idea that the form of the ceremony could endure over centuries may be found in comparative evidence from a range of different customs which endured in this way and from the evidence below that the custom of the Horngarth as it was understood in the eighteenth century continues to the present day.²⁷

Based on this evidence, historians have made three previous suggestions for the form and function of the Horngarth. Sir Lionel Charlton, writing in the 1770s, followed by the Revd George Young, writing in the early 1800s, thought that the Horngarth got its name from the blowing of the horn to assemble the men or signal its completion, and conjectured that it was either a store-yard for the landing of goods or a coal-yard. ²⁸ Canon Atkinson instead connected the Horngarth with another right of the Abbots called the acredike, constructing a complicated case that it was a 'customary annual restoration of the fence of the common arable lands of the Abbey, after the completion of the spring-sowing ... to resist the incursions of horned cattle as well as of sheep, goats, and swine.' ²⁹ Robert Turton accepted most of Atkinson's logic, but resisted his function, arguing that it was named from its horn-shape and was an enormous dyke and hedge stretching from Littlebeck to Whitby to assist in the hunting of game. ³⁰ Since Turton, authors have summarized one or more of these suggestions. ³¹

None of these arguments convince. First, neither Charlton nor Young illustrated how the hedge would function for landing goods or delivering coal and Turton freely stated that 'I must confess that I am not aware of the existence of any hedge or dike that affords any evidence of having been used for the purposes of hunting.' Second, there is no direct connection between the Horngarth and the acredike. Because the Horngarth was a *forinsec* obligation connected with the lord's rights over wardship and marriage, Atkinson extrapolated that it was an obligation on all tenants. He then observed that the Abbey had rights to pasturage in common fields (*campi*) within the acredike or acregarth at several places – North and South Fyling, Hackness, Larpool, Lathegarth, *Prestby*, Newholm, Ruswarp, *Sourby*, Stakesby, Stoup, and Whitby Lathes. He suggested that the Horngarth and acredyke were synonymous, Horngarth meaning 'horned-stock-fence'. Instead it is probable that there were two different obligations, connected by common lordship, and sometimes falling on the same lands. Third, these suggestions fail to account for its

timing, its construction at a particular point in the harbour, its assessment in terms of three tides, or its value.

Considered in the context of more recent historical, archaeological, and onomastic evidence, the Horngarth is likely to have been an intertidal fishing weir, primarily, but not exclusively, for salmon. The River Esk is the only Yorkshire river other than the Ouse visited by Atlantic salmon.³⁶ Late May to late June – following the feast of Ascension – is a good time to catch adult salmon.³⁷ This was also a suitable moment in the agricultural cycle. A piece of eleventh-century Old English 'estates literature', Be gesceadwiscan gerefan, 'On the prudent/ discriminating reeve', explains when to pursue particular activities, noting that 'In May and June and July in summer one may harrow, carry out manure, procure sheep hurdles, shear sheep, build, repair, construct in timber, cut wood, weed, make folds, construct a fish-weir and mill ...'38 The eve of Ascension falls 40 days after Easter, determined by the lunar cycle, usually, but not always, guaranteeing a low tide for construction: this may explain some variability. Excavated intertidal fish weirs were wattle hedges or fences analogous to the one constructed at Whitby. These could be V-shaped basket weirs directing the salmon into traps, or linear/ curving barriers to create an eddy for catching from a stop net.³⁹ Archaeological surveying and excavation has discovered examples of both types in early medieval Britain and Ireland. 40 Occasional references in charters acknowledge their existence. 41 Particularly well-preserved and fullyexcavated examples reveal that fish weirs were complex enterprises requiring labour and timber on the scale suggested by the Horngarth obligations – the remains from Collins Creek in the Blackwater Estuary, Essex, revealed structures of up to 10 000 roundwood posts 10-15cm in diameter set at 30-50 cm intervals and enclosing an area of 3000x700m, which were repaired, modified, and altered from the mid seventh

century to the mid tenth century. 42 As we have seen, the estate memorandum for Tidenham supplies a parallel for the lordship obligations associated with the Horngarth – the cutting and carrying of wood or the construction of a number of sections to survive three tides. Given their scale, the specification that they must last for three tides is likely to signify a duration of one month, referring to the spring, middle, and neap tides; this is a matter of durability, to withstand tidal forces, and height, to guarantee suitable catches under changing conditions. The name Horngarth perhaps meant horn-shaped fence/ hedge, referring to a curving barrier to facilitate catching from a stop net, or perhaps related to the ceremonial horn first mentioned in the late sixteenth- or early seventeenth-century note. 43 Other Old Welsh, Old English, and Old Norse names applied to fish weirs regularly include elements referring to their form and materiality: OW coredau, 'plaited/ bound'; OW argae, 'woven fence'; OE haecwere, 'fenced weir'; OE beamwaer, 'tree/wood weir'; OE tynadwere, 'fenced weir'; OE ginanhecce, 'open/wide fence'; OE aescwer, 'ash (withy?) weir' and OE plumewer, 'plum (tree?) weir; ON fiskigardr, 'fish hedge'; ON eyrrver, 'sand/gravel bank weir'.44

When and how did the Horngarth originate?

The origins of the Horngarth should be located within the particularities of the physical and social landscapes within which it was embedded. Events at the end of the last Ice Age established a physical landscape within which the Esk mouth was a focal point. An ice sheet girdled the uplands now known as the North York Moors. The retreating ice drained into the Esk Valley, creating the only artery within the north east coastal plain of Yorkshire and the only estuary between the Tees and Humber. ⁴⁵
The resulting solid and drift geology presented a few pockets of land suited to arable

agriculture surrounded by a broader plain better suited to pastoral farming. 46 The Esk mouth was a natural harbour and a necessary stopping point for boats plying the eastern coast of Britain. The coastline from Whitby to Sandsend, just below Lythe, presented a long stretch of sandy beach ideal for the landing of flat-bottomed boats. Together, this made Whitby an obvious location for the exploitation and transshipment of resources – the surpluses of cereals, meat, and wool from farms along the north eastern coastal plains, and fish from the Esk as well as from coastal fisheries.

<Insert Figure 3>

The Esk mouth was the centre of a royal territory of obligation from at least the seventh century and came to dominate the north eastern coastal plain. Bede's Historia ecclesiastica gentis Anglorum, completed c. 731, relates that King Oswiu of the Northumbrians (r. 642-670) granted the revenues from 10 households (Latin familia, Old English hid) at Streanaeshalch to Hild in 657 to found or set in order a religious community. 47 Hild established a further community 13 miles to the south at Hackness. 48 By the time of her successor, Abbess Ælfflæd, the Community possessed lands at *Osingadun*, probably modern Easington, supplied with a church for the lay brethren working there. 49 During the seventh, eighth, and ninth centuries the Community apparently exploited a quarry at nearby Aislaby with stone of exceptional quality and produced stone monuments in a distinctive house style: this suggests churches at Whitby, Hackness, and Easington, but also between Whitby and Easington at Lythe. 50 By the eleventh century, the Community and its satellites had disappeared. However, the royal territories on which they were founded continued to influence the landscapes of lordship and parochial allegiance. Domesday Book records four contiguous blocks of landholdings focused on Whitby, Hackness, Lythe,

and Easington: Whitby seems to have been a royal estate on loan to an earl by virtue of his office; Hackness remained part of a royal estate focused on Falsgrave; Easington remained part of a royal estate focused on Loftus; and Lythe was the focal point in a series of lands held by a single lord before and after the Norman Conquest. Moreover, the churches at Whitby, Hackness, Lythe, and Easington were mother churches for dependent chapelries within mother parishes that encompassed these blocks of landholdings. The likelihood is that these landholdings and parishes fossilize the outlines of the early royal territories of obligation within which the Community and its satellites were founded, because those communities provided pastoral care for the inhabitants of those territories. In the twelfth century this stretch of coastline was called Whitby Strand.

The Horngarth probably originated in the period before the Norman Conquest of 1066 and the re-foundation of the monastery at Whitby from c. 1078. First, it has an Old English or Old Norse name. Since both languages continued to be spoken into the twelfth century, this is suggestive, not conclusive. 55 Second, the best parallel for the customs of lordship is provided by the pre-Conquest Tidenham estate survey.

Third, the Abbey inherited a pre-Conquest landscape of lordship within which these customary rights functioned. Domesday Book reveals that Whitby and Hackness were manors with dependent berewicks (outlying parcels of demesne land) and sokelands (outlying lands held independently but owing suit as well as dues and services to Whitby): Whitby had a berewick at Sneaton and sokelands at Fyling, *Gnipe* [Hawsker], *Prestby*, Ugglebarnby, *Sowerby*, *Breck*, *Baldebi*, Flowergate, Stakesby and Newholm, and 'thegnland' held in return for services at Dunsley; Hackness had berewicks at Suffield and Everley. 56 Compare the list of lands on which the Horngarth obligation fell. Dunsley, Everley, Fyling, Sneaton, Stakesby, and

Ugglebarny were former berewicks and sokelands on which the obligations fell. *Gnipe, Prestby, Sowerby, Breck,* and *Baldebi* were former sokelands which disappeared from view in the twelfth century, hence there is no reference to them in relation to the Horngarth. Ruswarp and Sleights were omitted from the Domesday entries, but were part of the manor of Whitby granted to the Abbey. The match is imperfect, but anomalies are explicable: the Horngarth apparently fell on the pre-Conquest berewicks and sokelands of Whitby and Hackness, rather than on the wider portfolio of Abbey lands acquired in the twelfth century.

The Horngarth could have originated in several contexts. It could have emerged before the grant to St Hild in 657. Carole Hough argued that the Old English place-name (ge)stréones halh signified productive fishing places, suggesting the value of the Esk for fishing was recognized by the seventh century.⁵⁷ Our earliest evidence for royal expectations from a territory of obligation derive from the laws of Ine, king of the West Saxons, and include renders of salmon.⁵⁸ The Horngarth could have been a way for members of the royal territory to meet demands like these. Equally, the Horngarth could have been introduced after the establishment of the religious community in 657. Excavations of Hild's Community uncovered an above average volume of early medieval coins suggesting that it was the location for an interregional market.⁵⁹ Surpluses of grain, wool, and fish are likely to have underpinned this market, the construction of stone buildings with glazed windows, the writing of manuscripts, and the production of high status metalwork. ⁶⁰ Early medieval religious communities have been envisaged as innovators in lordship and technology, including mills and fish weirs, particularly in the 'long eighth century'. 61 Alternatively, the Horngarth might have emerged within the Viking diaspora. Old Norse place-names suggest a dense, low status settlement of Scandinavians on the north-eastern coastal

plain of Yorkshire in the later ninth and tenth century. ⁶² Across the Viking diaspora amber and jet ornaments were highly valued and exchanged; jet from the Whitby area was probably a significant source for specialist craftspeople in York, Lincoln, and Dublin. ⁶³ An unusual concentration of 'hogback' monuments at Lythe church has been envisaged as the material reflex of a group of Scandinavian traders operating on the Dublin-York axis. ⁶⁴ Excavated settlements and burials in the northern and western isles of Scotland have revealed the expertise of Scandinavians in coastal fishing. ⁶⁵ Finally, the Horngarth could have been established after the extension of West Saxon lordship over Yorkshire from the mid tenth century. In 1066 Whitby was apparently the centre of a royal estate on loan to an earl for the duration of his time in office. Either the West Saxon kings or their earls were capable of galvanizing their reeves to exploit resources in this way. ⁶⁶ Fish resources are likely to lie behind the exceptionally high valuation of Whitby at £112 in Domesday Book and the Horngarth was one way of guaranteeing lordly revenue from those resources. ⁶⁷

Why did the Horngarth endure?

Whatever its origins, from the twelfth century onwards the particularities of the physical and social landscapes within which the Horngarth was embedded encouraged its endurance. The re-founded monastery at Whitby was the nexus for a network of overlapping economic, social, and cultural relationships. From c. 1000 the 'fish event horizon' resulted in the commercial exploitation of offshore herring and cod, bringing fishermen to Whitby from the eastern coast of Britain, the northern coast of France and the low countries, and Scandinavia, particularly in the months of August and September, when the herring shoals visited. ⁶⁸ Over the course of the twelfth and thirteenth centuries this commercial network connected the sheep farmers of

Yorkshire with cloth producers in the cities of the Low Countries and northern Italy.⁶⁹ The fishing and wool industries fostered urbanization at Whitby: the first secure evidence survives from the last decade of the twelfth century and by *c*. 1300 it included an estimated population of 580-690 people pursuing a range of occupations - grocer, brewer, barber, baker, bricklayer, toll taker, porter, cobbler, goldsmith, tailor, fuller, and dyer.⁷⁰ This places Whitby in the fourth rank of the thirty Yorkshire towns, below York and Beverley, but comparable to Ripon and Selby.⁷¹

The Abbey exploited these commercial networks in ways that complemented and reinforced the landscapes of lordship and parochial allegiance. By the mid twelfth century it was the dominant landholder in the two mother parishes of Whitby and Hackness. 72 Parishioners could be expected to attend the mother churches at Whitby and Hackness on the major liturgical festivals of Christmas, Easter, Ascension, Michaelmas, and Martinmas. 73 The Abbey used the dates of these festivals as convenient occasions on which the obligations of lordship should be discharged – attending the seigneurial court at Easter, paying rents on rural and urban properties at Martinmas, and paying ecclesiastical dues to the mother church of St Mary's at Whitsun and Martinmas.⁷⁴ Sometime between the 1130s and 1176 the Abbey translated the relics of St Hild from Glastonbury to Whitby and chose to establish a new feast of translation for Hild on 25th August, perfectly timed for the peak of the herring season. 75 In the final decade of the twelfth century the Abbey negotiated the existence of a jurisdictional immunity known as the Liberty of Whitby Strand, coterminous with the mother parishes of Whitby and Hackness, including lordship over the port and town as well as acknowledgement of a fair with peace on this feast day. ⁷⁶ The memoranda between Abbot Thomas de Marton and Alexander of Sneaton reveal that the Abbey had allowed some rural tenants privileges of buying and selling

in the town, encouraging them to direct surplus through the town and port.⁷⁷ The Abbey successfully asserted its rights to tithes of herrings, which comprised a significant proportion of its income, and added to its own fleeces those collected from the flocks of others for trading overseas.⁷⁸

The Horngarth endured because it was embedded within these landscapes of lordship, parochial allegiance, and commercial cooperation. The charters and the article in the memoranda concerning the Horngarth remind us that it depended on a continued consensus about its value to lords and tenants – the transfer of lands and the seigneurial court presented regular opportunities for revisiting and revising its terms. The article in the memoranda reinforces this point by revealing that acts of petty resistance could undermine its construction on an annual basis – failure to respond to requests, lack of care in construction, and opportunistic exploitation of the lord's resources. Within the seasonal and liturgical rhythms of lordship, production, and commerce, the Ascensiontide construction of an intertidal fish weir complemented, but did not compete with, the timetable for other activities – legal administration, sowing, lambing, and shearing in the Spring; harvesting, offshore fishing, and trading in the Autumn. Seen in the light of those other activities, it was part of a broader web of social relations within which the whole seemed habitually rational and challenge to any one part might require rethinking the whole. Set in the context of the commercial relationships focused on the Abbey and town, it reflected a broader pattern of necessary cooperation between the inhabitants of the north eastern coastal plain and those of Esk mouth. Understood in terms of the knowledge and skillset underpinning its construction, it reflected a balance of power and agency between those who knew and exploited the river, and the Abbey. People continued to construct it partly because the custom of doing so represented an opportunity to use the need for their practical

knowledge and personal labour as leverage in renegotiating the relations of production.

How and why was the significance of the Horngarth transformed? At some point between the sixteenth and the eighteenth centuries the Horngarth ceased to serve or signify its original function, but it remained socially and culturally significant. The note in the flyleaf of the 'Abbot's Book' demonstrates that the service was still being performed, but someone felt it was worth recording the historic basis and ceremonial form, perhaps because the origin and function were forgotten: the first sentence is in the present tense – 'Everie year the Hornegarth service ys to be done upon Hollie Thursday evne' – but it is followed by an historical sketch in the past tense, focusing on the bailiff and tenants who lived in the immediately post-Dissolution period. By the eighteenth century an invented tradition was circulating about its origins and significance. Sir Lionel Charlton relates that in his time a printed pamphlet was circulating telling the story of the Horngarth, which he copied verbatim. ⁷⁹ Copies were also available to Captain Francis Grose and the Reverend George Young. 80 The pamphlet claimed that the Horngarth originated in the fifth year of the reign of King Henry II (1159): the Abbey was supposed to have had a hermitage and chapel on Eskdaleside, where some local landowners on a hunting trip mortally wounded a hermit; with his dying breath, the hermit placed them under the jurisdiction of the Abbot and imposed the construction of the hedge as an annual penance on which their tenure depended. Between them, Charlton, Young, and Atkinson pointed out the anachronisms: there was no Abbot Sedman of Whitby, the men named were not the known tenants of these lands in the time of Henry II, the hermitage of Eskdaleside remained a hermitage without a chapel in the 1170s, and the

conception of the Abbot's jurisdiction over the forest and the hermit seem unrealistic. ⁸¹ This has the air of an oral or antiquarian 'just so' story emerging from knowledge of the form of the Horngarth and the families involved in the sixteenth century.

The English Reformation, the alum trade, and the rise of English shipping are the combined reasons for this change. The Dissolution of the Abbey in 1539 diverted its revenues of over £400 per annum, formerly expended in the port and town, to the royal court and then to a series of lessees. 82 One family of lessees, the Cholmleys, purchased property around Whitby and established a new residence adjacent to the former Abbey buildings, but could not replace the Abbey as a fiscal stimulus and ran up huge debts during the Civil War. 83 However, in c. 1608 prospectors identified alum shale, a rare and valuable mineral crucial to dye fixing, in the hills to the north and west of Whitby, prompting the growth of an alum industry. 84 The processing of alum shale required large volumes of coal, imported from Newcastle, and urine, imported from London. 85 To supply this industry shipping companies were established at Whitby and a shipbuilding tradition developed, servicing a fleet of about 100 vessels by the 1670s. 86 This was the foundation for Whitby's contribution to whaling and to voyages of scientific and geographic discovery in the eighteenth century. 87 These changes had several effects pertinent to the Horngarth. First, they severed the customary relations of production between the Abbey and its tenants on which the Horngarth had rested. Second, they reduced the relative significance of intertidal and offshore fishing to the economy of the town and its hinterland. Third, they resulted in the redevelopment of the harbour to accommodate larger vessels with new staithes and warehouses, making an intertidal fish weir a significant hindrance to more valuable activity. The origins of the Horngarth ceremony and its form may

already have seemed obscure when the note was written on the flyleaf because it applied to fewer holdings and over the course of time all tenants negotiated their exemption from the ceremony until the Bailiff of Fyling remained the last to discharge it, eventually – as today – out of a sense of custom and tradition, not obligation. The fewer the participants and the lower the proportion of people involved in intertidal or offshore fishing, the smaller, and more peculiar, the hedge must have seemed.

In this changed environment the original function and significance of the Horngarth was forgotten and the new invented tradition emerged. The seeds for this lay in longer-term interactions between oral and textual culture explored by Adam Fox, which generated the kind of social memories focused on elements of the landscape analyzed by Alexandra Walsham and Andy Wood. 88 During the twelfth century the people of Whitby Strand were telling two miracle stories about St Hild. One turned on her ability to command poisonous snakes – presumably the adders native to the North York Moors – to throw themselves over the cliffs, where they were transformed into stone – the ammonite fossils of the Jurassic coastline. Another turned on her ability to control, liberate, and resurrect migratory geese threatening the crops. These were written into a now lost Liber Tomae de Sancta Hilda, recorded in a book list of c. 1176, which was the common source for two later vitae of Hild, an Anglo-Latin poem, and antiquarian notes made from the Abbey records. 89 Quite independent of these sources, a series of visitors and local antiquarians picked up versions of these stories being told by the people of Whitby in the sixteenth, seventeenth, and eighteenth centuries. 90 Other stories about Hild were heard in the eighteenth and nineteenth century – that she was born in Aislaby; that she visited Hinderwell in her youth, where her holy well lay behind the place-name *Hildrewell*;

that Hilda's spring on the boundaries of the Liberty was a favourite location of hers; that her ghost was regularly seen in the Abbey ruins. 91 Still other stories around the North York Moors revolved around real and fictitious members of early Anglo-Saxon royal and noble families. King Aldfrith, whose death one recension of the Anglo-Saxon Chronicle places at Driffield, was said to have fought a battle on the southern flanks of the Moors near Ebberston, before retreating, fatally wounded, to rest in a cave where a grotto was constructed in his memory. 92 A mythical wife of the historical King Oswald (r. 634-642), prompted by a dream, was thought to have fled to Roseberry Topping to protect her son Oswiu from death, only for him to drown in the spring there, and for the two of them to be buried at Osmotherley (Oswiu-by-hismother-lay!). 93 Duke Wada, recorded in one version of the Anglo-Saxon Chronicle as rebelling against King Eardwulf at Whalley in Lancashire in 798, was believed by some to have constructed Mulgrave Castle near Lythe, been buried at Wade's stones in Lythe parish, and given his name to Wade's causeway. 94 Most notoriously of all, the village of Robin Hood's Bay was said to be named from its role as a port for Robin Hood's fleet, and Robin Hood's and Little John's fields with their eponymous crosses were thought to have originated when Abbot Richard of Whitby dined with Robin and his men and they shot arrows which landed in these locations. 95 The story that the Horngarth originated in the time of Henry II, in a penance imposed by a dying hermit on the landholders responsible for his death, belongs to this same social and cultural milieu. 96 For the people of Whitby, the story ensured that the construction of the Horngarth was, simultaneously and paradoxically, both a perpetuation and a rejection of their pre-Reformation past – monasticism, religious lordship, and penance.

This story ensured that the Horngarth remained socially and culturally significant and continued to be constructed. Captain Francis Grose included the chapel at Eskdaleside and a verbatim transcription of the pamphlet in his popular multi-volume *Antiquities of England and Wales*, designed to make antiquities accessible to those without the necessary means for leisurely travel and study. 97

Standard notices about this curious phenomenon and the attractive story surrounding it began to be circulated and published across the nation via the network of regional newspapers. 98 Sir Walter Scott included reference to it in his infamous best-selling medieval epic poem, *Marmion*. 99 Alongside St Hild, the ruins of her Abbey, the ammonites associated with her cult, William Scoresby, Captain Cook, and, from the nineteenth century, Bram Stocker, the Horngarth (or Penny Hedge) became a historical curiosity significant to the collective identity of Whitby as a place. Indeed, it is promoted by official and unofficial tourism websites and employed for the name of businesses in the town, which usually tell the story as part of their marketing materials. 100

The Social and Cultural History of Fishing

The social history of the Horngarth is one example of the broader phenomenon of the local-global – the relationship between local societies and universal trends. Local societies and their collective activities construct and underpin the appearance of static macro-economic networks, and structures of authority and power. Local societies are in turn shaped by changes to those networks and structures. The social cooperation that produced the Horngarth was partly the product of a regional physical landscape in which the Esk mouth was the logical focal point for cooperation amongst the people of the north eastern coastal plain in the exchange and transshipment of surpluses of

grain, wool, and fish. It *could* have emerged amongst some of those people as an efficient solution to the seasonal labour necessary to guarantee suitable catches of salmon as early as the sixth or seventh century. It *could* instead have been devised to meet the demands of, or to establish a monopoly on behalf of, a ruler in the same period. It *might* have been a result of the ingenuity of a religious community in the long eighth century, to increase surpluses for the exchange of goods necessary to facilitate the religious life. It *might* instead have been generated by the dynamics of the 'Viking diaspora' in the ninth and tenth centuries or external conquest and the imposition of lordship in the tenth and eleventh centuries. From the twelfth century to the beginning of the sixteenth century it endured because of the overlapping networks of lordship, parochial allegiance, and economic cooperation within which it was embedded. When these overlapping networks were sundered by the English Reformation, the discovery of alum shale, and the growth of the shipping industry, its original function and significance were lost, but a new invented tradition successfully transformed its function and significance, preserving its construction.

The social history of the Horngarth therefore has important implications for our understanding of the social history of fishing more generally. When we are faced only with the physical remains of fish weirs, this is a reminder that long-term continuity in the form of a structure and the physical traces that it leaves behind may mask significant changes in its social and cultural contexts. When we seek to deduce from those physical traces alone the social and cultural contexts for them, or their social and cultural effects, we should be careful about our assumptions. Had we only the physical traces of the fish weir, it would be tempting to think in terms of an 'estuarine community', or to contrast 'urban' and 'agricultural' with 'fishing' communities. In fact our medieval evidence points to a hierarchical society in which

agricultural tenants and their workers from up to thirteen miles from the Esk mouth were involved in urban life and in its construction. Equally, we might be tempted to imagine that vestigial traces suggest an intertidal weir persisted to the present day, when its function and significance have completely changed. Yet the Horngarth is also an illustration of Aidan O'Sullivan's case for the social and cultural power of fish weirs. It *might* have survived many changes of social regime before the eleventh century. It *probably* survived the Norman Conquest. It *certainly* endured radical economic, social and cultural changes from the sixteenth century onwards. From the eleventh to the early sixteenth centuries it presented a way for tenants and their workers to use their practical knowledge and labour to renegotiate the relations of production. From the sixteenth century onwards the invented traditions or social memories projected onto it provided a means for people to negotiate radical change.

Acknowledgements

Peter Gaunt and Graeme White provided assistance with aspects of the research for this paper. Graham Pickles, Roger Pickles, and Katherine Wilson kindly read and improved earlier drafts. The three anonymous reviewers provided extremely helpful feedback, suggestions, and references. Nick Karn provided generous and invaluable help in translating the article in the memoranda between Abbot Thomas de Marton and Alexander of Sneaton. A version of this paper was presented at the York Festival of Ideas on Sunday 14th June, 2020: I am very grateful to the organizers and audience for this opportunity to share my developing ideas.

Figure Captions

Figure 1: Penny Hedge Planting, 1950. Whitby Museum Photo Archive, PS 0541-05. Copyright Whitby Museum. Reproduced by permission of Whitby Museum and Whitby Literary and Philosophical Society.

Figure 2: The Liberty of Whitby Strand. Map drawn by Roger Pickles.

Figure 3: Domesday estates and mother parishes. Contains OS Data. Crown Copyright and database right 2020. An Ordnance Survey/ EDINA supplied service.

¹ Two short films of the ceremony may be viewed on YouTube: Around and About Yorkshire, *Penny Hedge Whitby* (YouTube, 2014), <u>Penny Hedge, Whitby, Yorkshire - YouTube</u> and Doc Rowe, *Planting the Penny Hedge 2015* (YouTube, 2015), https://www.youtube.com/watch?v=J8bKu5fi6QA <b dots not be accessed 14-12-2020>.

² B. Bushaway, *By Rite: Custom, Ceremony and Community in England 1700-1880* (London, 2011), 11-17, is a helpful discussion of this problem.

³ C. Dyer, 'The consumption of fresh-water fish in medieval England', in M. Aston (ed.), *Medieval Fish, Fisheries and Fishponds in England, Part 1*, British Archaeological Reports, British Series, 182(i) (Oxford, 1988), 27-38.

⁴ J. M. Steane and M. Foreman, 'Medieval fishing tackle', in Aston (ed.), *Medieval Fish*, *op. cit.*, 137-86.

⁵ A. O'Sullivan, 'Place, memory and identity among estuarine fishing communities: interpreting the archaeology of early medieval fish weirs', *World Archaeology*, 35, 3 (2004), 449-68, quotations at 451-2. See also: A. O'Sullivan, *Foragers, Farmers and Fishers in a Coastal Landscape: An intertidal archaeological survey of the Shannon Estuary* (Dublin, 2001); A. O'Sullivan, 'Medieval fish traps on the Shannon Estuary, Ireland: interpreting people, place and identity in estuarine landscapes', *Journal of Wetland Archaeology*, 5 (2005), 65-77; and A. O'Sullivan, 'Temporality, cultural biography and seasonality: rethinking time in wetland archaeology', in J. Barber, C. Clark, M. Cressey *et al.* (eds), *Archaeology from the Wetlands: recent perspectives* (Edinburgh, 2005), 67-77.

⁶ The best overviews are: D. Hooke, 'Uses of waterways in Anglo-Saxon England', in J. Blair (ed.), Waterways and Canal-Building in Medieval England (Oxford, 2007), 37-54; J. M. Steane, 'The royal fishponds of England', and C. J. Bond, 'Monastic fisheries', in Aston, Medieval Fish, op. cit., 39-68, and 69-112; M. Kowaleski, 'The commercialization of the sea fisheries in medieval England and

Wales', International Journal of Medieval Maritime History, 15, 2 (Dec. 2003), 177-231; M.

Kowaleski, 'The early documentary evidence for the commercialization of the sea fisheries in medieval Britain', in J. H. Barrett and D. C. Orton (eds), Cod and Herring: The archaeology and history of medieval sea fishing (Oxford, 2016), 23-41. The best comprehensive regional studies remain J.

McDonnell, Inland fisheries in medieval Yorkshire 1066-1300 (York, 1981), and H. Fox, The Evolution of the Fishing Village: Landscape and Society along the South Devon Coast, 1086-1550, Leicester Explorations in Local History 1 (Oxford: Leopard's Head Press, 2001).

⁷ For a useful survey with agenda setting: J. Ransely and F. Sturt (eds), *People and the Sea: A maritime archaeological research agenda for England*, Council for British Archaeology Research Report 171 (York, 2013), 113-163.

⁸ McDonnell, op. cit., esp. 3-14; Fox, op.cit., 51-59, 107-29.

⁹ For up-to-date overviews of Britain and Ireland: O'Sullivan, 'Place, memory and identity', *op. cit.*; Hooke, 'Uses of waterways', *op. cit.*; and J. P. Cooper, G. Ciara, J. Opdebeeck, C. Papadopoulou, and V. Tsiairis, 'A Saxon fish weir and undated fish trap frames near Asklett Creek, Hampshire, UK: static structures on a dynamic foreshore', *Journal of Maritime Archaeology*, 12, 1 (2017), 33-69, esp. 34-38.

¹⁰ Steane and Foreman, *op. cit.*, 178-81.

¹¹ N. Cohen, 'Early Anglo-Saxon fish traps on the River Thames', in S. Brookes, S. Harrington, and A. Reynolds (eds), *Studies in Early Anglo-Saxon Art and Archaeology: papers in honour of Martin G. Welch*, British Archaeological Reports, British Series, 527 (Oxford, 2011), 131-9, at 136-7; D. Robertson and J. Ames, 'Early medieval inter-tidal fishweirs at Holme Beach, Norfolk', *Medieval Archaeology*, 54 (2010), 329-46, at 341-3; D. Strachan, 'Inter-tidal stationary fishing structures in Essex? Some C14 dates', *Essex Archaeology and History*, 3rd Ser., 29 (1998), 274-82, at 279-280; Cooper, Ciara, Opdebeeck, Papadopoulou, and Tsiairis, *op. cit.*, 55-7.

¹² A. White, 'Medieval fisheries in the Witham and its tributaries', *Lincolnshire History and Archaeology*, 19 (1984), 29-35, at 30-1; S. Godbold and R. C. Turner, 'Medieval fishtraps on the Severn Estuary', *Medieval Archaeology*, 38 (1994), 19-54, esp. 43-5 for lack of historical evidence, and 49-50 for a comparative angle including monastic contexts; R. C. Turner, 'Fish weirs and fish traps', in A. Davidson (ed.), *The Coastal Archaeology of Wales*, Council for British Archaeology Research Report 131 (York, 2002), 95-108; O'Sullivan, 'Place, memory and identity', *op. cit.*, 456-9.

¹⁵ Northallerton, North Yorkshire Record Office ZCG VI 1. Facsimile: *The* Greate Booke *of Whitby: CD Rom facsimile* (Hull, 1999). Edition: *Cartularium Abbathiae de Whiteby, Ordinis Sancti Benedicti fundate Anno MLXXVI*, ed. Revd J. C. Atkinson, 2 vols (Durham: Surtees Society 69 and 72, 1878-1881) [hereafter *CW*]. Translation: *The Whitby Abbot's Book*, trans. Revd Dr Barrie Williams (Whitby, 2014). Handlist: G. R. C. Davis, *Medieval Cartularies of Great Britain: a short catalogue* (London, 1958), No. 1032.

¹³ A. Brown, R. Turner and C. Pearson, 'Medieval fishing structures and baskets at Sudbrook Point, Severn Estuary, Wales', *Medieval Archaeology*, 54 (2010), 346-361, at 358.

¹⁴ For the survey: Cambridge, Corpus Christi College, MS 111, pp. 55-131, pp. 73-4 (s. xii²); A. J. Robertson (ed.), *Anglo-Saxon Charters*, 2nd Edn (Cambridge, 1956), 204-7, No. 109; P. Sawyer (ed.), *Anglo-Saxon Charters: An Annotated List and Bibliography* (London, 1968) [hereafter S 000], S 1555, revd edn online at https://esawyer.lib.cam.ac.uk/charter/1555.html accessed 17-4-2020; trans. M. Swanton, *Anglo-Saxon Prose*, Revd Edn (Gloucester, 2016), 33-5, at 34. For analysis: F. Seebohm, *The Village Community*, 4th Edn (London, 1890), 150-3; Godbold and Turner, 'Medieval Fishtraps', *op. cit.*, 19-54.

¹⁶ Northallerton, North Yorkshire Record Office ZCG VI 1, Fo 66-66v; *The* Greate Booke *of Whitby*, *op. cit.*, 150-151; *CW*, I, 210-11, No. 265.

¹⁷ Northallerton, North Yorkshire Record Office ZCG VI 1, Fo 66; *The* Greate Booke *of Whitby*, *op. cit.*, 150; *CW*, I, 209-10, No. 264.

¹⁸ Northallerton, North Yorkshire Record Office ZCG VI 1, Fo 40; *The* Greate Booke *of Whitby*, *op. cit.*, 98; *CW*, I, 129-31, No. 160.

¹⁹ Northallerton, North Yorkshire Record Office ZCG VI 1, Fos 134-135; *The* Greate Booke *of Whitby*, *op. cit.*, 86-88, at 87; *CW*, I, 323-7, No. 380, at 325-6.

²⁰ The manuscript has *atthaciamenta*, adjusted by Canon Atkinson in his transcription.

²¹ The manuscript and transcription have *vendicarent*, emended here to *vindicarent*. I am grateful to Nick Karn for this suggested emendation.

²² The manuscript and transcription have *premuniti*, 'strengthened', and I am grateful to Nick Karn for the suggestion that this is a mistake for *premoniti* 'forewarned'.

²³ I am grateful to Nick Karn for this suggested addition.

²⁴ This accepts Canon Atkinson's suggestion of *attachiamenta* and interprets it following https://logeion.uchicago.edu/attachiamentum, meaning 4, in the context of the illicit taking of wood.

²⁹ CW, I, 128-31; CW, II, 422-9, 501-5; J. C. Atkinson, Memorials of Old Whitby, or Historical Gleanings from Ancient Whitby Records (London, 1894), 35-56, 318-26; W. Page (ed.), A History of the County of York, North Riding: Volume 2 (London, 1923), 506-28.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/8107 20/SalmonReport-2018-assessment_final.pdf <accessed 17-4-2020>; for annual UK salmonid and freshwater fisheries statistics, see https://www.gov.uk/government/publications/salmonid-and-freshwater-fisheries-statistics <accessed 17-4-2020>.

³⁷ W. I. Atlas, W. G. Housty, A. Béliveau, B. DeRoy, G. Callegari, M. Reid, and J. W. Moore, 'Ancient fish weir technology for modern stewardship: lessons from community-based salmon monitoring', *Ecosystem Health and Sustainability*, 3, 6 (2017), 1-7.

³⁸ Cambridge, Corpus Christi College, MS 383, pp. 102-7; ed. F. Liebermann, *Die Gezetze der Angelsachsen*, I-IV (Halle, 1903-1916), I, 453-5; trans. Swanton, *op. cit.*, 33-35, at 34. For contextual

²⁵ Canon Atkinson suggested emendation of accipientes to accipiant.

²⁶ CW, I, p. 340.

²⁷ Bushaway, *op. cit.*, has numerous examples throughout.

²⁸ L. Charlton, The History of Whitby and of Whitby Abbey, collected from the original records of the Abbey, and other authentic memoirs never before made public (York, 1779), 125-32; G. Young, A History of Whitby and Streoneshalh Abbey with a statistical survey of the vicinity to a distance of twenty-five miles (Whitby, 1816), 308-14.

³⁰ R. B. Turton, 'Service of Horngarth', Yorkshire Archaeological Journal, 20 (1909), 51-67.

³¹ R. Barker, *Whitby: an extraordinary town* (Pickering, 2007), 30; A. White, *A History of Whitby* (Chichester, 2004), 103-4.

³² Turton, op. cit., 66.

³³ Atkinson, Memorials, op. cit., 48-9.

³⁴ CW, II, 422-9, Nos 473-4, and 501-5, No. 562; Atkinson, Memorials, op. cit., 42-3.

³⁵ Atkinson, Memorials, op. cit., 51-2.

³⁶ Salmon Stocks and Fisheries in England and Wales 2018: preliminary assessment prepared for ICES, March 2019 (Environment Agency, 2019), 4-8,

analysis: C. P. Wormald, *The Making of English Law: King Alfred to the twelfth century, volume I, legislation and its limits* (Oxford, 2001), 228-36.

³⁹ N. Bannerman and C. Jones, 'Fish-trap types: a component of the maritime cultural landscape', *International Journal of Nautical Archaeology*, 28 (1999), 70-84.

⁴⁰ See references in note X, above.

⁴¹ S 123, S 125, S 785, S 786: lands at Ickham and Palmstead (Kt) with 'fishing for one man in the *pusting* weir' (*atque unius hominis piscatum in đaem pusting uuerae/were*). S 849: a fishery on the River Darent (Kt) in 983 called *Ginanhecce*, with a trap (*captura*). S 1741.

⁴² O'Sullivan, 'Place, memory and identity', op. cit., 452-4.

⁴³ For Old English or Old Norse place-names derived from *horn* referring to the shape of a physical feature: E. Ekwall, *The Concise Oxford Dictionary of English Place-Names*, 4th Edn (Oxford, 1960), 250-1; M. Gelling and A. Cole, *The Landscape of Place-Names* (Stamford, 2000), 30, 155, 197. For the widespread medieval tradition of horns sounded to gather tenants or citizens, and the terminology applied to the horns and their ceremonies: N. Crummy, J. Cherry, and P. Northover, 'The Winchester Moot Horn', *Medieval Archaeology*, 52, 1 (2008), 211-29, esp. 223-7. For the use of horns in later popular ceremonies, including the naming of some ceremonies from horns: Bushaway, *op. cit.*, 64, 119, 122, 130-1.

For a useful overview: K. Kilpatrick, 'Medieval Welsh fish weirs' (2017),
 https://waternames.wordpress.com/2017/05/08/medieval-welsh-fish-weirs/
 accessed 17-4-2020>.
 D. Taylor, 'Geology', K. Atkinson, 'Glacial history', and A. J. Howard and M. G. Macklin, 'The rivers' in R. A. Butlin (ed.), *Historical Atlas of North Yorkshire* (Otley: Westbury Publishing, 2003), 8-17; G. D. Gaunt and P. C. Buckland, 'The geological background to Yorkshire's archaeology', in T. G. Manby, S. Moorhouse, and P. Ottaway (eds), *The Archaeology of Yorkshire: an assessment at the beginning of the 21st century*, Yorkshire Archaeological Society Occasional Paper No. 3 (Leeds, 2003), 17-24.

⁴⁶ N. J. Higham, 'Landscape and land use in northern England: a survey of agricultural potential *c.* 500 B.C.-A.D. 1000', *Landscape History*, 9 (1987), 35-44. B. Waites, *Monasteries and Landscape in North East England* (Oakham, 1997), 10-18.

⁴⁷ Bede, *Historia ecclesiastica gentis Anglorum*, iii.24-25, iv.23, ed. and trans. B. Colgrave and R. A. B. Mynors (Oxford, 1969).

⁴⁸ Bede, *Historia ecclesiastica*, iv.23.

- J. T. Lang (ed.), Corpus of Anglo-Saxon Stone Sculpture, Vol. VI, Northern Yorkshire (Oxford, 2001), 19, 24-27, 39-40, Easington No. 5, Lythe Nos 36-37, Whitby Nos 1-16, 18-30, 32, 34, 36-56; J. T. Lang (ed.), Corpus of Anglo-Saxon Stone Sculpture, Vol. III, York and Eastern Yorkshire (Oxford:, 1991), 14, 16, 25, Hackness Nos 1-4.
- ⁵¹ M. L. Faull and M. Stinson (eds), *Domesday Book 30: Yorkshire* (Chichester, 1986): Whitby 4N1, CN1, SN L2; Falsgrave 1Y3, 5N32, 13N13, SN D12 and Hackness 13N13, SN D9; Loftus and Easington 4N2, SN L13; Lythe 5N1, SN L5.
- ⁵² T. Pickles, Kingship, Society, and the Church in Anglo-Saxon Yorkshire (Oxford, 2018), 144-62.
- ⁵³ T. Pickles, 'Streanaeshalch, its satellite churches and lands', in T. Ó Carragáin and S. Turner (eds), Making Christian Landscapes in Atlantic Europe: conversion and consolidation in the early middle ages (Cork, 2016), 265-76.
- ⁵⁴ O. Anderson, *The English Hundred Names*, (Lund, 1934), 2-3.
- ⁵⁵ For a useful analysis of multilingualism in relation to lordship in post-Conquest England see S. Baxter, 'The making of Domesday and the languages of lordship in conquered England', in E. Tyler (ed.), *Conceptualizing Multilingualism in England, c. 800-c. 1250* (Turnhout, 2011), 271-308.

 ⁵⁶ Faull and Stinson, *op. cit.*, 4N1; 1N20; 13N13.
- ⁵⁷ C. Hough, 'Strensall, Streanaeshalch and Stronsay', Journal of the English Place-Name Society, 35 (2002-2003), 17-24; C. Hough, 'Another (ge)stréones halh', Journal of the English Place-Name Society, 36 (2003-2004), 61-2.
- ⁵⁸ Ine 70 §1, ed. Liebermann, *op. cit.*, I, 20-27, 89-123, and trans. F. L. Attenborough, *The Laws of the Earliest English Kings* (Cambridge, 1922), 36-61, at 59.
- ⁵⁹ J. Naylor, *An Archaeology of Trade in Middle Saxon England*, British Archaeological Reports, British Series, 376 (Oxford, 2004), 24-82.
- ⁶⁰ C. R. Peers and C. A. R. Radford, 'The Saxon monastery at Whitby', *Archaeologia*, 89 (1943), 27-88; P. A. Rahtz, 'The building plan of the Anglo-Saxon monastery of Whitby', in D. Wilson (ed.), *The archaeology of Anglo-Saxon England* (London, 1976), 459-462; R. J. Cramp, 'A reconsideration of the monastic site of Whitby', in R. M. Spearman and J. Higgitt (eds), *The Age of Migrating Ideas* (Stroud,

⁴⁹ Anonymous Monk of Lindisfarne, *Vita Cuthberti*, iv.10 and Bede, *Vita Cuthberti prosa*, c. 34, ed. and trans. B. Colgrave, *Two Lives of Saint Cuthbert* (Cambridge, 1940).

1993), 64-73; T. Wilmott, 'The Anglian abbey of Streonaeshalch-Whitby': new perspectives on topography and layout', *Anglo-Saxon Studies in Archaeology and History*, 20 (2017), 81-94.

- ⁶¹ J. Blair, *The Church in Anglo-Saxon Society* (Oxford, 2005), 251-61; W. Davies and R. Flechner, 'Conversion to Christianity and economic change: consequence or coincidence?', in R. Flechner and M. Ní Mhaonaigh (eds), *The Introduction of Christianity into the Early Medieval Insular World* (Turnhout, 2016), 377-398; G. Thomas, 'Downland, marsh and weald: monastic foundation and rural intensification in Anglo-Saxon Kent', in *ibid.*, 349-377.
- ⁶² L. Abrams and D. N. Parsons, 'Place-names and the history of Scandinavian settlement in England', in J. Hines, A. Lane, and M. Redknap (eds), *Land, Sea and Home: proceedings of a conference on viking-period settlement at Cardiff, July 2001* (Leeds, 2004), 379-431, for context; Atkinson, *Memorials, op. cit.*, 89-101; M. Townend, *Viking Age Yorkshire* (Pickering, 2014), 95-112.
- ⁶³ C. Coulter, 'Consumers and artisans: marketing amber and jet in the early medieval British Isles', in G. Hansen, S. P. Ashby, and I. Baug (eds), *Crafts, Consumption and the Individual in Northern Europe, c. AD 800-1600* (Oxford, 2015), 110-24.
- ⁶⁴ Lang, *Corpus of Anglo-Saxon Stone Sculpture VI*, 21-4, 153-67; D. Stocker, 'Monuments and merchants: irregularities in the distribution of stone sculpture in Lincolnshire and Yorkshire in the tenth century', in D. M. Hadley and J. Richards (eds), *Cultures in Contact: Scandinavian settlement in England in the ninth and tenth century* (Turnhout, 2000), 179-212.
- ⁶⁵ J. Graham-Campbell and C. E. Batey (eds), *Vikings in Scotland: an archaeological survey* (Edinburgh, 1998); J. H. Barrett, 'The pirate fishermen: the political economy of a medieval maritime society', in B. Ballin Smith, S. Taylor and G. Williams (eds), *West over Sea: studies in Scandinavian sea-borne expansion and settlement before 1300* (Leiden, 2007), 299-340.
- ⁶⁶ For context: H. Tsurushima, 'The eleventh century in England through fish eyes: salmon, herring, oysters, and 1066', *Anglo-Norman Studies*, 29 (2007), 193-213.
- ⁶⁷ Pickles, *Kingship, Society, and the Church, op. cit.*, 158-160, Table 5: the next most valuable Yorkshire holdings were Pickering at £88 and Northallerton, at £80.
- ⁶⁸ For the 'fish event horizon': J. H. Barrett, A. M. Locker, C. M. Roberts, "Dark Age Economics" revisited: the English fish bone evidence AD 600-1600', *Antiquity*, 78, 301 (Sept. 2004), 618-36; J. H. Barrett, A. M. Locker, and C. M. Roberts, 'The origins of intensive marine fishing in medieval Europe: the English evidence', *Proceedings of the Royal Society of London B*, 271 (2004), 2417-21; J. H.

Barrett, 'Medieval sea fishing, AD 500-1500: chronology, causes and consequences', in Barrett and Orton, *op. cit.*, 250-72. For the seasonality: Kowaleski, 'The commercialization', *op. cit.*, 179-80, 182-4; M. Kowaleski, 'The seasonality of fishing in medieval Britain', in S. G. Bruce (ed.), *Ecologies and Economies in Medieval and Early Modern Europe* (Leiden, 2010), 117-47; Kowaleski, 'The early documentary evidence', *op. cit.*, 30.

- ⁶⁹ T. H. Lloyd, *The English Wool Trade in the Middle Ages* (Cambridge, 1977); S. Rose, *The Wealth of England: The Medieval Wool Trade and its Political Importance* (Oxford, 2018).
- ⁷⁰ CW, I, No. 266 for a charter of Abbot Richard II granting burgage to the burgesses of Whitby; W. Brown (ed.), *The Lay Subsidy of 1301*, Yorkshire Archaeological Society, xxi (London, 1896), 107-11, for the basis of the population and professions in Whitby c. 1300.
- ⁷¹ J. Kermode, 'Northern Towns', in D. M. Palliser (ed.), *The Cambridge Urban History of Britain, Vol. I, 600-1540* (Cambridge, 2000), 657-79, at 674-7.
- The evolution of the Whitby endowment may be charted in the following documents: *CW*, I, No. 27, William de Percy (?<1095); *CW*, I, No. 279, Alan de Percy (?<c. 1130/1135); H. W. C. Davis, Robert J. Whitwell, and Charles Johnson (eds), *Regesta Regum Anglo-Normannorum 1066-1154* (Oxford: Oxford University Press, 1913-1969), III, No. 942, King Stephen (1136), confirmed by comparison with Nos 99, 255, 256-7, 335, 373a, 716-7, 906-7, 979, 990; Philippe Jaffé, *Regesta Pontificum Romanorum ab Condita Ecclesia ad Annum Post Christum Natum MCXCVIII*, Vol. III (Lipsiae, 1888), No. 9645, Pope Eugenius III (1143x1148), confirmed by comparison with those with similar incipits, listed Index, 603; *CW*, I, No. 1. All but the last of these documents is edited and accepted in W. Farrer and C. Clay (eds.), *Early Yorkshire Charters* (Edinburgh, 1914-1916), II, Nos 855, 857, 868, 872.

⁷⁴ For Epiphany, Easter, and August/November seigneurial courts: *CW*, I, Nos 22, 266. For urban properties with rents at Christmas, Whitsun, and Martinmas: *CW*, I, Nos 9, 11-14, 16-17, 266. For rural holdings within the later bounds of Whitby Strand with rents or fines at Whitsun and Martinmas: *CW*, I, Nos 66, 101, 164, 167, 169, 208, 233. *CW*, I, No. 236, establishes that even rents from lands well beyond the later Liberty – Tewthorpe in this case – might have rents to paid to the abbot's bailiffs in Whitby itself.

⁷⁵ William of Malmesbury (d. c. 1142) relates that Hild's relics had been translated to Glastonbury in the tenth century: William of Malmesbury, *De antiquitate*, ed. and trans. John Scott, *The Early History*

of Glastonbury (Woodbridge, 2009), c. 21; Gesta regum anglorum, ed. R. A. B. Mynors, Rodney Thomson, and Michael Winterbottom (Oxford, 1998, 2002), I, cc. 50, 54; Gesta pontificum anglorum, ed. and trans. Michael Winterbottom and Rodney Thomson (Oxford, 2007), ii.91.8 and iii.116.2. Hugh Candidus, who accompanied Abbot Richard I from Peterborough to Whitby and finished writing c. 1175, places them on Esk, at Whitby: Hugh Candidus, Chronicon, ed. W. T. Mellows (London, 1949), p. 63. Charters at from the Whitby and Guisborough cartularies and liturgical calendars record two feast days for her death and translation: A. D. H. Leadman, 'St Hilda', Yorkshire Archaeological Journal, 17 (1903), 33-49; George Buchannan, 'The feast days of St Hilda', Yorkshire Archaeological Journal, 17 (1903), 249-53.

⁷⁶ The first secure evidence for the Liberty seems to be a charter of Richard I: *CW*, I, No. 189; L. Landon, *The Itinerary of King Richard I, with studies on certain matters of interest connected with his reign* (London, 1935), 32, No. 283, 23 April 1190.

⁷⁷ CW, I, No. 380, Article 5.

⁷⁸ For fish tithes and their value: *CW*, I, No. 267; *Pipe Roll* 12 John 2010, 219, but membrane damaged, and 14 John, 1212, 5; *CW*, II, 553-623, with Waites, *op. cit.*, 174, for calculations. For wool: A. Evans (ed.), *Francesco Balducci Pegolottie, La Pratica della Mercatura*, Medieval Academy Books, No. 24 (1936), 267: Guitebi; W. Illingworth and J. Caley (eds), *Rotuli Hundredorum*, 2 Vols (London, 1812-18), 131-2, 134; and Waites, *op. cit.*, 138-9.

⁷⁹ Charlton, op. cit., 125-7.

⁸⁰ F. Grose, *The Antiquities of England and Wales*, VI (London, 1785-1787), 89-91; Young, *op. cit.*, 310-312.

⁸¹ Charlton, op. cit., 127-132; Young, op. cit., 312-314; Atkinson, Memorials, op. cit., 37-9.

⁸² J. Caley (ed.), *Valor Ecclesiasticus Tempore Henri VIII Auctoritate Regia Institutus* (London, 1825); TNA/Close Roll No. 421, 31 Henry VIII, part 4, 213.

⁸³ J. Binns, 'Sir Hugh Cholmley: Whitby's benefactor or beneficiary?', *Northern History*, 30 (1994), 86-104; J. Binns, *Sir Hugh Cholmley of Whitby: ancestry, life and legacy* (Pickering, 2008).

⁸⁴ I. Miller, 'Introduction', and R. Pickles, 'Historical overview', in I. Miller (ed.), *Steeped in History: the alum industry of north-east Yorkshire* (Helmsley, 2002), 1-16.

- ⁸⁶ P. Brown, 'Shipping and the alum industry', in Miller, *op. cit.*, 75-88; R. Barker, *The Rise of An Early Modern Shipping Industry: Whitby's Golden Fleet, 1600-1750* (Woodbridge, 2011).
- ⁸⁷ R. Davis, *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (London, 1962); T. Barrow, *The Whaling Trade of North-East England, 1750-1850* (Sunderland, 2001); G. Williams (ed.), *Captain Cook: explorations and reassessments* (Woodbridge, 2004).
- ⁸⁸ A. Fox, Oral and Literate Culture in England, 1500-1700 (Oxford, 2000); A. Walsham, The Reformation of the Landscape: religion, identity, and memory in early modern Britain and Ireland (Oxford, 2011); A. Wood, The Memory of the People: custom and popular senses of the past in early modern England (Cambridge, 2013).
- ⁸⁹ For the book list: *CW*, I, p. 341; R. Sharpe, J. P. Carley, R. M. Thomson, and A. G. Watson (eds), *English Benedictine Libraries: the shorter catalogues* (London, 1996), B109. For the *vitae*: British Library MS Landsdowne 436/2, folio 105b; and John of Tynemouth, *Sanctilogium*, ed. C. Horstman, *Nova Legenda Anglie*, 2 vols (Oxford, 1901), II, 29-33. For the Anglo-Latin poem: Cambridge, Trinity College, MS O.9.38, ed. A. G. Rigg, 'A Latin Poem on St. Hilda and Whitby Abbey', *Journal of Medieval Latin*, 6 (1996), 12-43. For Leland: T. Hearne (ed.), *Johannis Lelandi Antiquarii de rebus Britannicis collectanea*, 6 vols (Oxford, 1715), III, 39-40.
- ⁹⁰ W. Camden, *Britannia* (1607), c. 42, trans. P. Holland and ed. D. F. Sutton,
 www.philological.bham.ac.uk/cambrit/ <accessed 10-6-2019>; 'A Description of Cleveland in a Letter addressed by H. Tr. to Sir Thomas Chaloner', in J. Gough Nichols (ed.), *The Topographer and Genealogist* (1853), II, 403-430, at 419; J. Childrey, *Britannica Baconica: or, the natural rarities of England, Scotland and Wales* (London, 1660), 159; J. Brome, *Travels over England, Scotland and Wales* (London, 1700), 161-162; Charlton, *op. cit.*, 31-33; Young, *op. cit.*, I, 212-214.
 ⁹¹ Charlton, *op. cit.*, 22, 31-33, 64; L. Charlton, *Letter to Dr. Percy*, 3rd January, 1780, in Nichols, *op.*

cit., 432; T. Hinderwell, *The History and Antiquities of Scarborough and the Vicinity* (Scarborough, 1811), 303.

⁸⁵ R. Osborne, *The Floating Egg: episodes in the making of geology* (London, 1999); A. Rout, 'The manufacture of alum from shale' and I. Miller, 'The manufacture of alum: the collated evidence', in Miller, *op. cit.*, 19-26, 107-19.

⁹² G. P. Cubbin (ed.), *The Anglo-Saxon Chronicle, A Collaborative Edition, Volume 6, MS D*(Cambridge, 1996), 9, s. a. 705; Young, *op. cit.*, I, 35-38; E. Lamplugh, *Yorkshire Battles* (Hull, 1891),
11.

⁹³ Bede, *Historia ecclesiastica*, op. cit., iii.1-3, 5-7, 9-13; J. W. Ord, *The History and Antiquities of Cleveland* (London, 1846), 422-3; 'Osmotherley', *Notes and Queries*, Volums I-IX, Issue 225 (18th February, 1854), 152-3.

⁹⁴ C. Hart (ed. and trans.), *Byrhtferth's Northumbrian Chronicle: an edition and translation of the Old English and Latin annals*, The early chronicles of England, Volume II (Lampeter, 2006), 149, s.a. 798; Camden, *op. cit.*, c. 42; Charlton, *op. cit.*, 40; Young, *op. cit.*, I, 47-9, II, 718-26; Hinderwell, *op. cit.*, 306-7.

⁹⁵ Charlton, op. cit., 146-7; Young, op. cit., II, 647; Hinderwell, op. cit., 286.

⁹⁶ Many of these stories were collected from their various written sources and popularized in Mrs Gutch (ed.), *County Folklore, Vol. III, Printed Extracts No. 4: examples of printed folklore concerning the North Riding of Yorkshire, York and the Ainsty* (London, 1901), 8-10, 13-15, 28, 31-2, 35, 71, 108-9, 398-9, 445-6.

⁹⁷ Grose, op. cit., VI, 89-95. J. H. Farrant, 'Grose, Francis (bap. 1731, d. 1791)', Oxford Dictionary of National Biography (Oxford, 2004), https://doi.org/10.1093/ref:odnb/11660 <accessed 24-4-20>.

⁹⁸ A search of the *British Newspaper Archive*, www.britishnewspaperarchive.co.uk, turns up articles from regional newspapers across England, beginning *c*. 1800, peaking in the period 1900-1949, but extending to the present day. A few examples from 1800-1850 demonstrate the reach: *Star* (London), 27 May 1801, 3; *Tyne Mercury, Northumberland and Durham and Cumberland Gazette*, 1 June 1802, 2; *Staffordshire Advertiser*, 1 June 1805, 3; *Lancaster Gazette*, 1 June 1805, 3; *Chester Courant*, 4 June 1805, 2; *Bell's New Weekly Messenger* (London), 31 May 1835, 13-14; *Salisbury and Winchester Journal*, 8 June 1835, 3. For 1843: *Kentish Mercury*, 27th May 1843, 6.

⁹⁹ W. Scott, *Marmion*, ii.XIII (Philadelphia, 1897), 41. J. Sutherland, *The Life of Walter Scott* (Oxford, 1995), 120-7.

¹⁰⁰ Visit Whitby, https://www.visitwhitby.com/blog/event/planting-of-the-penny-hedge-at-whitby/; Whitby Online, https://www.whitbyonline.co.uk/whitbyhistory/thepennyhedge.php; Whitby Museum, https://whitbymuseum.org.uk/whitby-history/penny-hedge/; The Penny Hedge Gallery,

https://www.whitbygalleries.com/about; The Penny Hedge Hotel,

https://www.pennyhedgepubwhitby.co.uk/ <all accessed 24-4-20>.