

Ethnic identity or something else? The production and use of non-ferrous dress-accessories and related items from early medieval Lincoln

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Abstract

This paper asks what can decorative metalwork tell us about the way in which identities were expressed in Viking-Age Lincoln? It presents the non-ferrous metalwork assemblage from early medieval Lincoln, England (c. AD 800-1100), for the first time as a coherent assemblage. The artefact types – mainly dress-accessories and related decorative objects – are described in terms of their art-historical and stylistic characteristics, and placed within the context of manufacturing evidence from Lincoln. The question is asked, did the production of decorative metalwork play a key role in the deliberate creation or manipulation of ‘ethnic’ identities? Many of the objects found in Lincoln reveal Anglo-Saxon, Scandinavian, Hiberno-Norse and Frankish influences, and provide insights into the complex identities of Lincoln’s ninth- to eleventh-century inhabitants on multiple levels. However, the manufacturing evidence, providing an insight into the deliberate choices that were made by Lincoln’s metalworkers with respect to the manipulation of such identities, suggests that ethnic considerations may perhaps have been less important than is sometimes assumed.

Introduction: metalwork and ethnicity

What was the role of decorative metalwork in ninth- to eleventh-century England?

Writing a decade and a half ago, Hadley and Richards stated that ‘many archaeologists of the early medieval period ... still work within a broad culture history framework ... individual artefacts are commonly classified, on stylistic and art-historical grounds, as Anglo-Saxon or Scandinavian, and by implication the racial

identity of their makers and wearers is identified'.¹ More than fifteen years on, we acknowledge that the relationship between material culture and ethnicity is problematic on theoretical grounds, and that identities are multi-faceted and exist on different scales, but often Viking-Age metalwork studies in England are still concerned with 'Anglo-Saxon', 'Scandinavian' or hybrid 'Anglo-Scandinavian' identities.² Sometimes allowance is made for other ethnic influences: for example, based on the increasing number of 'Frankish' dress-accessories from metal-detected contexts in England, Gabor Thomas has argued that 'the adoption, adaptation, and strategic manipulation of Carolingian/northern Frankish identity formed an embedded component of cultural dynamics in Viking-Age England'.³ This is a step forwards from depictions of Viking settlement that imagined the situation as rigidly dichotomous, involving two static cultures, one Anglian, the other Scandinavian.⁴ But it does not ask the question, how important *was* ethnicity? To quote Hadley and Richards once more, we need 'to address the question of what people thought of themselves and their 'ethnic' allegiances, if, indeed, they ever or normally thought in those terms'.⁵

The roots of culture historical analyses lie in a period when 'national' identities were at the forefront of European socio-political consciousness, and it is thus unsurprising that a scholarly focus on ethnicity has been the result. But did the ninth- and tenth-century inhabitants and settlers of the Anglo-Saxon kingdoms share this concern with ethnicity? Walter Pohl has pointed out that 'we should not be surprised to find more evidence on the ethnic perceptions of others than on ethnic self-identification', and although his comment was made in the context of contemporary groups describing 'others', it can also be applied to the context of modern scholarship describing 'others' in the past.⁶ This is a pertinent point in the current context: in a recent synthesis of the archaeology of Lincoln's Lower City, the authors remarked that few of the finds from Flaxengate, probably the most important site for our understanding of Lincoln's Anglo-Scandinavian phase, were distinctly 'Viking'.⁷

¹ Hadley and Richards 2000, 10.

² See for example Kershaw 2013; Thomas 2012.

³ Thomas 2012, 486.

⁴ Thomas 2012, 487.

⁵ Hadley and Richards 2000, 4.

⁶ Pohl 2013, 13.

⁷ Steane *et al.* 2016, 56, 486.

This paper addresses the question whether ethnicity was expressed through decorative metalwork in Lincoln between the ninth and eleventh centuries AD. In a previous paper analysing descriptions of Vikings in contemporary historical and literary sources, I have argued that religious and regional identities were more important than ethnic ones.⁸ Contemporary texts are predominantly written from a (West) Saxon perspective at this date, however, providing a perspective of how the native population viewed the incoming ‘others’. Through a focus on metalwork, it may be possible to gain insight into the process of self-identification of the settlers.

This paper is not the first to attempt such an approach, but differs from other studies in terms of selection of evidence. The success of the Portable Antiquities Scheme, which catalogues stray finds made by members of the public (mostly metal-detectorists), has led to a number of recent high-quality studies of dress-accessories of the period, but the selection of material tends to be typological, rather than regional or context-specific.⁹ Other studies that have emphasised the central role of decorative metalwork for the expression of ethnic identities have also tended to focus on selected artefact types, such as a recent paper by Ingunn Marie Røstad who considers a group of eleventh-century brooches from central places in eastern Norway that display ‘Danish’ influences as referring to a ‘Danish’ identity.¹⁰ Yet by focusing on a single artefact type or decorative style, we automatically introduce bias into our analyses. The same issue affects the recently published Lower City volume, which singles out the handful of ‘Viking’ artefacts in the discussion of occupation evidence from Flaxengate, providing a one-sided impression of the nature of the material.¹¹ This paper argues that, to understand the role of decorative metalwork *in the past*, a holistic, site-specific or regional study of all available evidence is required, not just those objects that share certain decorative or typological traits. For that reason, reference will also be made to other, previously published objects from Lincoln that were made from different materials.¹² Only then is it possible to appreciate the relative importance, context and significance of the material in contemporary society.

The assemblage that stands central to this paper is the material from excavations in the city of Lincoln, held by 'The Collection: Art and Archaeology in Lincolnshire',

⁸ Ten Harkel 2006.

⁹ E.g. Kershaw 2013; Thomas 2000b; 2012; Weetch 2013.

¹⁰ Røstad 2012.

¹¹ Steane *et al.* 2016, 56–7.

¹² Mann 1982.

which has never before been coherently published.¹³ The Lincoln material is suited particularly well to the current study, as Lincoln is considered one of the main towns of Anglo-Scandinavian England, one of ‘five boroughs’ that were reportedly under Scandinavian control for some time. As such, it provides a good comparison to the material from York, which is better known and published, and whose experts have commented on a lack of a discernable ‘Scandinavian’ identity.¹⁴ Urban assemblages have an advantage over studies of metal-detected finds because – although not without depositional issues either – they provide more contextual information, including manufacturing evidence, which usually remains unidentified in rural unstratified contexts. Evidence for manufacturing – which forms the first part of this paper – is important: it provides insight into the interplay between supply and demand, in particular the selection of certain artefactual styles for production, or the deliberate manipulation of identities.

It is not the aim of this paper to present an exhaustive catalogue, as new discoveries will continue to come to light; however, a comprehensive and representative selection has been included. With the exception of a small number of hooked tags made of iron, ferrous metalwork has largely been excluded, although a significant assemblage deserving of conservation and further analysis does exist. One object worth mentioning in passing is a Viking spearhead from Flaxengate, dated to the later ninth or tenth centuries.¹⁵ Coinage has also been excluded from this study, as this has formed the basis of another, separate publication by the author.¹⁶ A catalogue of decorative metal artefacts from Lincoln is included (**Appendix**). Relevant catalogue numbers are referred to in the text in brackets. Illustrations are included in many cases; obvious exceptions are objects that have already been published elsewhere (unless inclusion here was deemed to add meaningful information, for example for comparative reasons), or objects that have not been cleaned and conserved.

¹³ But see Ten Harkel 2013a; Ten Harkel *et al* 2016 for selective aspects of this assemblage. The accompanying appendices to this paper represent the fullest catalogue of the Lincoln material that is available in print.

¹⁴ Bayley 1992; Mainman and Rogers 2000; Rogers 1993; Tweddle 2004, esp. 453, 456–8.

¹⁵ Steane *et al.* 2016, 56.

¹⁶ Ten Harkel 2013c.

There are some interpretative challenges. Because of its well-preserved historic town centre, excavations in Lincoln have been piecemeal.¹⁷ The most extensive ones took place in the mid-1970s at Flaxengate in the Lower City, revealing evidence for manufacturing activities including pottery production and metalworking, both ferrous and non-ferrous (**Fig. 1**).¹⁸ Much of the following discussion will therefore concern the Flaxengate material, but it is important to emphasise that this reflects an excavation bias.¹⁹ Moreover, as a result of the deep stratigraphy on most sites in the city, with evidence for frequent levelling and intercutting of features, the majority of objects are residual, which means their dating often depends on the combination of a *terminus ante quem* in combination with art-historical criteria, and contextual information can only be addressed on site-level. This was exacerbated on some sites by the excavation methodologies that were adopted, which sometimes left early medieval deposits *in situ* because of their great depth, and in other cases favoured machine or spit excavation of post-Roman layers.²⁰ Although this inhibits very detailed interpretations of depositional circumstances, the situation is nevertheless more favourable than for plough soil finds, not in the least because undiagnostic or difficult-to-date objects – such as manufacturing waste – are less likely to be disregarded from excavated sites. This paper is therefore best read in conjunction with the excellent publications on the urban stratigraphy in the Lincoln Archaeological Studies series.²¹ **[Insert figure 1 here.]**

Ethnicity, identity and metalwork: theoretical considerations

In order to address the question whether ethnicity was actively expressed through decorative metalwork, it is necessary to define what we mean by it. Ethnicity is only one aspect of more complex identities, also including (and sometimes difficult to distinguish from) affiliation with kinship groups, territorial or regional groupings, urban identities, military groups, and religious or political identities.²² Given the modern emphasis on ‘identity’ as an *active* choice, it is important to remember that

¹⁷ Steane *et al.* 2016.

¹⁸ Bayley 2008a; 2008b; Mann 1982; Perring 1981; Steane *et al.* 2016, 11–62, 488–90; Vince 2003b, 284; Young and Vince 2005.

¹⁹ E.g. Bayley 2008b.

²⁰ E.g. Steane *et al.* 2016, 84, 145, 199, 246.

²¹ In particular Steane *et al.* 2001; 2006; 2016.

²² E.g. Pohl 2013.

expressing one's identity is an act of performance, a deliberate association with a specific social group.²³ In trying to understand early medieval identities, it is therefore not the question whether we can identify the provenance of an object or even the biological identity of its producer, but whether (and how) the wearer's contemporaries would have understood the significance of this object in any given context. This is not an easy task, as objects change significance: for example, a brooch type commonly produced in Denmark (but not in England) would almost certainly be more 'exotic' when worn in Wessex, simply because there would be fewer around. It would possibly be perceived as explicitly signifying a 'Danish' identity because the person who wore it spoke with a Danish accent, even though the wearer her/himself might not readily associate it with anything of the sort. Its exotic decoration might be copied by local producers, but the perceived significance of its decorative elements might become lost in translation as the new 'fashions' became firmly engrained in West Saxon society. How, then, can we begin to unravel such complexity?

The only way to understanding the complexity of associated meanings of decorative metalwork is by placing the whole process of metalwork production and use in Lincoln – from the personal possessions of Scandinavian settlers to the organised mass-production of low-cost dress-accessories in the blossoming Anglo-Scandinavian town – in its socio-political context. For that reason, the next section first involves a brief summary of Lincoln's early medieval archaeology. If – as I have explored in a previous article – metalwork production in Lincoln was subject to changes in 'fashion' that can be tied to broader developments in society, we might expect to be able to explain changes in metalwork styles by reference to broad changes in the city's archaeological record.²⁴ If this can be done, we should be able to identify whether the immigration of a substantial Scandinavian population was enough in itself to explain changes in contemporary metalwork styles, or whether other dynamics – such as the increased production scale characteristic of the emerging towns – were equally important. These issues will be returned to in the final section of this paper.

The bulk of the paper is divided into two parts, first focusing on the evidence for metalworking, to determine which types of objects were actively produced in the town, and then on the additional artefactual evidence from Lincoln. Dagfinn Skre has

²³ Burke and Stets 2000.

²⁴ Ten Harkel 2013a, 172–3, 178–9; also see Davis 1992, 16–17.

highlighted the difficulty in distinguishing between these – sometimes overlapping – categories, and the distinction here should not be seen as dichotomous.²⁵ The objects included in the section on metalworking include moulds, unfinished products and objects with close parallels that could have indicated the use of a single mould for their production, rendering it likely they would have been produced nearby. The objects in the second part include the rest.

A brief consideration of the identities of metalworkers will conclude the analysis. As stated already, evidence for manufacturing provides insight into the deliberate manipulation of identities. Yet the relationship between supply and demand can be hard to unravel, which is why this section also includes a brief consideration of the identity of metalworkers and the socio-economic context in which they worked. An important consideration is the degree to which changes in production mode – the emergence of mass-production in specialised workshops – affected the styles of the objects being produced. Decorative metalwork of the period *c.* 870-1100 (after the Scandinavian settlement) is typically made of base metals, in particular copper and lead alloys, whilst silver – used in much larger quantities during the earlier ninth century and before – was largely restricted to the production of coinage. The choice of cheaper materials may well relate to increased production scale and a different type of market.²⁶ Mass-production can also affect decorative style, resulting in a preference for simpler designs and methods of decoration.²⁷ Indeed, many of the objects discussed in this paper that were (probably) produced in Lincoln are executed in simple decorative styles requiring relatively little effort and expertise. Yet equally important in the context of changing market demands is the creation of a recognisable product, which may result in the development of regional styles. This possibility will also be explored below.

Whether ethnicity played a role or not, in writing about this topic I am continuing an established tradition with its own, ethnically-laden, jargon. I will make no attempt to change this, as I believe that the terminology does reflect regional characteristics of the origin and spread of specific styles adequately; it is merely the implication of this classification for our understanding of the wearer's identities that I question. Therefore I will label objects with an explicitly 'Scandinavian' style that

²⁵ Skre 2011, 418.

²⁶ Ten Harkel 2013a; Mainman and Rogers 2000, 2478–9.

²⁷ Thomas 2000a, 284–5.

were unlikely to have been produced in Anglo-Saxon England or the continent – such as the *Borre-* or *Jellinge-*styles in their pure, unaltered forms – as ‘Scandinavian’. Hybrid styles, combining for example Scandinavian decoration with Anglo-Saxon object types, will be labelled ‘Anglo-Scandinavian’ or ‘Hiberno-Norse’. Finally, I will refer to objects with no discernable Scandinavian elements as ‘Anglo-Saxon’, ‘Frankish’ or ‘Irish’.

Setting the scene: Lincoln c. 800-1100

Excellent summaries of early medieval Lincoln exist elsewhere, but a few aspects are worth repeating to set the scene.²⁸ (Near-) contemporary written sources commenting on the socio-political circumstances in the town have lasted in a lasting perception of Lincoln as a ‘Viking’ – or at least ‘Anglo-Scandinavian’ – town, similar in many ways to the ‘Viking’ city of York.²⁹ One of the first documentary references to Lincoln comes from an entry in the *Anglo-Saxon Chronicle*, which mentions Lincoln, along with Nottingham, Derby, Leicester and Stamford, as one of five boroughs (*burga fife*), which King Edmund ‘freed’ from Norsemen in AD 942, and alludes to the fact that its inhabitants were, at some point, ‘Danes’ (*Dane*).³⁰ The chronicler’s emphasis on the Scandinavian identity of its inhabitants is beyond doubt, and it is not surprising that subsequent scholars have therefore regarded these boroughs as the urbanised outcomes of the military camps of the Viking ‘great army’.³¹ It should, however, not be overlooked that Lincoln’s development was more complex.

A former Roman *colonia*, Lincoln was situated in a dominant position in the relatively flat landscape of Lincolnshire, at the crossroads of a number of riverine and land-based communication routes (**Fig. 1**).³² Unsurprisingly therefore, despite evidence for widespread abandonment of the town after the Roman period, Lincoln continued to function as a place of some importance.³³ It is possible that a post-Roman ecclesiastical centre continued to exist at the site of St Paul-in-the-Bail in the Upper City, consisting of a sequence of small buildings interpreted as

²⁸ The most comprehensive and up-to-date overview is still Stocker 2003.

²⁹ For a discussion of the political relationship between Lincoln and York, based in coin evidence, see Ten Harkel 2013c.

³⁰ Williams 2013, 26–9 for a recent discussion of the significance of this passage for the political status of the five towns mentioned.

³¹ E.g. Roesdahl *et al.* 1981, 95.

³² Jones and Stocker 2003; Mann 1982, 46; Vince 2003b, 196, 235–42.

³³ Vince 2003a, 141.

chapels/churches with associated burials, although the evidence could also be middle Anglo-Saxon in date (**Fig. 1**).³⁴ By that stage, Lincoln was undoubtedly important: it was at Lincoln that the seventh-century missionary Paulinus ‘built a stone church of remarkable workmanship’ following conversion of its *praefectus*, a man called Blæcca, and a few years later it was also at Lincoln that the new archbishop of Canterbury was consecrated.³⁵ A number of ecclesiastical foundations existed in the Lower City before the period of Scandinavian settlement in the middle of the ninth century.³⁶ In this context, a heavily corroded copper-alloy fragment with a splayed terminal from the Lower City deserves mention as it possibly represents a stylus-fragment, usually found in ecclesiastical contexts, although it has no clear parallels amongst the styli found at nearby Flixborough (**no. 138; Fig. 2**).³⁷ **[Insert figure 2 here.]**

Lincoln was not exclusively an ecclesiastical enclave, however. More recently, excavations to the south of the Lower City have revealed tentative evidence for a middle Anglo-Saxon settlement core, providing a possible parallel to the extra-mural sites of *Eoforwic* in York or *Lundenwic* in London.³⁸ Economic activity within the walled town did not start until approximately the third quarter of the ninth century, however, more or less contemporary with documented Scandinavian settlement in the Anglo-Saxon kingdoms of Northumbria, Mercia and East Anglia.

The evidence for non-ferrous metalworking emphasises the importance and status of Lincoln during this period, as this has only been recognised to date in a limited number of ninth- to tenth-century towns in England, also including York, Thetford, Northampton, London and Winchester.³⁹ Unlike in York, however, where evidence for non-ferrous metalworking has been found that can be dated to both the middle Anglo-Saxon period and the Anglo-Scandinavian periods, currently all production evidence from Lincoln belongs to the later part, dating to the period after

³⁴ Gilmour 2007; Steane *et al* 2006; Vince 2003a, 144–50.

³⁵ Bede, *HE* II, 16, 18; for discussion of possible contenders for Paulinus’s church, see Vince 2003a, 144–5.

³⁶ Vince 2003a, 144–5.

³⁷ Pestell *et al* 2009, 124–38; Pestell *pers. comm.*

³⁸ Lincolnshire HER number 71064, available on http://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=MLI97571&sourceID=1006 (information last checked on 24 March 2015); Steane *et al.* 2016, 485.

³⁹ Bayley 1991; Bayley *et al* 2008, 52; Rogers 1993, 1239.

the Scandinavian settlement.⁴⁰ The majority of evidence comes from the Flaxengate site, which was excavated in the 1970s and also yielded evidence for other crafts such as pottery production, bone- and antler working and glass-working. The excavations provided a unique insight into the development of what seems to have been a single urban property, as all the buildings across the whole site were periodically levelled and rebuilt. This resulted in high levels of residuality, with the majority of artefacts coming from levelling and demolition layers between building phases.⁴¹

Disregarding the pre-existing importance of Lincoln prior to the Scandinavian settlement, it is commonly assumed that the two were causally related – that ‘the Scandinavian conquest and settlement appear to have been followed by a particularly intense phase of urban growth’ – even if ‘little of the Scandinavian contribution to urbanisation can be described as being characteristically Scandinavian’.⁴² Indeed, early coinage produced in these ‘Scandinavian’ urban centres was typically based on Anglo-Saxon prototypes (or revealed Frankish and Byzantine influences), and named moneyers often bore Frankish names, Lincoln being no exception in this respect.⁴³ What is more, many of the emerging towns in the Scandinavian-occupied regions of England, including Lincoln, reveal evidence for pottery industries from the mid- to late ninth century onwards, producing, for the first time since Roman times, wheel-turned wares that were similar to contemporary Frankish wares. The evidence for these industries has caused a debate over the ethnic origins of the people responsible for its inception. Scholars like Kathy Kilmer and Alan Vince have argued that these innovative changes in pottery production happened at the instigation of itinerant Frankish potters arriving in England in the wake of the Scandinavian settlement, whilst more recently, Paul Blinkhorn has challenged the argument that there was a Scandinavian impetus behind these developments on the same ‘ethnic’ grounds.⁴⁴

The interpretation of Viking-Age urbanisation betrays the same preoccupation with ethnicity as the study of Viking-Age dress-accessories, and is indicative of a broader predilection for ethnic explanations in early medieval studies. But what if this says more about the development of our discipline than about the realities of the early

⁴⁰ See Rogers 1993, 1232–8; Mainman and Rogers 2000, 2475–9; Bayley 1992.

⁴¹ Adams Gilmour 1988, 59; Mann 1982, 4; Perring 1981, 4–5; Ten Harkel *et al.* 2016.

⁴² Hadley 2006, 145; also see Astill 2009, 265.

⁴³ Blackburn 2011a; 2011b; 2011c; Ten Harkel 2013c.

⁴⁴ Vince 1993, 156; Kilmer 1980; Blinkhorn 2013.

medieval past? Do we really need to refer to the Scandinavian settlement to explain the changes in metalwork production in Lincoln, or was this the logical outcome of socio-economic processes that were already in motion? Put simply, can we identify the deliberate copying of new incoming object types or decorative styles that some may have associated with a ‘Scandinavian’ identity, and is there any evidence that they were selected *because* of their ‘Scandinavian-ness’?

Metalworking in Lincoln

Introduction

Non-ferrous metalwork production evidence from Lincoln is plentiful, and has been discussed in more detail elsewhere.⁴⁵ The discussion here will focus mainly on the evidence that is relevant to a discussion of decorative styles. The first type of evidence to be considered are metalworking moulds, of which only a handful of relevant examples survive, spanning the ninth to eleventh centuries. In addition to moulds, there are a small number of artefacts that may shed more light on the issue. These are artefacts that may have been produced in Lincoln, based on the presence of unfinished specimens or the possible identification of mould duplicates. They include a large assemblage of hooked tags, some finger rings, wire rings and pins, two identical brooches, and two probably identical openwork discs. Like the moulds, none display undeniably Scandinavian characteristics.

Moulds

An ingot mould made of soapstone from Saltergate in the Lower City might date to the later ninth century. As there seems to be a positive correlation between areas of Scandinavian settlement and finds of soapstone (mostly of Norwegian provenance), Justine Bayley has interpreted this mould as a possible indicator of the presence of an itinerant Scandinavian metalworker in Lincoln in the early period of settlement.⁴⁶ Identifying the identity of the ‘owner’ of a single object is, however, tentative at best, and requires corroborating evidence, such as was for example found in the so-called ‘Frisian merchant’s house’ in contemporary Kaupang, Norway, but which is to date absent from Lincoln.⁴⁷

⁴⁵ Bayley 2008b.

⁴⁶ Forster *et al.* 2004; Bayley 2008b, 20, fig 18.

⁴⁷ Skre 2011, 431–2.

Soapstone ingot moulds are also known from Coppergate, York, including a re-used sherd of a soapstone vessel, like the Lincoln example.⁴⁸ As soapstone vessels are rare in English urban contexts, with only a few other soapstone vessel sherds from Lincoln and a handful from York, which also had Scandinavian connections, the argument for a Scandinavian presence (or at least close contacts with Scandinavia) is compelling.⁴⁹ However, this does not mean that the products that emanated from the Lower City conveyed a ‘Scandinavian’ identity.

The production of ingots – if used for bullion purposes – would fit a Scandinavian context. However, although ingot moulds made from other materials were also found elsewhere in Lincoln, there is at present no evidence that a bullion economy functioned within the town of Lincoln.⁵⁰ In contrast to York and Torksey, no decorated weights are known from the city to date, and no hack silver has been found. What is more, the evidence for silver working from the Lower City (presumably for coinage, as the later tenth-century reverse die for a Crux penny of Æthelred (991-97) from nearby Flaxengate would suggest) means that this ingot mould could also have been used to rationalise raw materials for silver smithing.⁵¹ In that case, the evidence may support the Scandinavian background (or contacts) of the metalworker, but not the deliberate expression or manipulation of a Scandinavian identity. Instead, the soapstone may have been valued for its materiality rather than its Scandinavian connections, an argument that can also be applied to the ubiquitous hone stones of Norwegian Ragstone that occur on many sites of this period in the southern North Sea basin, even if their importation into England may have started as a result of the Scandinavian settlement.⁵²

[Insert figures 3 and 4 here.] Other moulds from Lincoln are mostly made of clay, and – as a result of the aforementioned high levels of residuality on the Flaxengate site – few have been well enough preserved to identify the objects they would have created.⁵³ There are a handful of exceptions, none of which can be argued to have any Scandinavian affinities. On the contrary, the Flaxengate excavations have

⁴⁸ Bayley 1992, cat no 4001; also see cat nos 3990, 3998, 4000

⁴⁹ Mann 1982, 20–1, 42; Mainman and Roger 2000, 2541–4; Steane *et al* 2016, 57.

⁵⁰ Bayley 2008b, 20.

⁵¹ Steane *et al.* 2016, 57.

⁵² Bayley 2008b, 20. For the Lincoln hones, see Mann 1982, 27–30, 47.

⁵³ Sketch drawings of some of the larger fragments have been included in Bayley 2008b, 96–7, and some of the better-preserved examples with traces of decorative elements have been included on p 16.

produced two clay mould fragments used for the production of tongue-shaped strap-ends, ultimately derived from continental styles, but with a wide distribution in tenth- to eleventh-century England. These include F75 <p241>, a strap-end with debased Winchester-style foliate ornament, and F75 <p116>, a Winchester-style openwork strap-end of Thomas Type E1 (**Figs 3-4**). Similar strap-ends are known from Coppergate, York.⁵⁴ F75 <p206> (**Fig. 5**) would have created a strap-end with convex sides, a split attachment end and a zoomorphic terminal, which Gabor Thomas has identified as morphologically earlier, belonging to Thomas Class A, with a broad distribution across England in the ninth century.⁵⁵ **[Insert figure 5 here.]**

Excavations at Flaxengate also brought to light a fragment of a decorated stone mould, possibly used for casting lead.⁵⁶ A different design is visible on either side, one possibly for a flat disc brooch and the other for a cross-shaped ornament with lobed protrusions (**Fig. 6**). If this identification is correct, the flat disc brooch bears certain similarities to a copper-alloy specimen from Domburg in the Netherlands and to lead-alloy brooches of Weetch Types 5 and 24 (with a distribution in eastern England) from the eleventh-century Cheapside hoard from London, although the detail is different.⁵⁷ The lobed ornament bears similarities to Weetch Type 25, typically made of lead alloy and with a distribution in London, Lincolnshire and Yorkshire, although the protrusions are spaced further apart in the shape of a simple cross.⁵⁸ Although abstract, it is possible that this cross-shape would have signalled a Christian identity. **[Insert figure 6 here.]**

Hooked tags

Hooked tags represent the most common type of manufacturing evidence from Lincoln and – rather than lending themselves for ethnic interpretations – their main characteristics seem to have been ease and (relatively) low cost of manufacture. They are fasteners of some sort, consisting of a plate with two attachment holes at the top and a protruding hook at the other end. The Lincoln hooked tags were largely made of copper-alloy or iron; the only recorded exception, made from silver, is **no. 74** from

⁵⁴ Mainman and Rogers 2000, 2569–70, figs 1265, 10421–10422; Tweddle 2004, 447, fig 105.

⁵⁵ Thomas *pers. comm.*; Thomas 2000a, 186–8.

⁵⁶ Bayley 2008b, 17, fig 10.

⁵⁷ Capelle 1976, no. 88; Weetch 2013, 78–9, 122–3, cat nos 809–17.

⁵⁸ Weetch 2013, 123–5.

West Parade in the Lower City. Iron examples were common in and near the Lower City and Wigford, although the waterlogged nature of deposits near the river (as opposed to the drier soils of the Upper City) may have aided their preservation (**nos 48-62, 64, 66-69, 77**). In a previous paper, drawing on a smaller selection of artefacts than those included here, I have linked such choices of ‘cheaper’ materials to increased production scale.⁵⁹ Of course the use of iron was not always a ‘cheaper’ alternative but may indicate a functional difference instead, as suggested by a hooked tag from Gloucester that was made of iron but also gilded and decorated.⁶⁰ However, none of the Lincoln tags made of iron seem to have been gilded.

[Insert figure 7 here.] The majority of the *c.* 80 hooked tags was found in association with Flaxengate Structure 20, interpreted as a possible workshop for the (relatively large-scale) production of these objects, and dated to the eleventh century (although the stratigraphic complexity of the site means that earlier, residual artefacts may also be included).⁶¹ The shape of the plate varied between triangular and (sub-) circular (**Figs 7-8**). Both finished and unfinished examples – as well as other forms of metalworking debris and crucible sherds – have also been found on other sites across Lincoln, however, suggesting that metalworking took place in several locations in the city (**Figs 7d; 8m, o-p**).⁶² This is suggestive of a specialist household mode of production, whereby craft activity, albeit increasingly specialised, still took place on a household level, a suggestion that is confirmed by the evidence for combined working and living space in single dwellings at Flaxengate.⁶³ These issues will be returned to further below. **[Insert figure 8 here.]**

In terms of their decoration, one of the hooked tags from Flaxengate, dated to the eleventh or earlier twelfth centuries, was decorated with an abstract design (**no. 7; Fig. 9**). Although much cruder and different in execution, the abstract nature of the decoration and its possible reference to zoomorphic or anthropomorphic mask-like features are vaguely reminiscent of a silver specimen found at Coppergate, York.⁶⁴

⁵⁹ Ten Harkel 2013a; Mainman and Rogers 2000, 2478–9.

⁶⁰ Heighway and Bryant (1999, 138) suggest they were meant for fastening heavier clothing than the lighter copper-alloy variants.

⁶¹ Mann 1982, 4; 1999, 226–7; Perring 1981, 41. For discussion of a production centre for hooked tags from Lund, Sweden, see Cinthio 1999.

⁶² Bayley 2008b.

⁶³ Mann 1982, 1.

⁶⁴ Tweddle 2004, 455–6, fig 115; Mainman and Rogers 2000, 2576, fig 1273, no. 10437.

Dominic Tweddle has suggested that the York specimen possibly contained elements of the originally Scandinavian *Ringerike-style*, which became popular in England after the accession of Cnut, although he acknowledges that the decoration could have other stylistic origins as well.⁶⁵ The decorative pattern of the Lincoln hooked tag is even more abstract and is unlikely to have carried overtly ethnic associations of any kind. **[Insert figure 9 here.]**

Many of the Lincoln tags were decorated even more simply, with rocked-tracer decoration around the outline of the plate, the attachment holes, and sometimes forming lines or cross-shapes across the plate. The latter may again refer to a ‘Christian’ identity, although such abstract cross-shapes can also be interpreted as simple geometric patterns with no additional significance (**nos 6, 8, 10, 47, 76; Fig. 10**). Rocked-tracer decoration of hooked tags is not restricted to Lincoln: roughly contemporary examples have been found in York, Winchester, Gloucester and Hereford.⁶⁶ Other common types of decoration, such as the ring-and-dot motifs found on one of the York hooked tags, are not known from the large assemblage of Lincoln tags.⁶⁷ **[Insert figure 10 here.]**

I have argued elsewhere that copper-alloy hooked tags with rocked-tracer decoration from rural Lincolnshire – a growing number of examples brought to light through metal-detecting – were Lincoln-products.⁶⁸ Given the evidence for contacts between York and Lincoln, it is possible that the York-specimen – which fits well with the Lincoln style – should be included in this. By contrast, the rocked-tracer decoration on the example from Gloucester differs from the Lincoln examples, with diagonal rather than vertical and horizontal lines, suggesting that distinct ‘workshops’ – possibly linked to regional ‘identities’ focused on different production centres – can be identified also in the case of more simple decorative styles.

Rings

The evidence from the hooked tags presents the largest production assemblage of a single artefact type from Lincoln, and the only evidence that can rightly be seen as

⁶⁵ Tweddle 2004, 456.

⁶⁶ Mainman and Rogers 2000, 2576, fig 1273, no. 10684; Biddle 1990, 550, fig 148, no. 1423; Heighway and Bryant 1999, 136, fig 3,14, no. 40; Shoesmith 1985, 8–11, figs 4.5 and 6.

⁶⁷ Mainman and Rogers 2000, 2576, fig 1273, no. 10435.

⁶⁸ Ten Harkel 2013a, 176–8, fig 11.3.

indicative of insipient mass-production for a regional market. In other cases, the evidence is less conclusive. There are three finger rings made from tapering strips of copper alloy (**nos 113, 115-116**). Two, both from Wigford, were unfinished. Like the hooked tags and the smaller pins discussed below, these rings were characterised by simple decoration consisting of punched dots. They are similar in form to some finger rings from York, although the latter are decorated with punched ring-and-dot motifs, which also occurred on the abovementioned hooked tag from York.⁶⁹ Ring-and-dot motifs do not occur much on the Lincoln metalwork to date, except on a group of small hexagonal bells (discussed below). It also occurs on finds made from different materials, such as a bone and antler comb from Flaxengate with an in-turned animal head terminal.⁷⁰ This might suggest that, in addition to being regionally varied, simple decorative styles might also vary in terms of the materials to which they were applied.

Excavations have also yielded a relatively large number of undecorated wire rings, possible finger- or earrings, some with their ends twisted together (**nos 103-112, 114**). As copper-alloy wire was produced at Flaxengate, it is likely that these were local products.⁷¹ Similar rings are known from both Fishergate and Coppergate in York, spanning the middle and late Anglo-Saxon periods, although some could also be Roman in date.⁷² They may also have had a rural distribution, although the objects are too fragile to render their survival (and recognition by metal-detectorists) likely. In addition to copper-alloy rings, excavations at Flaxengate have yielded some plain jet finger rings and a fragment of an amber finger ring as well, similar to types manufactured at the Hiberno-Norse site of Wood Quay (Dublin) and Coppergate.⁷³ Amber probably originated in the Baltic (although it also occurs on the east coast of England, as it floats on sea water), but jet was probably sourced closer to home, for example from Whitby in Yorkshire.⁷⁴ This suggests that Lincoln was tied in to (supra-)regional economic networks, connected not only to the cities of York and Dublin, but – either directly or via York – also to more rural areas that provided raw materials for craft production.

⁶⁹ Mainman and Rogers 2000, 2585–6, fig 1279, cat nos 10515 and 10517.

⁷⁰ Mann 1982, 5–6, fig 3, cat no 4.

⁷¹ Bayley 2008b.

⁷² Rogers 1993, 1370-4; Mainman and Rogers 2000, 2584–6.

⁷³ Mann 1982, 11.

⁷⁴ Mainman and Rogers 2000, 2591; Mann 1982, 47.

Pins

Given the evidence for copper-alloy wire as well as glass production at Flaxengate, it is possible that two copper-alloy wire pins with glass heads were also produced in Lincoln (**nos 95, 98**).⁷⁵ They are similar to finds from Winchester from eleventh- to twelfth-century contexts.⁷⁶ Although the objects are undiagnostic and – like the wire rings – may have been produced more generally in a number of different production centres, it is not unthinkable that the pins indicate further economic contacts between Lincoln and Winchester, situated outside the area of Scandinavian settlement. Coin finds from Lincolnshire demonstrate that Lincoln was increasingly tied in to ‘national’ economic networks from the later tenth century onwards, with increasing numbers of coins with ‘southern’ mint signatures (including Winchester).⁷⁷

Brooches

Moving on to more diagnostic decorative metalwork, there are two lead-alloy brooches of tenth- to eleventh-century date from the Lower City, which represent possible mould duplicates (**nos 84-85; Fig. 11**).⁷⁸ With the possible exception of the stone mould discussed previously, which was used for ornaments in a different style, no definite lead alloy production evidence (moulds or lead melting crucibles) has been found. However, because lead has a much lower melting point than copper alloy, moulds could have been made of wood or antler, and domestic cooking pots were suitable for use as lead melting crucibles, leaving no identifiable vitreous residues.⁷⁹ This means that production evidence for lead alloys may be severely under-represented in Lincoln’s archaeological record. **[Insert figure 11 here.]**

The flat disc shape and the form of the attachment fittings of the two Lincoln brooches indicate Anglo-Saxon and Frankish rather than Scandinavian fashions.⁸⁰ Decoration consists of a stylised curved-armed cross-design common across England and the nearby continent; examples from England include one found at Barrow-upon-Humber in North Lincolnshire.⁸¹ A variety of disc brooches with designs including

⁷⁵ Bayley 2008a; 2008b.

⁷⁶ Biddle 1990, 556–7, fig 150, nos 1440–1.

⁷⁷ Ten Harkel 2013c, 21, table 7.

⁷⁸ Bayley 2008a, 17, fig 10; Mann 1999, 157–8.

⁷⁹ Bayley 2008b, 35.

⁸⁰ Kershaw 2009, 300–1.

⁸¹ Weetch Type 4C: Weetch 2013, 76-7; Ten Harkel 2013a, 181–3.

crosses, foliate patterns, animals and coin-designs, and reflecting fashions current in southern England as well as the Ottonian realm, are known from York also, although the variety there is larger; for example, no animal or coin brooches are currently known from Lincoln.⁸²

Pendants

The final objects to be considered in the section on metalworking are two openwork copper-alloy discs, again possible mould-duplicates, both from the Lower City (**nos 89, 91; Fig. 12c**).⁸³ A very small fragment of a metalworking mould found at Flaxengate (F72 <p79>) tentatively strengthens the suggestion that objects *of this type* were produced in Lincoln. **Fig. 12** shows this mould fragment alongside a reconstruction of the partial object it would have created (**Fig. 12a**) and a broadly similar disc from Wimborne St Giles (Dorset) (**Fig. 12b**), with a similar double border and some features that may depict a claw gripping or adjoining the border, although the fragment is admittedly too small to be definitive. **[Insert figure 12 here.]**

In a previous article I noted that the central animal motif shares elements with eleventh- to twelfth-century finds from Denmark in the Scandinavian-derived *Ringerike*- and *Urnes*-styles and early Romanesque Agnus Dei brooches, and suggested that their pendant-form – a type of dress-accessory that had gone out of fashion in Anglo-Saxon England – points to a Scandinavian context.⁸⁴ However, as other metal pendants from Lincoln (discussed in Part 2 of this paper) also belong to the eleventh century or later, it seems that the revival of this fashion was not a direct result of the initial Scandinavian settlement in the ninth century, but occurred at a later date, possibly after the reign of Cnut. Having said that, pendants made from different materials such as amber and jet occur more broadly in both York and Lincoln, some belonging to a slightly earlier time period.⁸⁵ The York assemblage in particular includes a significant number of amber pendants, a material that in itself could be argued to have Scandinavian or at least Baltic connotations.⁸⁶

⁸² For the York material, see Mainman and Rogers 2000, 2571–4; Tweddle 2004, 452–3.

⁸³ Mann 1999, 152, fig 67.

⁸⁴ Ten Harkel 2013a, 180–1, fig 11.5; Leahy and Paterson 2001, 195.

⁸⁵ Mann 1982, 11–2; Mainman and Rogers 2000, 2588–91.

⁸⁶ Mainman and Rogers 2000, 2589–90.

If the fashion of wearing pendants may have been reintroduced into England from Scandinavia, the decoration of the two Lincoln objects seems to imply a religious, rather than an ethnic, statement. Additional examples that share certain decorative elements are now known from England, including the abovementioned specimen from Wimborne St Giles.⁸⁷ The Wimborne St Giles object – probably a pendant as well – seems to conform stylistically to a group of mostly eleventh-century bird brooches from Scandinavia, England and the nearby continent, which Anne Pedersen has suggested expressed a Christian identity.⁸⁸ In addition, a number of eleventh-century metal-detected finds with broadly similar decoration, interpreted as depicting griffins, have since been published from coastal Flanders.⁸⁹ Pieterjan Deckers has argued that the griffin was essentially also a Christian symbol, referring to the dual nature of Christ, being at once human and divine.⁹⁰ Unlike the openwork discs from Lincoln, the Flemish objects were of smaller size and with attachment fittings suggesting they were brooches. This demonstrates that similar decoration occurred on different types of ornaments, and – as we have already seen with simpler decorative styles – confirms the suggestion that specific combinations of decoration and ornament type may be regionally specific.

The interpretation of the elements of the Lincoln pendants is more complicated. Although a stylised wing extending upwards can be discerned, it lacks the bird-like tail and beak of the Wimborne St Giles example (compare **Figs 12b and 12c**). The decoration is fairly abstract, like the Flemish brooches, and depicts a winged forward-looking quadruped with a tail curving back towards its head. The tail intersects at right angles with the raised wing and a backwards-extended leg, forming two rough cross-shapes that are reminiscent of the positioning of crosses on the Agnus Dei brooches. Its dragonesque features have something in common with depictions of amphisbaena – mythical two-headed serpent-like creatures – from the Bayeux Tapestry, who are also winged, with tails that curve back over their shoulders, although the similarities are superficial.⁹¹ Although the Lincoln objects are unusual in their detail, they nevertheless fit with broader fashions that have been argued to express Christian identities.

⁸⁷ Deckers 2012, 28, fig 10d; Mann 1999, 152; Ten Harkel 2013a, 180.

⁸⁸ Deckers 2012, 30; Pedersen 2001.

⁸⁹ Deckers 2012, 27–34.

⁹⁰ Deckers 2012, 32–4.

⁹¹ Hicks 1993, 255, fig 5.2.

Conclusions

In sum, there is little metalwork production evidence from Anglo-Scandinavian Lincoln – tentative and certain – that can be argued to support the deliberate creation of a Scandinavian identity. A similar lack of overtly ethnic styles has been noted for other small finds from Lincoln, made of different materials.⁹² The evidence presented here is overwhelmingly fairly late, dating to the tenth to twelfth centuries rather than the initial period of Scandinavian settlement. Although the eleventh century undoubtedly also witnessed an strengthening of ties with the Scandinavian territories, especially during the reign of King Cnut, Scandinavia was becoming increasingly the integrated with other parts of Europe by this stage, which may have rendered previous differences less pronounced. A driving force behind this integration was of course the spread of Christianity, and it is interesting to note that Tweddle has commented on a similar lack of ‘classic Viking art’ from York, instead interpreting the York assemblage as reflecting changes in the balance of power between secular and ecclesiastical magnates.⁹³ The Lincoln production evidence, with its recurring cross-shapes and other arguably Christian motifs, may reflect similar concerns. In this context it may also be worth drawing attention to the absence of Thor’s Hammers from either Lincoln or York, which exists in contrast to evidence from the later ninth-century Viking winter camp at nearby Torksey, indicating a clear difference in the character (and date) of occupation.⁹⁴ However, even more striking is the relative simplicity of decorative designs, allowing for fast and low-cost production techniques. The implications of this will be revisited further below, after a discussion of other decorative metalwork finds from Lincoln.

Other decorative metalwork from Lincoln

Introduction

The choices in terms of form and decoration that are made during the production of decorative metalwork – as that of all types of objects – is the outcome of a complex interaction between supply and demand, embedded in the relationship between

⁹² Man 1982, 42.

⁹³ Tweddle 2004, 456–8.

⁹⁴ Blackburn 2011d.

consumers and producers.⁹⁵ Put simply, a craftsperson is unlikely to make things that no one wants, but at the same time he or she might try to impress or influence prospective clients or patrons through the introduction of new elements or motifs. A craftsperson's repertoire was influenced by encounters with other craftspeople but also their products, and for that reason this paper will now turn to the analysis of other decorative metalwork from the city, to place the production evidence in its appropriate context. Rather than by object type, the discussion is organised chronologically, to chart changes in the decorative and stylistic tastes of Lincoln's population. Given the difficulties in dating metalwork on art-historical grounds and the stratigraphic complexities of the Lincoln excavations, the chronological divisions are necessarily fairly broad and overlapping.

Before the Scandinavian settlement (earlier ninth century)

The decorative metal artefacts that can broadly be dated to the period before the Scandinavian settlement in the later ninth century were part of the cultural and typological repertoire of the southern North Sea zone, in particular Anglo-Saxon England and the Low Countries. The largest quantity of ninth-century middle Anglo-Saxon metalwork is from St Paul-in-the-Bail, consisting of a silver Anglo-Saxon Trewhiddle-style buckle and strap-end – a ubiquitous Anglo-Saxon art style – and a silver Carolingian buckle (**nos 117-118, 124**). Another probably ninth-century copper-alloy buckle with a triangular buckle-plate has been found at Michaelgate in the Lower City (**no. 122**).⁹⁶ The Trewhiddle style was better represented on finds from York, where their production has been argued to continue into the tenth century, after the initial Scandinavian settlement.⁹⁷

Other early artefacts belong to generic types and their attribution to the middle Anglo-Saxon period is tentative. The corpus of dress pins from Lincoln reveals a variety of cultural influences. Many of the earlier copper-alloy pins – like their bone counterparts – are common types, also found at nearby Flixborough, typologically spanning the middle and late Anglo-Saxon periods.⁹⁸ Two are plain, with globular and biconical pinheads, and a widespread distribution across England (**nos 94, 99**). In

⁹⁵ Davis 1992, 16–7; Ten Harkel 2013a.

⁹⁶ Vince 2003a, 151, 153, figs 8.9, 8.10, 8.14; but see Steane *et al* 2006, 201–2.

⁹⁷ Tweddle 2004, 450–1.

⁹⁸ For the bone pins, see Mann 1982, 8–11. For the Flixborough corpus, see Rogers 2009.

addition, there are three copper-alloy polyhedral-headed pins with ring-and-dot decoration from Lincoln, again with parallels from other Anglo-Saxon and Anglo-Scandinavian sites including York, although the corpus of metal dress-pins from York is substantially larger and more varied (nos 93, 97, 101).⁹⁹

After the Scandinavian settlement (later ninth to tenth centuries)

From the later ninth and tenth centuries onwards, a greater variety of cultural influences becomes apparent, including artefacts that are distinctively ‘Scandinavian’ in style and/or decoration. A multi-headed copper-alloy strap-end in derived Scandinavian *Borre*-style, dated to the late ninth to tenth centuries, was found in Wigford (no. 125).¹⁰⁰ Parallels are known from across the Scandinavian homelands and diaspora, including an example from Fishergate in York.¹⁰¹ In addition, a D-shaped buckle in Scandinavian *Borre*-style, with an outward facing stylized animal head *en face* protruding from the lip, was either manufactured in Scandinavia, or produced in England but overtly imitating contemporary Scandinavian buckles (no. 123).¹⁰²

[Insert figure 13 here.] There are two probably tenth-century brooches from Lincoln that betray Scandinavian influences. They belong to fairly standard types. A convex disc-brooch decorated in *Jellinge*-style was found in Wigford (no. 88), from the same site that also yielded the abovementioned *Borre*-style buckle. Jane Kershaw has suggested this type may be of southern Scandinavian manufacture.¹⁰³ The attachment fittings included a third attachment loop, a diagnostically Scandinavian trait.¹⁰⁴ The other example is a flat copper-alloy disc-brooch decorated in *Borre*-style from Flaxengate (no. 81; Fig. 13). This tenth-century brooch type – a common metal-detector find in East Anglia and Lincolnshire after the Scandinavian settlement – was mass-produced in East Anglia.¹⁰⁵ It combines Scandinavian-derived decoration with

⁹⁹ The polyhedral-headed pins from Lincoln belong to Coppergate Type 2: Mainman and Rogers 2000, 2577. Also see Mainman and Rogers 2000, 2576–80; Rogers 1993, 1361–7.

¹⁰⁰ Steane *et al* 2001, 130, fig 8.33; Thomas 2000a, 102–4, 204.

¹⁰¹ Rogers 1993, 1351, fig 652, 5320.

¹⁰² Paterson *pers. comm.*

¹⁰³ See Kershaw 2009, 317, fig 11 for a decorative parallel.

¹⁰⁴ Kershaw 2009, 310, 317, fig 11.

¹⁰⁵ Kershaw 2009, 319; Richardson 1993, 31–2.

an essentially Anglo-Saxon or continental brooch form, the flat disc shape, and is often seen as expressing a hybrid Anglo-Scandinavian identity.¹⁰⁶

[Insert figure 14 here.] Other brooches display continental influences. The earliest brooches from Lincoln are ansate or equal-armed brooches. They are broadly dated to the seventh to tenth centuries, although the presence of broadly similar brooches in York at the Anglo-Scandinavian Coppergate site, and their absence from the earlier, predominantly Anglian Fishergate site, suggests that – in England at least – they belong to the later part of the chronology.¹⁰⁷ The Lincoln examples include two brooches from Flaxengate (**nos 79, 83; Fig. 14b-c**) and one, of the so-called Lincoln Type, from St Mark's Church in Wigford (**cat no 87; Fig. 14a**). They are common on the continent, and their distribution in England is distinctly eastern.¹⁰⁸ In his discussion of the York material, Dominic Tweddle has interpreted such brooches as evidence for continuing links with continental Europe during the Anglo-Scandinavian period.¹⁰⁹

[Insert figure 15 here.] A tenth-century polychrome enamelled disc brooch from Flaxengate, together with the majority of the hooked tags also found in association with Structure 20, probably represents a continental import (**no. 80; Fig. 15**). It is only the third of its kind ever to have been recognised in England, and has been the subject of a separate publication.¹¹⁰ Its most striking aspect was undoubtedly its colourful decoration depicting a bird holding a branch in its beak, which should be understood as Christian imagery, either reflecting Jesus' words in John 15:1 ('I am the true vine'), or representing the dove that returns to Noah with an olive branch.¹¹¹

[Insert figure 16 here.] Ringed pins are commonly regarded as indicating a Hiberno-Norse identity, based on their frequent occurrence in the Irish Sea region between the ninth and twelfth centuries. Two excavated examples from (near) the Lower City belong to Fanning's plain-ringed polyhedral-headed type, the most common type of ringed pin found in the British Isles between the early tenth and mid-eleventh centuries; an example is a parallel from Coppergate, York (**nos 96, 100; Fig.**

¹⁰⁶ Kershaw 2009, 318–9; Margeson 1997, 23; Richardson 1993, 31–2.

¹⁰⁷ Mainman and Rogers 2000, 2571.

¹⁰⁸ See for example Capelle 1976, table 5, no. 65 and table 6, no. 67; Mann 1986, 41.

¹⁰⁹ Tweddle 2004, 457.

¹¹⁰ Weetch Type 21: Weetch 2013, 114–16; Ten Harkel *et al* 2016. See Hinton 1990, 636–9; Alexander 1987, 102 for other specimens from England.

¹¹¹ Ten Harkel *et al* 2016.

16).¹¹² A third pin, with a slightly flattened head but probably still belonging to the same broad group, was a casual find from Nettleham Road, roughly one mile to the northeast of the Upper City (**no. 102; Fig. 17**). **[Insert figure 17 here.]**

Four hexagonal bells with cusped bottom and ring-and-dot decoration are also known from Lincoln (**nos 133-136**).¹¹³ Commonly described as ‘Norse bells’, these are frequent finds on sites within areas of Scandinavian settlement, especially in England, but only outside Scandinavia, thus rendering the label ‘Norse’ somewhat misleading. Within England, their distribution is biased towards the east, concentrating particularly on East Yorkshire and Lincolnshire.¹¹⁴ Their use is debated, including theories about their use for horse harness accessories, dog collars, falconry or as fashion accessories. Other suggestions, often highlighting their common occurrence in funerary contexts, have focused on more ritual/religious connotations, including the importance of bells in Christian worship.¹¹⁵ On the basis of the occurrence of a bell in a possible female child burial from the Isle of Man, Deirdre McAllister has suggested that they may have been toys; however, Meagan Schoenfelder and Julian Richards have emphasised the female (rather than juvenile) identity of the deceased, drawing attention to the fact that poor bone preservation made ageing of the skeletal remains impossible.¹¹⁶

A final object of interest is a crude zoomorphic iron-plated hasp or hinge from Grantham Place in the Lower City, possibly for a box (**no. 137; Fig. 18**). It was found in an eleventh-century pit, but in association with tenth-century pottery, making an earlier date not unlikely. This is the only piece of decorative metalwork from early medieval Lincoln that was almost certainly used for the decoration of furniture rather than for personal adornment, but it shares certain qualities, such as relative ease and low cost of production. **[Insert figure 18 here.]**

In sum, there is a clear increase in the circulation of objects with Scandinavian influences after the period of settlement in the later ninth century, some – like the soapstone mould discussed in the previous section – possibly representing the personal possessions of Scandinavian settlers. However, many of these link to other

¹¹² Mainman and Rogers 2000, 2581-2, fig 1275, 10477; Fanning 1994, 10, 25, 28, 70–88; Steane *et al.* 2016, 57.

¹¹³ Schoenfelder and Richards 2011, 157, 164–5; Vince 2003b, 295–96.

¹¹⁴ Schoenfelder and Richards 2011, 154–7, fig 2.

¹¹⁵ Schoenfelder and Richards 2011, 157–9.

¹¹⁶ Freke 2002, 70; McAllister 2013, 90; Schoenfelder and Richards 2011, 159.

parts of the Viking diaspora, rather than directly to the Scandinavian homelands. Moreover, these objects only represent part of the overall assemblage, with additional evidence for the continued presence of continental Frankish or indeed Anglo-Saxon influences (including some of the objects discussed in the previous section, which undoubtedly also belong to this period). Rather than suggesting an influx of distinctly ‘Scandinavian’ influences, the assemblage therefore points to a more general influence from a variety of geographical directions, a fact that might be overlooked when analysis is focused on specific artefact types rather than entire assemblages. The strongest evidence for Scandinavian imports (i.e. objects manufactured in Scandinavia) comes from Wigford, despite the fact that the largest quantity of metalwork overall has been found in the Lower City, which includes more hybrid forms as well as objects of possible continental manufacture. This may indicate a possible difference in the ethnic composition of the inhabitants of various parts of the city, although the evidence is too thin to be definitive.

The eleventh century and later

The final part of this section turns to the eleventh century, which witnessed continued intermixing of different metalwork styles from across the southern North Sea zone, with forms that are now entirely hybrid. Two brooches belong to this period. A convex disc brooch with an irregular and unusual pattern of petal-like loops in high relief from Flaxengate bears superficial resemblance to the tenth-century Scandinavian Terslev-style, although is much more devolved and should thus be placed in a slightly later time period (**no. 82; Fig. 19**).¹¹⁷ The domed shape also suggests Scandinavian influence, but the attachment fittings are Anglo-Saxon.¹¹⁸ This could be an Anglo-Saxon brooch inspired by Scandinavian prototypes, although parallels are known from the continent, and it is uncertain whether the devolved decoration retained any Scandinavian connotations at this stage.¹¹⁹ **[Insert figure 19 here.]**

Also somewhat reminiscent of the Terslev style in its placement of the four volutes or back-to-back C-shaped scrolls, but no longer comprising the actual ring-chain interlace characteristic of the style in its pure form, is a flat copper-alloy gilded

¹¹⁷ Kershaw 2013, figs 3.27, 3.29, 3.31, 3.33, 3.36, 3.38, 3.40; *pers. comm.*

¹¹⁸ Kershaw 2013, 24, fig 2.2.

¹¹⁹ Kershaw 2013, map 3.9; Capelle 1976, no 404.

disc brooch from Wigford (**no. 86; Fig. 20**). The flat shape suggests Anglo-Saxon or continental influences but the decorative motif is common across Europe, also appearing on a tenth-century lead brooch from York.¹²⁰ Although this type of decoration first occurs in the tenth century, both the devolved adaptation and the slightly unusual brooch form suggest a slightly later, eleventh-century date.¹²¹ **[Insert figure 20 here.]**

There are two pendants with possible Scandinavian parallels, although neither is decorated in what might be considered a ‘Scandinavian’ art style. A small lead-alloy pendant was found at St Mark’s Station in Wigford (**no. 92, Fig. 21a**). The object is similar to a miscast found at Coppergate, York (**Fig. 21b**), as well as a second example from York with crescent-shaped motifs, and may represent evidence for York-produced metalwork circulating in Lincoln.¹²² The York miscast bears a pseudo-runic inscription, possibly expressing Scandinavian associations, but the markings on the Lincoln pendant represent circles or crescent-shapes.¹²³ Possible parallels in lead- and silver-alloy are also known from Domburg, and similarities with silver pendants from graves in Birka (Sweden) have also been noted.¹²⁴ A similar object, although with a less-protruding attachment fitting, was found in Mainz on the German Rhine as well., again emphasising the widespread connections of many objects types by this time.¹²⁵ **[Insert figure 21 here.]**

Finally, a possible gilded pendant was found at Hungate in the Lower City (**no. 90; Fig. 22**). Its interpretation as a pendant rests on comparison with a copper-alloy object found in the Danish Viking fortress of Aggersborg, although there is little about either of these objects that is distinctively Scandinavian.¹²⁶ The Scandinavian object was simpler in execution, the decoration applied in the so-called rocked-tracing technique rather than as applied strips, but it shares the small diameter, paper-thin quality and symmetrical decorative pattern with the Hungate object. The Aggersborg find was attributed to the eleventh to twelfth centuries, which is consistent with a

¹²⁰ Weetch 2013, 79-81; Mainman and Rogers 2000, 2573, fig 1268.

¹²¹ Weetch 2013, 80.

¹²² Bayley 1992, 780, fig 340; Mainman and Rogers 2000, 2588, fig 1282, 10615.

¹²³ Roesdahl *et al* 1981, 118.

¹²⁴ Capelle 1976, nos 271 and 278; Bayley 1992, 780, Mainman and Rogers 2000, 2588.

¹²⁵ Wamers 1994, 39, fig 23 no. 073.

¹²⁶ Eriksen *et al* 2009, 260, fig K32–4; Pedersen *et al* 2014, 288, fig 6.112.

renewed more widespread use of gilding in England after the Norman Conquest.¹²⁷

[Insert figure 22 here.]

The most clearly Scandinavian-derived decorative elements from this period are found on mounts and studs. Two are executed in *Urnes*-style, including the published mount from Danes Terrace in the Lower City (executed in an insular adaption of this originally Scandinavian art style), as well as an unprovenanced openwork stirrup mound ‘from Lincoln’, now in the collection of the British Museum (**nos 128, 132**).¹²⁸ The *Urnes*-style decoration is also common on contemporary rural metal-detected finds from Lincolnshire. Together with an almost complete absence of decorative horse-harness gear dating to the eighth, ninth and earlier tenth centuries, this suggests that a re-appreciation of equestrian activity occurred *after* the Scandinavian settlement, possibly as late as the eleventh century, during the reign of Cnut. By this stage, the ‘Scandinavian’ decoration may have become associated with a more generic ‘elite’ identity.

[Insert figure 23 here.] A third object, from the Castle Westgate site in the Upper City, was decorated with a gilded zoomorphic motif depicting two back-turned dragon-like winged creatures with intertwined tails (**no. 126; Fig. 23**). Although unusual in its design, the design has certain parallels in Romanesque art and the wings display similarities to those of the aforementioned amphisbaena from the Bayeux Tapestry, although it is otherwise difficult to ascribe to a specific style. The rope-like border is reminiscent of the Lincoln-style stone grave markers, suggesting that this piece may have more in common with other Lincoln products in a different medium than with metalwork from further afield.¹²⁹

[Insert figure 24 here.] Other studs and mounts are executed in more neutral, geometric styles. These include another copper-alloy stud from Castle Westgate, similar to lead-alloy examples found in Domburg, Denmark and Norway, possibly representing a decorative stud for a saddle strap, and a small square-headed copper-alloy stud with crudely executed incised geometric decoration (**nos 127, 130; Fig. 24a**).¹³⁰ A similar example was found at nearby Saltergate (**cat no 131; Fig 24b**). Finally, two undiagnostic D-shaped buckles of probable eleventh-century date were

¹²⁷ Pedersen *et al* 2014, 288.

¹²⁸ Owen 2001, 212–23; Steane *et al.* 2016, 145; Wilson 1964, 33.

¹²⁹ Everson and Stocker 1999; Ten Harkel 2013b, fig 2a.

¹³⁰ Capelle 1976, nos 320–325.

found at Flaxengate (**nos 119, 121; Fig. 25**), as well as a more elaborate eleventh- or twelfth-century Romanesque buckle with two animal-head terminals biting the bar (**no. 120; Fig. 26**).¹³¹ Finally, a simple copper-alloy strap-loop of slightly crude workmanship with incised decoration was found in an 11th/12th c context at Flaxengate (**no. 129**), although the latter is more difficult to date on stylistic grounds.¹³² **[Insert figures 25-26 here.]**

Metalworkers in London

A question that remains to be answered is, who were the metalworkers who produced this material? The social status of early medieval craftspeople, including smiths, has frequently been the subject of scholarly debate, and it is beyond the scope of the current paper to go into much detail. However, in the introductory sections to this paper I posed the question to which degree changes in production mode – the emergence of mass-production in specialised workshops – affected the styles of the objects being produced. What, then, is the evidence that this was indeed the way in which metalworking activities were organised in early medieval Lincoln?

Different schemes for the classification of modes of production exist, although they tend to be variations on the same theme. A classification by Brandenburgh, proposed in the context of textile manufacture, likewise part of people's personal attire, distinguishes between household production, household industry, tethered specialisation and workshop industry.¹³³ Of course such categories are by their nature always overlapping, and the Lincoln evidence seems to have aspects of several of these. This includes the household level on which crafts seem to have been organised – suggested by the combined living and working space in the craftworkers' dwellings, mentioned previously, as well as the broad spread of often small amounts of metalworking debris and crucible sherds across different sites – but also the standardised efficiency of the finished products, characteristic of workshop industries.¹³⁴ The clearest evidence for the latter comes from the production evidence for the hooked tags, which were largely associated with a sequence of buildings (S13,

¹³¹ Caroline Paterson *pers. comm.*

¹³² Ten Harkel 2013a, 185–6, fig 11.8; 2013b, 167–8, fig 4a.

¹³³ Brandenburgh 2010, 47.

¹³⁴ Bayley 2008b.

S17 and S20) dating to the later tenth to eleventh centuries.¹³⁵ This might suggest a chronological development, whereby the organisation of metalwork production increasingly moved into the category for workshop industries.

Another consideration that deserves mentioning is the question to which degree craftspeople were sedentary. The notion of the itinerant artisan is persistent in considerations of Viking-Age craft production. Criteria for mobility have included smaller-than-expected workshop waste deposits – which is certainly not an issue at the Flaxengate site – as well as morphological and decorative homogeneity of finished products.¹³⁶ Although the latter can indeed be observed, itinerancy is of course not the only plausible explanation for the spread of ideas, and the superimposed nature of several metalworkers' workshops at Flaxengate would suggest that crafts were passed down the generations in the same location. This would seem in line with evidence from contemporary settlement contexts in York and Dublin, although – as Ashby has highlighted – different craftsmen active in the same settlements might have different ways of living.¹³⁷

Discussion: identities in Lincoln

To return to the question posed at the start of this paper, how important was ethnicity to the inhabitants of Anglo-Scandinavian Lincoln? The urban metalwork assemblage from Lincoln displays evidence for Anglo-Saxon, Frankish, Scandinavian, and Irish (or Hiberno-Scandinavian) influences. Unsurprisingly, the latter two only occur from the period of Scandinavian settlement onwards. This is also true for the presence of other materials from Scandinavia, such as amber and Norwegian Ragstone, and the soapstone ingot mould of probable Swedish provenance.

Although some of the objects displaying Frankish influences do, on art-historical grounds, predate the Scandinavian settlement in the third quarter of the ninth century, there is nevertheless a possible 'Viking' explanation for their presence. The abovementioned Carolingian silver belt-buckle from St Paul-in-the-Bail may have been part of a dispersed Viking hoard.¹³⁸ Jane Young and Alan Vince have furthermore suggested that Lincoln's small assemblage of continental pottery from

¹³⁵ Perring 1981, 41; Stean *et al.* 2016, 28–31; Ten Harkel *et al.* 2016.

¹³⁶ For a critique, see Ashby 2015.

¹³⁷ Ashby 2015, 5, 22–3.

¹³⁸ Vince 2006, 529; Steane *et al.* 2016, 486.

the Rhineland and northern France was introduced ‘during the early years of Anglo-Scandinavian settlement’.¹³⁹ What is more, tentative evidence for a possible middle Anglo-Saxon settlement core south of the Lower City, referred to above, is seemingly indicated by the presence of middle ‘Anglo-Saxon’ pottery only, with no reference to imported continental wares, as were common at *Eoforwic* in York or *Hamwic* near Southampton.¹⁴⁰ In this respect, then, pre-Viking Lincoln differed from York, which – as Tweddle has demonstrated – was already part of a broader North Sea world with connections to the Carolingian court.¹⁴¹ The difference may be one of relative status: although Lincoln was not unimportant as an ecclesiastical centre, it did not have the same status (and therefore connections) as York – one of Britain’s two archiepiscopal sees – either.

Did any of this represent the deliberate expression of ethnic identities, Scandinavian or otherwise? The answer to this question is surely scale-dependent. Even if we accept the possibility that (some of) the objects of Scandinavian manufacture were the personal possessions of Scandinavian settlers – and assume that these were understood to signal ‘Scandinavian-ness’ by the individual wearer and/or others – and that some of the metalworkers may have been of Scandinavian origin, there is no evidence at present that they were reproduced on a larger scale in Lincoln, in other words, that there was a market for these objects, aimed at promoting a more general ‘Scandinavian’ identity. This seems to exist in contrast to the more numerous evidence for the popularity of Scandinavian-derived styles from rural, metal-detected contexts in the East Midlands.¹⁴² Why was this the case? A plausible explanation might be the pre-existing importance of Lincoln as a central place of some sort, emphasised at the start of this paper. Even if economic activity was still limited, at the time of the Scandinavian settlement in the second half of the ninth century, Lincoln was a regional centre of considerable importance. The Scandinavian settlement was a factor in its growth, but not the only one. To depict the town as ‘Anglo-Scandinavian’

¹³⁹ Young and Vince 2005, 34.

¹⁴⁰ Lincolnshire HER number 71064, available on http://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=MLI97571&resourceID=1006 (information last checked on 24 March 2015); Mainman 1993; Brown 1997.

¹⁴¹ Tweddle 2004.

¹⁴² Leahy 2007; Kershaw 2013.

is therefore overly simplistic: it was a place where different agents coalesced and had to negotiate hybrid – or neutral – identities in order to coexist.

A possible exception to the lack of evidence for the popularity of overtly ‘Scandinavian’ styles in Lincoln is represented by the eleventh-century *Urnes*-style decorative mount, which fits in a broader eleventh-century ‘fashion’ of Urnes-style objects also including horse harness accessories, although by this stage – the reign of the Danish King Cnut – Scandinavian-derived styles may have come to signify elite status rather than any ‘ethnic’ identity.¹⁴³ A similar caveat is in order with regards to Frankish-derived styles, which may have appealed to Christian identities instead. Indeed – as Thomas has argued – the cultural dynamics of Viking-Age England were highly fluent and adaptive, and so were the cultural repertoires from which they drew, both before and after the Scandinavian settlement.¹⁴⁴ What is more, meanings were also fluid, and we have to acknowledge the likelihood that the mixture of Anglo-Saxon, Scandinavian, Frankish, and Hiberno-Norse styles that *we* can discern lost their ethnic significance soon after they started to be produced.¹⁴⁵

So, ethnic identity or something else altogether? Perhaps the answer is ethnic identity *and* something else. Once we let go of the ethnically-focused culture-historical frameworks characteristic of many early medievalist approaches, the story actually becomes more interesting. Even within a single urban metalwork assemblage, different aspects of identity can be discerned in all their complexity, each with their own chronological trajectory. These may *include* ethnic identities, but also religious and regional ones, or identities specific to an even smaller locale, such as the city of Lincoln itself. Some objects, such as the openwork pendants, may have expressed multi-layered identities, combining references to Christianity (in the decoration), Scandinavian-ness (in the pendant form), and perhaps lending a distinct Anglo-Scandinavian or even Lincoln-based twist in the specific combination between the two. In other cases, the messages that a single aspect of an object conveyed may have been deliberately or unavoidably ambiguous. Rather than deciding whether the defining characteristic of an object was to be understood as a reference to a ‘continental’ or a ‘Christian’ identity, for example, both may have been inherently intertwined: the continent *was*, after all, where Rome was located.

¹⁴³ Sheeran 2009.

¹⁴⁴ Thomas 2012, 486.

¹⁴⁵ Tweddle 2004 456–8.

Again, different scales at which identities were played out can also be recognised, ranging from the possessions of individuals via the products of workshops with regional distributions to styles (often Christian) that enjoyed a pan-European currency. The scale at which a particular object type operated was context-specific: a product of a regional production centre in Lincoln (such as a hooked tag with rocked-tracer decoration) would become an individual curiosity in a different location, just as a *Jellinge*-style brooch common in Scandinavia was one-of-a-kind in Lincoln. Here, a contextual approach focusing on the relationship between (numbers of) artefacts in circulation and manufacturing evidence from sites or regions becomes particularly relevant, as this can shed light on the deliberate choices that were made with regards to expressing particular aspects of identities in particular locales.

A contextual approach also avoids cherry-picking particular object types that skew the picture. Looking at the Lincoln assemblage as a whole, it is evident that fairly plain objects without any clear ethnic or religious characteristics took up the larger part of the production evidence. In some cases it is still possible to recognise locally specific traits, as may be the case with the seeming preference for rocked-tracer decoration (instead of, for example, ring-and-dot motifs) in Lincoln.¹⁴⁶ The relatively simple decoration of these objects was a prerequisite for mass-production on a scale that allowed Lincoln to grow into a manufacturing centre of significant importance. It was therefore the production of these smaller, less interesting – from our perspective – and more easily produced artefacts that shaped the emerging urban identity of Lincoln.

Of course much work remains to be done. The arguments presented here are based on a selection of material retrieved during generally small-scale excavations scattered across the settlement, and the possibility exists that a single site in the future may alter our understanding entirely. There is also much scope to compare between different urban assemblages, or to link the evidence from urban assemblages more explicitly on a regional scale to the ever-growing corpus of metal-detected finds listed in the Portable Antiquities Scheme database. Finally, comparisons on an international scale may shed light on the relative representativeness of the Lincoln evidence on a broader level. It is hoped that this paper will inspire such undertakings. One thing is clear, however: our focus on early medieval ethnicities does insufficient justice to the

¹⁴⁶ Ten Harkel 2013a, 176–8, fig 11.3.

multi-layered and complex nature of early medieval identities, which consisted of ethnicity *and* a lot else besides.

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Catalogue

Early medieval decorative metal objects from Lincoln

Abbreviations

HE Bede, *Historia Ecclesiastica Gentis Anglorum*

Bibliography

Primary sources

Anglo-Saxon Chronicle, in *The Anglo-Saxon Chronicle: A Collaborative Edition* (eds D Dumville and S Keynes, 1983-...), 17 vols, Cambridge, D S Brewer

Bede, *Historia Ecclesiastica Gentis Anglorum*, in *The Ecclesiastical History of the English People* (trans J McClure and R Collins, 1999), Oxford, Oxford University Press

Secondary sources

Adams Gilmour, L 1988. *Early Medieval Pottery from Flaxengate, Lincoln*, The Archaeology of Lincoln 17 (2), London, CBA for the Trust for Lincolnshire Archaeology

Alexander, M 1987. 'A "Viking-Age" grave from Cambois, Bedlington, Northumberland', *Medieval Archaeology* **31**, 101–5

Ashby, S P 2015. "'With staff in hand, and dog at heel"? What did it mean to be an "itinerant" artisan?', in G Hansen, S P Ashby and I Baug (eds), *Everyday Products in the Middle Ages: crafts, consumption and the individual in Northern Europe c. 800-1600*, 1–27, Oxford, Oxbow

Astill, G G 2009. 'Medieval towns and urbanization', in R Gilchrist and A Reynolds (eds), *Reflections: 50 years of Medieval Archaeology, 1957–2007*, 255–70, Society for Medieval Archaeology Monograph 30, Leeds, Maney Publishing

Bayley, J 1991. 'Anglo-Saxon non-ferrous metalworking: a survey', *World Archaeology* **23** (1), 115–30

Bayley, J 1992. *Anglo-Scandinavian Non-Ferrous Metalworking from 16–22 Coppergate*, The Archaeology of York 17 (7), London, CBA

Bayley, J 2008a. 'Lincoln: evidence for glass-working on Flaxengate and other sites in the city: technology report', unpublished report, EH Research Department Report 68-2008

Bayley, J 2008b. 'Lincoln: evidence for metalworking on Flaxengate and other sites in the city: technology report', unpublished report, EH Research Department Report 67-2008

- Bayley, J, Crossley, D and Ponting, M 2008. *Metals and Metalworking: A research framework for archaeometallurgy*, The Historical Metallurgy Society Occasional Publication 6, London, Historical Metallurgy Society
- Biddle, M 1976b. 'Towns', in D M Wilson (ed), *The Archaeology of Anglo-Saxon England*, 99–150, London, Methuen and Co Ltd
- Biddle, M 1990. *Object and Economy in Medieval Winchester. Part II: artefacts from medieval Winchester*, Oxford, Clarendon Press
- Blackburn, M 2011a. 'The Coinage of Scandinavian York', in M Blackburn, *Viking Coinage and Currency in the British Isles*, 281–307, London, Spink for the British Numismatic Society
- Blackburn, M 2011b. 'Currency under the Vikings. Part 1: Guthrum and the Earliest Danelaw Coinages', in M Blackburn, *Viking Coinage and Currency in the British Isles*, 2–31, London, Spink for the British Numismatic Society
- Blackburn, M 2011c. 'Currency under the Vikings. Part 2: The Two Scandinavian Kingdoms of the Danelaw', in M Blackburn, *Viking Coinage and Currency in the British Isles*, 32–58, London, Spink for the British Numismatic Society
- Blackburn, M 2011d. 'The Viking Winter Camp at Torksey, 872–73', in M Blackburn, *Viking Coinage and Currency in the British Isles*, 221–48, London, Spink for the British Numismatic Society
- Blinkhorn, P 2013. 'No pots please, we're Vikings: pottery in the southern Danelaw, 850–1000', in D M Hadley and L ten Harkel (eds), *Everyday Life in Viking-Age Towns: social approaches to towns in England and Ireland, c. 800–1100*, 157–71, Oxford, Oxbow
- Brandenburgh, C R 2010. 'Early medieval textile remains from settlements in the Netherlands: an evaluation of textile production', *Journal of Archaeology in the Low Countries* **2** (1), 41–79
- Brown, D 1997. 'The social significance of imported medieval pottery, in C G Cumberpatch and P W Blinkhorn (eds), *Not So Much a Pot, More a Way of Life*, 95–112, Oxford, Oxbow
- Burke, P J and Stets, J E 2000. 'Identity Theory and Social Identity Theory', *Social Psychology Quarterly* **63**, 224–37
- Capelle, T 1976. *Die frühgeschichtlichen Metallfunde von Domburg auf Walcheren*, 2 vols, Amersfoort, Rijksdienst voor het Oudheidkundig Bodemonderzoek in collaboration with the Koninklijk Zeeuwsch Genootschap der Wetenschappen

- Cinthio, M 1999. 'Guldsmed i Lund', in G Fellows-Jensen and N Lund (eds), *Beretning fra Attende Tværfaglige Vikingsymposium*, 35–52, Højbjerg, Forlaget Hikuin og Afdeling for Middelalderarkæologi
- Davis, F 1992. *Fashion, Culture and Identity*, Chicago, The University of Chicago Press
- Deckers, P J 2012. "“Productive” sites in the polders? “Griffin brooches” and other early medieval metalwork from the Belgian coastal plain', *Medieval and Modern Matters* 3, 21–43
- Eriksen, P, Egeberg, T, Olesen, L H and Rostholm, H 2009. *Vikinger i vest: vikingetiden i Vestjylland*, Moesgaard, Jysk Arkæologisk Selskab
- Evans, D H and Loveluck, C (eds) 2009. *Life and Economy at Early Medieval Flixborough, c. AD 600–1000: the artefact evidence*, Excavations at Flixborough 2, Oxford, Oxbow
- Everson, P and Stocker, D 1999. *Corpus of Anglo-Saxon Stone Sculpture*, Vol. 5: *Lincolnshire*, Oxford, Oxford University Press
- Fanning, T 1994. *Viking Age Ringed Pins from Dublin*, Medieval Dublin Excavations 1962–81 series B vol 4, Dublin, Royal Irish Academy
- Forster, A K, Thomas, J and Driscoll, S J 2004. 'Spatial Analysis and Cultural Indicators: Viking Settlers at old Scatness Broch, Shetland?', in J Hines, A Lane and M Redknap (eds), *Land, Sea and Home: settlement in the Viking period*, 219–34, Society for Medieval Archaeology Monographs 20, Leeds, Maney
- Freke, D 2002. 'The cemeteries: the excavated evidence', in D Freke (ed), *Excavations on St Patrick's Isle, Isle of Man, 1989-1992: prehistoric, Viking, medieval and later*, 58–82, Liverpool, Liverpool University Press
- Gilmour, B 2007. 'Sub-Roman or Saxon, Pagan or Christian: who was buried in the early cemetery at St Paul-in-the-Bail, Lincoln?', in L Gilmour (ed), *Pagans and Christians from Antiquity to the Middle Ages: papers in honour of Martin Henig, presented on the occasion of his 65th birthday*, 229–56, BAR International Series 1610, Oxford, Archaeopress
- Hadley, D M 2006. *The Vikings in England; settlement, society and culture*, Manchester, Manchester University Press
- Hadley, D M and Richards, J D 2000. 'Introduction: interdisciplinary approaches to the Scandinavian Settlement', in D M Hadley and J D Richards (eds), *Cultures in Contact: Scandinavian settlement in England in the ninth and tenth centuries*,

- 3–15, Turnhout, Brepols
- Heighway, C and Bryant, R 1999. *The Golden Minster: the Anglo-Saxon minster and later priory of St Oswald at Gloucester*, CBA Research Report 117, York, CBA
- Hicks, C 1993. *Animals in Early Medieval Art*, Edinburgh, Edinburgh University Press
- Hinton, D 1990. 'Disc and rectangular brooches', in M Biddle (ed), *Object and Economy in Medieval Winchester*, 636–63, Oxford, Clarendon Press
- Hinton, D 1996. *The Gold, Silver and Other Non-ferrous Alloy Objects from Hamwic, Southampton*, Southampton Archaeological Monographs 6, Stroud, Allan Sutton
- Jones, M J and Stocker, D 2003. 'Geological and topographical background', in D Stocker (ed), *The City by the Pool: assessing the archaeology of the City of Lincoln*, 13–18, Lincoln Archaeological Studies 10, Oxford: Oxbow
- Kershaw, J 2009. 'Culture and gender in the Danelaw: Scandinavian and Anglo-Scandinavian brooches', *Viking and Medieval Scandinavia* 5, 295–325
- Kershaw, J 2013. *Viking Identities: Scandinavian jewellery in England*, Oxford, Oxford University Press
- Kilmurry, K 1980. *The Pottery Industry of Stamford, Lincs, c. AD 850–1250: its manufacture, trade and relationship with continental wares, with a classification and chronology*, BAR British Series 84, Oxford, BAR
- Leahy, K 2007. *The Anglo-Saxon Kingdom of Lindsey*, Stroud, Tempus
- Leahy, K and Paterson, C 2001. 'New light on the Viking presence in Lincolnshire: the artefactual evidence', in J Graham-Campbell, R Hall, J Jesch and D N Parsons (eds), *Vikings and the Danelaw: select papers from the proceedings of the thirteenth Viking Congress*, 181–202, Oxford, Oxbow
- Mainman, A 1993. 'Imported Wares in York', in D Piton (ed), *Travaux du Groupe de Recherches et D'Etudes sur la Céramique dans le Nord – Pas-de-Calais: actes du Colloque D'Outreau (10–12 Avril 1992)*, 189–93, Numéro hors-série de Nord-Ouest Archéologie, Berck-sur-Mer, CRADC
- Mainman, A J and Rogers, N 2000. *Craft, Industry and Everyday Life: finds from Anglo-Scandinavian York*, The Archaeology of York 17 (14), York, CBA
- Mann, J 1982. *Early Medieval Finds from Flaxengate I: objects of antler, bone, stone, horn, ivory, amber, and jet*, The Archaeology of Lincoln 14 (1), London, CBA for the Lincoln Archaeological Trust

- Mann, J 1986. 'Small finds', in B J J Gilmour and D A Stocker (eds), *St Mark's Church and Cemetery*, 41–3, The Archaeology of Lincoln 13 (1), London, CBA for the Trust for Lincolnshire Archaeology
- Mann, J 1999. 'Other artefacts', in C Colyer, B J J Gilmour and M J Jones (eds), *The Defences of the Lower City: excavations at The Park and West Parade 1970–2 and a discussion of other sites excavated up to 1994*, The Archaeology of Lincoln 7 (2), 146–69 and 224–36, York, CBA for the City of Lincoln Archaeology Unit
- Mann, J 2009. 'Some Finds from the Site of the New City and County Museum, Flaxengate, Lincoln (LDG03)' in S Malone, 'Excavations at the site of *The Collection*, Danes Terrace, Lincoln', unpublished Archaeological Project Services report 20/09
- McAllister, D 2013. 'Childhood in Viking and Hiberno-Scandinavian Dublin, 800–1100', in D M Hadley and L ten Harkel (eds), *Everyday Life in Viking-Age Towns: social approaches to towns in England and Ireland, c. 800–1100*, 86–102, Oxford, Oxbow
- Owen, O 2001. 'The strange beast that is the English Urnes style', in J Graham-Campbell, R Hall, J Jesch and D N Parsons (eds), *Vikings and the Danelaw: select papers from the proceedings of the thirteenth Viking Congress*, 203–22, Oxford, Oxbow
- Pedersen, A 2001. 'Rovfugle eller duer: fugleformede fibler fra den tidlige middelalder', *Aarbøger for Nordisk Oldkyndighed og Historie* **1999**, 19–66
- Pedersen, A, Roesdahl, E, Graham-Campbell, J 2014. 'Dress accessories and personal ornaments of metal: amulets', in E Roesdahl, S M Sindbæk, A Pedersen and D M Wilson (eds), *Aggersborg: the Viking-Age Settlement and fortress*, 279–89, Jutland Archaeological Society Publications 82, Aarhus, Aarhus University Press
- Perring, D 1981. *Early Medieval Occupation at Flaxengate, Lincoln*, The Archaeology of Lincoln 9, London, CBA
- Pestell, T, Brown, M, Okasha, E, Ottaway, P and Rogers, N 2009. 'Artefacts relating to specialist activities', in D H Evans and C Loveluck (eds), *Life and Economy at Early Medieval Flixborough, c. AD 600–1000: the artefact evidence*, 122–42, Excavations at Flixborough 2, Oxford, Oxbow
- Pohl, W 2013. 'Introduction. Strategies of identification: a methodological profile', in

- W Pohl and G Heydemann (eds), *Strategies of Identification: Ethnicity and Religion in Early Medieval Europe*, 1–64, Turnhout, Brepols
- Richards, J D and Schoenfelder, M 2011. ‘Norse bells: a Scandinavian colonial artefact’, *Anglo-Saxon Studies in Archaeology and History* **17**, 151–68
- Richardson, C 1993. ‘The Borre Style in the British Isles and Ireland: a reassessment’, unpublished MA dissertation, University of Newcastle
- Roesdahl, E, Graham-Campbell, J, Connor, P and Pearson, K 1981. *The Vikings in England and in their Danish Homeland*, London, The Anglo-Danish Viking Project
- Rogers, N 1993. *Anglian and Other Finds from Fishergate*, The Archaeology of York **17** (9), London, York Archaeological Trust and CBA
- Rogers, N 2009. ‘The pins’, in D H Evans and C Loveluck (eds), *Life and Economy at Early Medieval Flixborough, c. AD 600–1000: the artefact evidence*, 32–78, Excavations at Flixborough 2, Oxford: Oxbow
- Røstad, I M 2012. ‘En fremmed fugl: “Danske” smykker og forbindelser på Østlandet I overgangen mellom vikingtid og middelalder’, *Viking* **75**, 181–210
- Sheeran, H 2009. ‘Artefact distribution case study: equestrian equipment’, *Internet Archaeology* **25** (<http://intarch.ac.uk/journal/issue25/2/3.4.3.html>; consulted 13 June 2017).
- Shoosmith, R 1985. *Hereford City Excavations vol. 3: the finds*, CBA Research Report 56, London, CBA
- Skre, D 2011. ‘The inhabitants: origins and trading connexions’, in D Skre (ed.), *Things from the Town*, 417–41, Kaupang Excavation Project Publication Series 3, Norske Oldfunn XXIV, Oslo, Aarhus University Press and the Kaupang Excavation Project
- Steane, K, Darling, M J, Jones, M J, Mann, J, Vince, A and Young, J 2016. *The Archaeology of the Lower City and Adjacent Suburbs*, Lincoln Archaeological Studies 4, Oxford, Oxbow
- Steane, K, Darling, M J, Jones, M J, Mann, J, Vince, A and Young, J 2006. *The Archaeology of the Upper City and Adjacent Suburbs*, Lincoln Archaeological Studies 3, Oxford, Oxbow
- Steane, K, Darling, M J, Mann, J, Vince, A and Young, J 2001. *The Archaeology of Wigford and the Brayford Pool*, Lincoln Archaeological Studies 2, Oxford, Oxbow

- Stocker, D (ed) 2003. *The City by the Pool: assessing the archaeology of the City of Lincoln*, Lincoln Archaeological Studies 10, Oxford, Oxbow
- Ten Harkel, L 2006. 'The Vikings and the natives: ethnic identity in England and Normandy c.1000', *The Medieval Chronicle* **4**, 175–88
- Ten Harkel, L 2013a. 'Of towns and trinkets: metalworking and metal dress-accessories in Viking-Age Lincoln', in D M Hadley and L ten Harkel (eds), *Everyday Life in Viking-Age Towns: social approaches to towns in England and Ireland, c. 800–1100*, 172–92, Oxford, Oxbow
- Ten Harkel, L 2013b. 'Urban identity and material culture: a case study of Viking-Age Lincoln, c. AD 850–1000', *Anglo-Saxon Studies in Archaeology and History* **18**, 157–73
- Ten Harkel, L 2013c. 'The urbanization of Viking Age Lincoln: a numismatic perspective', *The Mediaeval Journal* **13** (1), 1–48
- Ten Harkel, L, Weetch, R and Sainsbury, V 2016. 'An early medieval polychrome-enamelled brooch from Flaxengate, Lincoln: continental fashions in an Anglo-Scandinavian town', *Medieval Archaeology* **60** (1), 57–71
- Thomas, G 2000a. 'A Survey of Late Anglo-Saxon and Viking Strap-ends from Britain', unpublished PhD thesis, University College London
- Thomas, G 2000b. 'Anglo-Scandinavian metalwork from the Danelaw: exploring social and cultural interaction', in D M Hadley and J D Richards (eds), *Cultures in Contact: Scandinavian settlement in England in the ninth and tenth centuries*, 237–55, Turnhout, Brepols
- Thomas, G 2012. 'Carolingian Culture in the North Sea world: rethinking the cultural dynamics of personal adornment in Viking-Age England', *European Journal of Archaeology* **15** (3), 486–518
- Tweddle, D 2004. 'Art in pre-Conquest York', in R A Hall (ed), *Aspects of Anglo-Scandinavian York* (ed), 446–58, The Archaeology of York 8 (4), London, CBA
- Vince, A 1993. 'Forms, functions and manufacturing techniques of late ninth- and tenth-century wheelthrown pottery in England and their origins', in D Piton (ed), *Travaux du Groupe de Recherches et D'Etudes sur la Céramique dans le Nord – Pas-de-Calais: actes du Colloque D'Outreau (10–12 Avril 1992)*, 151–64, Numéro hors-série de Nord-Ouest Archéologie, Berck-sur-Mer, CRADC
- Vince, A 2003a. 'Lincoln in the early medieval era, between the 5th and 9th centuries', in D Stocker (ed), *The City by the Pool: assessing the archaeology of the City of*

- Lincoln*, 141–56, Lincoln Archaeological Studies 10, Oxford, Oxbow
- Vince, A 2003b. ‘The new town: Lincoln in the high medieval era (c. 900 to c. 1350)’, in D Stocker (ed), *The City by the Pool: assessing the archaeology of the City of Lincoln*, 159–296, Lincoln Archaeological Studies 10, Oxford, Oxbow
- Vince, A 2006. ‘Coinage and urban development: integrating the archaeological and numismatic history of Lincoln’, in B Cook and G Williams (eds), *Coinage and History in the North Sea World, c. AD 500 – 1250: essays in honour of Marion Archibald*, 525–43, Leiden, Brill
- Wamers, E 1994. *Die frühmittelalterlichen Lesefunde aus der Löhrstrasse (Baustelle Hilton II) in Mainz*, Mainzer Archäologische Schriften 1, Mainz, Landesamt für Denkmalpflege Rheinland-Pfalz
- Weetch R 2013. ‘Late Anglo-Saxon brooches within their northwest European context: a study of social identities between the eighth and eleventh centuries’, unpublished PhD thesis, University of Reading
- White, R 1982. ‘Non-Ferrous Metalworking on Flaxengate, Lincoln, from the 9th – 11th centuries’, unpublished MSc dissertation, Institute of Archaeology
- Williams, G 2013. ‘Towns and identities in Viking England’, in D M Hadley and L ten Harkel (eds), *Everyday Life in Viking-Age Towns: social approaches to towns in England and Ireland, c. 800–1100*, 14–34, Oxford, Oxbow
- Wilson, D M 1964. *Anglo-Saxon Ornamental Metalwork, 700–1100, in the British Museum*, London, Trustees of the British Museum
- Young, J and Vince, A 2005. *A Corpus of Anglo-Saxon and Medieval Pottery from Lincoln*, Lincoln Archaeological Studies 7, Oxford, Oxbow

Illustration captions

Fig. 1: sites in Lincoln, mentioned in the text (drawing by Letty ten Harkel, after Stocker (ed.) 2003, fig. 1).

Fig. 2: Photograph of H83 <269>, Catalogue **no. 138** (photograph by Letty ten Harkel).

Fig. 3: Photograph of F75 <p241> and reconstruction drawing of object it would have created (photograph and drawing by Letty ten Harkel).

Fig. 4: Photograph of F75 <p116> and reconstruction drawing of object it would have created (photograph and drawing by Letty ten Harkel).

Fig. 5: Photograph of F75 <p206> and reconstruction drawing of object it would have created (photograph and drawing by Letty ten Harkel).

Fig. 6: Photograph of stone mould from Flaxengate, possibly used for lead brooch casting (copyright Historic England).

Fig. 7: Examples of finished hooked tags from Lincoln with different plate forms (a: F72 <ae15>, Catalogue **no. 6**; b: F72 <ae294>, Catalogue **no. 10**; c: BE73 <ae37>, Catalogue **no. 76**; d: WP71 <ae24>, Catalogue **no. 73**) (photographs by Letty ten Harkel).

Fig. 8: Outline drawings of unfinished hooked tags from different excavations in Lincoln, showing a variety of plate forms (a: F74 <ae165>, Catalogue **no. 16**; b: F74 <ae240>, Catalogue **no. 25**; c: F74 <ae335>, Catalogue **no. 38**; d: F74 <ae166>, Catalogue **no. 17**; e: F74 <ae335>, Catalogue **no. 38**; f: F74 <ae485>, Catalogue **no. 43**; g: F74 <ae259>, Catalogue **no. 29**; h: F74 <ae281>, Catalogue **no. 30**; i: F74 <ae242>, Catalogue **no. 27**; j: F74 <ae289>, Catalogue **no. 32**; k: F74 <ae169>, Catalogue **no. 19**; l: F74 <ae169>, Catalogue **no. 19**; m: WW89 <193>, Catalogue **no. 72**; n: F74 <ae254>, Catalogue **no. 28**; o: GP81 <147>, Catalogue **no. 65**; p: WB80 <ae13>, Catalogue **no. 3**) (drawings by Julia Warszewski).

Fig. 9: Photograph of F72 <ae45>, Catalogue **no. 7** (photograph by Letty ten Harkel).

Fig. 10: Drawings of hooked tags from Flaxengate, showing the typical rocked-tracer decoration (a: F72 <ae213>, Catalogue **no. 8**; b: F74 <ae546>, Catalogue **no. 47**) (drawings by Dave Watt, copyright City of Lincoln Council).

Fig. 11: Photograph of a) P70 <pb13>, Catalogue **no. 85** and b) SW82 <386>, Catalogue **no. 84** (photograph by Letty ten Harkel).

Fig. 12: Photograph of a) F72 <p79> alongside reconstruction of object fragment (photograph and drawing by Letty ten Harkel); b) griffin disc from Wimborne St Giles, Dorset (photograph by Martin Green; previously published as Deckers 2012, 28, fig 10d. Reproduced with kind permission of Martin Green.); c) P70 <ae171>, Catalogue **no. 91** (photograph by Letty ten Harkel).

Fig. 13: Drawing of F72 <ae302>, Catalogue **no. 81** (drawing by Dave Watt, copyright City of Lincoln Council).

Fig. 14: Photograph of a) SM76 <ae92>, Catalogue **no. 87**; b) F76 <ae107>, Catalogue **no. 83**; and c) F72 <ae23>, Catalogue **no. 79** (photographs by Letty ten Harkel).

Fig. 15: Photograph of F72 <ae296>, Catalogue **no. 80** (photograph by Letty ten Harkel).

Fig. 16: Drawings of ringed pins from Lincoln: a) F72 <ae290>, Catalogue **no. 96**; b) BE73 <ae164>, Catalogue **no. 100** (drawings by Dave Watt, copyright City of Lincoln Council).

Fig. 17: Photograph of *The Collection* no <88.52>, Catalogue **no. 102** (photograph by Letty ten Harkel).

Fig. 18: Photograph of GP81 <57>, Catalogue **no. 137** (photograph by Letty ten Harkel).

Fig. 19: Photograph of F74 <ae184>, Catalogue **no. 82** (photograph by Letty ten Harkel).

Fig. 20: Photograph of HG72 <ae58>, Catalogue **no. 86** (photograph by Letty ten Harkel).

Fig. 21: Photograph of Z86 <676>, Catalogue **no. 92** alongside a parallel from York, previously published in Bayley 1992, 780, fig 340 (photograph by Letty ten Harkel; drawing reproduced with kind permission of Christine McDonnell, York Archaeological Trust).

Fig. 22: Photograph of H83 <455>, Catalogue **no. 90** (photograph by Letty ten Harkel).

Fig. 23: Photograph of CWG86 <106>, Catalogue **no. 126** (photograph by Letty ten Harkel).

Fig. 24: Photographs of a) F72 <ae243>, Catalogue **no. 130** and b) LIN73 <44>, Catalogue **no. 131** (photographs by Letty ten Harkel).

Fig. 25: Photograph of F72 <ae44>, Catalogue **no. 119** (photograph by Letty ten Harkel).

Fig. 26: Photograph of F72 <ae297>, Catalogue **no. 120** (photograph by Letty ten Harkel).

Catalogue of early medieval decorative metal objects from Lincoln

This catalogue lists decorative metalwork finds from Lincoln, referred to in the text. Finds are organised by finds type, main part of the city (Upper City, Lower City, Butwerk, Wigford, ‘other’), and then alphabetically by site and numerically by excavation phase and small find number. Finds from the Waterside excavations, located just to the south of the Lower City on the north bank of the river, are grouped with the Lower City finds. Unless otherwise indicated, information about find-spots is based on unpublished information held within the archives of the former City of Lincoln Archaeology Unit – now held by *The Collection: Art and Archaeology in Lincolnshire* – kindly provided by Jenny Mann or taken from Rob White’s unpublished 1982 MSc dissertation. Objects without detailed information either could not be located during a visit to the stores of *The Collection* in July 2014, or (if indicated) were not removed from display cases for this study. Finds from excavations at *The Collection* were not available for study but are included in the list with relevant literature references.

Hooked tags

Upper City

St. Paul-in-the-Bail (SP72)

1. SP72 <ae46> copper-alloy hooked tag.
2. SP72 <ae170> copper-alloy hooked tag.

West Bight (WB80)

3. WB80 <ae13> triangular piece of sheet metal; possible unfinished copper-alloy hooked tag. No attachment holes or hook. 46 x 13 mm. **Fig. 8p.**

Lower City

Danes Terrace (DT74i and DT74ii)

4. DT74i <ae116> copper-alloy hooked tag with triangular plate (on display).

5. DT74ii <ae177> corroded fragment of a copper-alloy hooked tag. Both attachment holes and hook broken off. 7.5 x 9 mm (including corrosion). Residual, found in a post-medieval context.

Flaxengate (F72; F73; F74; F76)

6. F72 <ae15> copper-alloy hooked tag with circular plate. One of two closely spaced attachment holes damaged. Plate 11 mm in diameter; surviving part of hook 8 mm long. Rocked-tracer decoration on front of plate in cross-shape, and possibly around circumference of plate. Unstratified. **Fig. 7a.**
7. F72 <ae45> copper-alloy hooked tag with circular plate. Tip of hook broken off. Plate 14 mm in diameter; surviving part of hook 4.5 mm. It has 2 attachment holes spaced rather far apart. Symmetrical, possibly abstract-zoomorphic decoration in broad black lines. Similar to a metal-detected find from Thimbleby (Lincs) (PAS NLM-E7A805). Deposited in Saxo-Norman building T24, dated to the early to late twelfth century. **Fig. 9.**
8. F72 <ae213> copper-alloy hooked tag with triangular plate. Hook mostly broken off and one of attachment holes damaged. Plate 14 x 12 mm (tapering towards 4 mm near hook); surviving hook 2.5 mm. Rocked-tracer decoration around circumference of plate, around attachment holes, and in horizontal line across middle of plate. Similar to BE73 <ae37> and F74 <ae546>. Residual, found in late twelfth- to early thirteenth-century pit. **Fig. 10a.**
9. F72 <ae220> two fragments of a heavily damaged and unfinished copper-alloy hooked tag made of copper-alloy. Fragment 1 part of sub-circular plate, measuring 10.5 x 8 mm. Fragment 2 attachment hook, measuring 11 x 2 mm.
10. F72 <ae294> copper-alloy hooked tag with roughly pear-shaped plate. Plate 15 x 13 mm; hook 4.5 mm. Rocked-tracer decoration on front of plate in cross-shape and around circumference. Included in Roesdahl *et al.* 1981, 101, G3 (with F74 <ae169>). Residual, found in a late twelfth- to thirteenth-century levelling dump. **Fig. 7b.**

11. F73 <ae274> unfinished copper-alloy hooked tag with a triangular plate, heavily corroded. No attachment holes or hook. 20 x 14 mm. Deposited in mid to late eleventh-century context. Included in White 1982, 51, F84 and (as F72 Ae274) in Bayley 2008b, 129, table 35, who identified metal composition as bronze.
12. F74 <ae25> unfinished copper-alloy hooked tag with a triangular plate. No attachment holes or hook. 18 x 10 mm. Residual, found in late fourteenth- to early fifteenth-century layer. Included in White 1982, 51, F85 and Bayley 2008b, 129, table 35, who identified metal composition as brass.
13. F74 <ae153> fragmented copper-alloy hooked tag, heavily corroded. Only the hook and bottom of plate survive. 9 x 5 mm.
14. F74 <ae163> unfinished copper-alloy hooked tag with triangular plate, broken into 3 pieces. No attachment holes or hook. 24 x 10 mm. Traces of metallurgical analysis, but not included in Bayley 2008b, 129, table 35.
15. F74 <ae164> unfinished copper-alloy hooked tag with circular plate. No attachment holes. 21 x 14 mm. Included in White 1982, 52, F86, who concluded that it underwent a high degree of working, with little evidence for porosity or inclusions. Also included in Bayley 2008b, 129, table 35, who identified metal composition as copper/brass. Deposited in context dated to second half of eleventh century.
16. F74 <ae165> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. 21 x 7 mm. Included in White 1982, 52-3, F87 and Bayley 2008b, 129, table 35, who identified metal composition as copper/brass. Deposited in mid eleventh-century context. **Fig. 8a.**
17. F74 <ae166> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. 19 x 12 mm. Included in White 1982, 53, F88 and

Bayley 2008b, 129, table 35, who identified metal composition as bronze.
Deposited in mid eleventh-century context. **Fig. 8d.**

18. F74 <ae167> unfinished copper-alloy hooked tag with circular to oval plate.
No attachment holes. Plate 12 x 15 mm; hook 25 mm. Included in White 1982, 53, F89 and Bayley 2008b, 129, table 35, who identified metal composition as copper/brass. Deposited in mid eleventh-century context.
19. F74 <ae169> two unfinished copper-alloy hooked tags, both with sub-circular, teardrop-shaped plates. No attachment fittings. The hook of the smaller one is broken. 26 x 14 mm and 19 x 13 mm. Included in Roesdahl *et al.* 1981, 101, G3, together with F72 <ae294>. **Figs 8k-l.**
20. F74 <ae170> unfinished copper-alloy hooked tag with triangular plate. No attachment holes. 22 x 12 mm. Included in White 1982, 54, F90 and Bayley 2008b, 129, table 35, who identified metal composition as brass. Found in mid-eleventh-century context.
21. F74 <ae183> unfinished copper-alloy hooked tag with triangular plate. No attachment holes. 20 x 10 mm. Included in White 1982, 54, F91, and Bayley 2008b, 129, table 35, who identified metal composition as brass. Deposited in later eleventh-century context.
22. F74 <ae209> unfinished copper-alloy hooked tag.
23. F74 <ae216> three fragments of copper-alloy hooked tag. 5 x 3.5 mm, 6 x 3.5 mm and 9 x 6 mm, the latter with part of attachment hole (diameter 2 mm).
24. F74 <ae217> unfinished copper-alloy hooked tag.
25. F74 <ae240> unfinished copper-alloy hooked tag with triangular plate. No hook, and top of plate damaged. 19.5 x 8.5 mm. **Fig. 8b.**
26. F74 <ae241> two unfinished copper-alloy hooked tags.

27. F74 <ae242> unfinished copper-alloy hooked tag with shield-shaped plate. No attachment holes or hook. 24 x 14 mm. **Fig. 8i.**
28. F74 <ae254> unfinished copper-alloy tag with shield-shaped plate. No attachment holes or hook. 25 x 16.5 mm. Included in White 1982, 54-5, F92 and Bayley 2008b, 129, table 35, who identified metal composition as brass. Deposited in a later eleventh-century context. **Fig. 8n.**
29. F74 <ae259> unfinished copper-alloy hooked tag with coarsely shaped triangular plate. No attachment holes or hook. 22 x 11.5 mm. **Fig. 8g.**
30. F74 <ae281> unfinished copper-alloy hooked tag with shield-shaped plate. No attachment holes or hook. 21 x 11 mm. Included in White 1982, 55, F93 and Bayley 2008b, 129, table 35, who identified metal composition as brass. Deposited in a mid eleventh-century context. **Fig. 8h.**
31. F74 <ae286> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. 20 x 12 mm. Included in White 1982, 55, F94, and Bayley 2008b, 129, table 35, who identified metal composition as brass. Deposited in a mid eleventh-century context.
32. F74 <ae289> unfinished copper-alloy hooked tag with an asymmetrically shaped plate, rounded on one side and triangular on the other. No attachment holes or hook. 23 x 12 mm. Included in White 1982, 56, F95, and Bayley 2008b, 129, table 35, who identified metal composition as brass. Deposited in a context dated *c.* 1040-1070. **Fig. 8j.**
33. F74 <ae296> unfinished copper-alloy hooked tag with shield-shaped plate, broken into 3 fragments. Traces of attachment hole visible but hook not yet bent. 14 x 11 mm, 5 x 4 and 6 x 4 mm.
34. F74 <ae299> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. 20 x 9 mm. Included in White 1982, 56, F96 and

Bayley 2008b, 129, table 35, who identified metal composition as brass.
Deposited in a context dated *c.* 1040-1070.

35. F74 <ae302> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. Included in White 1982, 56-7, F97 and Bayley 2008b, 129, table 35, who identified metal composition as copper/brass. Deposited in a context dated *c.* 1040-1070.
36. F74 <ae306> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. 27 x 12 mm. Included in White 1982, 57, F98 and Bayley 2008b, 129, table 35, who identified metal composition as copper/brass. Deposited in a context dated *c.* 1040-1070.
37. F74 <ae308> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. 21 x 11 mm. Included in White 1982, 57, F99 and Bayley 2008b, 129, table 35, who identified metal composition as brass. Deposited in a context dated *c.* 1040-1070.
38. F74 <ae335> two unfinished copper-alloy hooked tags with triangular plates. No attachment holes or hooks. 18 x 9 mm and 21 x 10 mm. Included in White 1982, 58, F100 and Bayley 2008b, 129, table 35, who identified metal composition as brass. Both from a context dated *c.* 1040-1070. **Figs 8c and e.**
39. F74 <ae354> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. Upper right-hand corner damaged. 21 x 7 mm. Included in White 1982, 58, F101 and Bayley 2008b, 129, table 35, who identified metal composition as brass. Context dated *c.* 1040-1070.
40. F74 <ae385> unfinished copper-alloy hooked tag.
41. F74 <ae439> two fragments of an unfinished copper-alloy hooked tag. No trace of attachment holes; hook not yet bent. 12 x 10.5 mm and 10 x 7 mm.
42. F74 <ae484> unfinished copper-alloy hooked tag.

43. F74 <ae485> unfinished hooked tag with a triangular plate. 22 x 11.5 mm. No attachment holes or hook. Included (as F75 <ae485>) in Roesdahl *et al.* 1981, 101, G4 together with F74 <ae546>. **Fig. 8f.**
44. F74 <ae527> unfinished copper-alloy hooked tag. No attachment holes or hook. 25 x 10 mm. Included in White 1982, 58-9, F102 and Bayley 2008b, 129, table 35, who identified metal composition as brass. Unstratified.
45. F74 <ae529> unfinished copper-alloy hooked tag.
46. F74 <ae538> copper-alloy hooked tag from eleventh-century context.
47. F74 <ae546> copper-alloy hooked tag with triangular plate. Attachment holes at opposite corners, *c.* 1 mm in diameter. Plate 17 x 12 mm (tapering to 6 mm); hook 9 mm long. Rocked-tracer decoration around circumference of plate, and forming inverted T-shape across plate. Included (as F75 <ae546>) in Roesdahl *et al.* 1981, 101, G4. Found in eleventh-century layers. **Fig. 10b.**
48. F74 <fe1443> unfinished iron hooked tag.
49. F74 <fe1620> unfinished iron hooked tag with circular plate.
50. F74 <fe1699> unfinished iron hooked tag. No attachment holes or hook. 36 x 15 mm.
51. F74 <fe1788> unfinished iron hooked tag with a triangular plate, heavily corroded. 20 x 11 mm.
52. F74 <fe1820> two fragments of iron hooked tag, heavily corroded. First fragment with two attachment holes with diameter of 2.5 mm, spaced 2 mm apart. 19 x 18 mm. Second fragment part of attachment hook, 9 mm long.

- 53.** F74 <fe1934> unfinished iron hooked tag with triangular plate. No attachment holes or hook. 31 x 10 mm.
- 54.** F74 <fe1969> unfinished iron hooked tag with triangular plate.
- 55.** F74 <fe1984> unfinished iron hooked tag with triangular plate, heavily corroded. No attachment holes or hook. 44 x 16 mm.
- 56.** F74 <fe1992> unfinished iron hooked tag, heavily corroded. 27 x 18 mm.
- 57.** F74 <fe2163> unfinished iron hooked tag, heavily corroded. 33 x 16 mm.
- 58.** F74 <fe2285> unfinished iron hooked tag with triangular plate.
- 59.** F74 <fe2329> unfinished iron hooked tag with triangular plate, heavily corroded. 26 x 20 mm.
- 60.** F74 <fe2431> unfinished iron hooked tag with triangular plate.
- 61.** F74 <fe2524> unfinished iron hooked tag with triangular plate, heavily corroded. 20 x 14 mm.
- 62.** F74 <fe2609> unfinished iron hooked tag with triangular plate. No attachment holes. 22 x 10 mm. Found in early to mid-eleventh century context.
- 63.** F76 <ae85> copper-alloy hooked tag with triangular plate. 6 x 12 mm.
Included in Bayley 2008b (p. 129, table 35), who identified metal composition as gunmetal.
- 64.** F76 <fe658> unfinished iron hooked tag with triangular plate, heavily corroded. No attachment holes or hook. 27 x 9 mm.

Grantham Place (GP81)

65. GP81 <147> unfinished copper-alloy hooked tag with triangular plate. No attachment holes or hook. 37 x 15 mm. **Fig. 8o.**

Waterside (WO89, WNW88; WW89)

66. WO89 <162> unfinished iron hooked tag with triangular plate.
67. WO89 <210> unfinished iron hooked tag with triangular plate.
68. (WNW88) <306> unfinished iron hooked tag.
69. (WNW88) <2116> unfinished iron hooked tag.
70. WNW88 <577> copper-alloy hooked tag with shield-shaped plate. Two attachment holes with diameter of *c.* 1 mm, *c.* 4 mm apart. 16 x 12 mm.
71. WNW88 <1225> copper-alloy hooked tag.
72. WW89 <193> damaged and corroded copper-alloy hooked tag. Tip of hook broken. Outside of the plate damaged so that shape is hard to identify. 34 x 13 mm. Part of one attachment hole with diameter of 1.5 mm visible. **Fig. 8m.**

West Parade (WP71)

73. WP71 <ae24> unfinished copper-alloy hooked tag. Roughly cut to shape. No attachment holes or hook. Plate intended to be circular. 13 x 12 mm. Included in Colyer *et al.* 1999, 226, fig 109. Found with twelfth-century hearth. **Fig. 7d.**
74. WP71 <ae62> silver hooked tag with circular plate. Two closely spaced attachment holes with diameter of 2 mm. Tip of hook broken off. Plate 10 mm in diameter; hook 4 mm. Included in Colyer *et al.* 1999, 226, fig 109. Found in thirteenth-century pit.

Butwerk

Broadgate East (BE73)

75. BE73 <ae10> fragment of copper-alloy hooked tag with (probably) triangular plate. Only the hook and bottom of plate survive. 12 x 4 mm.
76. BE73 <ae37> copper-alloy hooked tag with triangular plate. Top right corner damaged. Two circular attachment holes in opposing corners. 20 x 12 mm. Possible traces of rocked-tracer decoration around circumference of plate. Similar to F72 <ae213>. Found in post-medieval dumping layer. **Fig. 7c.**

Wigford

St Mark's Church (SM76)

77. SM76 <fe365> two fragments of iron hooked tag with triangular plate, broken between plate and attachment hook. Two attachment holes with a diameter of 2 mm, spaced 3 mm apart. 28 x 14 mm.

170 High Street (HS90)

78. HS90 <34> unfinished copper-alloy hooked tag with triangular plate, heavily corroded. No attachment holes or hook. 19 x 11 mm.

Brooches

Lower City

Flaxengate (F72; F74; F76)

79. F72 <ae23> rectangular copper-alloy ansate brooch with a pronounced bow in the middle. Transverse ribbed decoration. 49 x 16 x 6 mm. Similar to Weetch Type XI A. Belongs to broad 'caterpillar' type, with terminals that do not expand beyond the width of the bow, but different sub-type from published Coppergate examples (Mainman and Rogers 2000, 2571; Tweddle 2004, 456-7, fig 116). Parallel from Domburg (the Netherlands) published as Capelle 1976, table 5, no. 65. **Fig. 14c.**

80. F72 <ae296> polychrome enamelled copper-alloy disc brooch of so-called Kettlach-style; tenth century. Severely damaged. Diameter 43 mm. Ribbed border. Raised inner part (diameter 25 mm) with traces of polychrome enamel surrounding a bird-with-branch motif. Published separately as Ten Harkel *et al* in press. Found in eleventh- to twelfth-century levelling layer. **Fig. 15.**
81. F72 <ae302> flat copper-alloy *Borre*-style disc brooch of Kershaw's East Anglian group (Kershaw 2009, 319). Decorated with four symmetrical strands of knotted interlace emerging from a central lozenge. Catch plate and lug missing. Plate damaged. Diameter originally 32 mm; in current state 31 x 27 x 3 mm. Found associated with thirteenth-century road surface. **Fig. 13.**
82. F74 <ae184> convex copper-alloy disc brooch decorated in high relief, in possible devolved Torslev-style. Eleventh- or twelfth-century date. Decoration consists of central circle divided into three fields by raised cross-bars, surrounded by another concentric circle divided into twelve. Outside the second circle are twelve petal-shaped loops. Diameter 36 mm. Found associated with early to mid-twelfth century floor. **Fig. 19.**
83. F76 <ae107> copper-alloy ansate brooch with leaf-shaped terminals. 45 mm in length, 8 mm wide at each terminal, 5 mm wide in the middle, and 5 mm thick in the centre. Weetch Type XII Aii (Weetch 2013, 172, 250, fig 35), with a production centre in East Anglia. **Fig. 14b.**

Grantham Street (SW82)

84. SW82 <386> cast lead-alloy flat disc-brooch decorated with stylised curved-armed cross-design. At the centre of the cross is a pellet within a lozenge-shaped decoration with a double border. The curved arms of the cross are decorated with a ladder pattern. In each of the spaces between the arms are two raised pellets. Outer rim of brooch decorated with ladder pattern as well. Diameter 20 mm; thickness 1 mm. A small hole is visible next to one of the pellets between the cross-arms. Weetch Type 4C (Weetch 2013, 76-7, fig

3.11C). Included in Mann 1999, 156-7. Found in a post-medieval context. Identical to P70 <pb13> (**cat. no 85**). **Fig. 11b**.

The Park (P70)

85. P70 <pb13> identical to SW82 <386> (**cat. no 84**), although one of the pellets between the cross arms is missing. Previously published in Mann 1999, 156-7, fig 75, and Ten Harkel 2013a, 183, fig 11.7a. Unstratified. **Fig. 11a**.

Wigford

181–3 High Street (aka Holmes Grainwarehouse) (HG72)

86. HG72 <ae58> gilt copper-alloy flat disc brooch. Volute decoration reminiscent of Terslev style, consisting of four back-to-back C-shaped scrolls arranged in a cross-shape in low relief around a lozenge-shaped centre with an incised cross. Border plain. No sign of attachment fittings. 27.8 x 27.2 x 1 mm. Weetch Type 6 (Weetch 2013, 79-81). **Fig. 20**.

St Mark's Church (SM76)

87. SM76 <ae92> copper-alloy ansate brooch of so-called Lincoln Type, dated to seventh to ninth centuries. 80 mm in length. Weetch Type VII B (Weetch 2013, 155, fig. 29), with parallels from London, East Anglia, Lincolnshire and Yorkshire. Included in Vince 2003a, 154, fig 8.15. Parallel from Domburg (the Netherlands) published as Capelle 1976, table 6, no 67. Found in thirteenth-century pier base in north of nave. **Fig. 14a**.

St Mark's Station (ZEB95)

88. ZEB95 <442> copper-alloy convex disc brooch with *Jellinge*-style interlace decoration, dated to ninth or tenth centuries. Not cleaned/conserved. Attachment fittings include a third loop intended for suspension of beads, chains or pendants. 32 x 33 x 6 mm. Deposited in eleventh-century context.

Pendants

Lower City

Grantham Place (GP81)

- 89.** GP81 <44> copper-alloy openwork disc with plain border, dated to tenth or eleventh centuries. Not cleaned/conserved. Roughly circular. Decoration consisting of winged back-turned quadruped gripping border. Diameter 44 mm; thickness *c.* 5 mm. Protruding lug for attachment as pendant. Identical to P70 <ae171> (**cat. no 91**). Found associated with eleventh-century building phase.

Hungate (H83)

- 90.** H83 <455> gilded wafer-thin copper-alloy disc, possibly used as pendant. Damaged. Circular and slightly convex. Decorated with punched applied strips of gilt copper-alloy in a geometric pattern radiating out from centre in fake filigree effect. Diameter 17 mm. Unstratified. **Fig. 22.**

The Park (P70)

- 91.** P70 <ae171>) identical to GP81 <44> (**cat. no 89**), but cleaned. Damaged, missing a rear leg and adjacent portion of frame. Slightly convex. Diameter 40 mm; thickness *c.* 3 mm. Included in Mann 1999, fig 67 and Ten Harkel 2013a, 180, fig 11.5. **Fig. 12c.**

Wigford

St Mark's Station (ZEB95; Z86)

- 92.** Z86 <676> small lead-alloy pendant. Roughly circular. 18 x 20 x 1 mm, with 9 mm protrusion with square cross-section and pierced hole. Decorated with three concentric rings around a central pellet, with markings between them possibly representing garbled runes. Attachment protrusion decorated with parallel lines. Similar to miscast from York with runic inscription (Bayley 1992, 780, fig 340). Found in a late eleventh- to early twelfth-century pit containing a high percentage of tenth-century pottery. **Fig. 21a.**

Pins

Upper City

St Paul-in-the-Bail (SP74)

93. SP74 <ae120> polyhedral-headed pin with ring-and-dot decoration. Included in Roesdahl *et al* (1981, 51, C16).

Lower City

Flaxengate (F72; F76)

94. F72 <ae67> copper-alloy pin with plain globular head. Head 10 x 11 mm. Shaft broken; surviving length 11 mm. Circular cross-section *c.* 3 mm. Uncollared. Flixborough Type 100 (Rogers 2009, 33–4, 47). Parallels from *Hamwic*, the Anglian settlement at Fishergate, York and the earliest Anglo-Scandinavian layers at Coppergate (Hinton 1996, 14–21; Rogers 1993, 1361–3; Mainman and Rogers 2000, 2577). Unstratified.
95. F72 <ae197> copper-alloy wire-like pin with globular green glass head. Head 8 x 5 mm. Cone-shaped on top, tapering towards a central ridge, with flat base. Wire-like shaft is bent, *c.* 42 mm. Similar to MH77 <ae2> (**cat. no 98**). Parallels from Winchester (Biddle 1990, 556–7). From twelfth- to thirteenth-century building phase.
96. F72 <ae290> ringed pin of Fanning’s plain-ringed polyhedral-headed type. 94 mm in length. Head 6.0 x 5.0 x 6.5 mm. Front and back faces lozenge-shaped, decorated with four lozenge-shaped depressions arranged in cross-shape. Shaft 88 mm; circular cross-section 3 mm at the top, gradually tapering towards point. Uncollared. Diameter of undecorated ring 10.5 mm, with circular cross-section measuring *c.* 1.5 mm. Found in twelfth-century context. **Fig. 16a.**
97. F76 <ae64> copper-alloy pin with polyhedral head of rectangular cross-section, hexagonal facets on the sides and triangular corner facets, and a deeply stamped dot on each side. Head 6 x 7 x 4 mm. Circular shaft, diameter

2 mm. Bent, tip broken; surviving length 42 mm. No collar. Flixborough Type 221 (Rogers 2009), found in contexts spanning the middle and late Anglo-Saxon periods. Previously published (not illustrated) in Jones *et al.* 2003, 154. Found in early to mid tenth-century levelling dump containing much residual earlier pottery.

Motherby Hill (MH77)

98. MH77 <ae2> copper-alloy wire-like pin with globular opaque light brown glass head, speckled with pale greenish and blueish grey and mid-brown. Head 7.9 x 7.4 x 4 mm. Wire-like shaft bent, measuring 29.3 mm. Similar to F72 <ae197> (**cat. no 95**).

Steep Hill (SH74)

99. SH74 <ae144> copper-alloy bi-conical pinhead. Head 12 x 14 mm. Shaft broken; surviving length 4 mm. Circular cross-section of shaft 4 mm. No obvious medial band. Collared. Flixborough Type 310, of later ninth- to early eleventh-century date (Rogers 2009, 34, 55–6.). Found in association with residual late ninth- to early tenth-century pottery.

Butwerk

Broadgate East (BE73)

100. BE73 <ae164> ringed pin of Fanning's plain-ringed polyhedral-headed type. 91 mm in length. Head 6 mm x 5 mm; lozenge-shaped front and back faces decorated with four recessed holes arranged in a cross-shape. Shaft 86 mm long with circular cross-section, measuring *c.* 4 mm, gradually tapering towards point. Faint collar, *c.* 1 mm wide. Ring is rectangular in cross-section, *c.* 1.7 x 1.5 mm. Ring decorated with 7 recessed oval holes, each *c.* 1.5 x 1.0 mm. Found associated with a thirteenth-century building. **Fig. 16b.**

Wigford

St Benedict's Square (SB85)

- 101.** SB85 <64> copper-alloy pin with polyhedral head of square section, with lozenge-shaped facets on the sides and triangular corner facets. Decoration damaged by surface corrosion, but seems to consist of regularly spaced punched dots on the side facets. Head 4 x 4 x 4 mm. Length of pin 60.9 mm. Shank circular in section and swollen near head. Collared. Flixborough Type 232, of mid eighth- to eleventh-century date (Rogers 2009). Found in early to mid tenth-century context.

Other (casual find)

Nettleham Road (northeast of Upper City, outside early medieval walled town)

- 102.** *The Collection* <88.52> ringed pin, probably a crude version of Fanning's plain-ringed polyhedral-headed type (Fanning 1994). 99.5 mm in length. Head broad and slightly flattened, measuring 7.5 x 11.5 mm. Decoration consists of four evenly spaced circular depressions on each of the flat sides. Vertical narrow sides deeply indented (rather than perforated) to attach ring. Uncollared. Pin 86.5 mm long with oval cross-section of c. 3.5 mm, tapering to point. Ring plain with rectangular diameter and roughly circular, c. 18 x 22 mm. **Fig. 17.**

Rings

Lower City

The Collection

- 103.** Plain copper-alloy ring of circular-sectioned wire with knotted terminals. Described and illustrated in Mann 2009.

Flaxengate (F72, F74)

- 104.** F72 <ae203> plain copper-alloy wire ring, circular cross-section, c. 2.5 mm. 24 x 21 mm. Found associated with late twelfth- to early thirteenth-century building.

- 105.** F72 <ae250> plain copper-alloy wire ring. Found in late eleventh- to early twelfth-century pit.
- 106.** F72 <ae259> plain copper-alloy wire ring, circular cross-section, *c.* 2 mm. 23 x 20 mm. Associated with early to mid twelfth-century building T25.
- 107.** F72 <ae262> plain copper-alloy wire ring, circular cross-section, *c.* 2.5 mm. 22 x 20 mm. Found in late eleventh- to early twelfth-century layer.
- 108.** F74 <ae66> plain copper-alloy wire ring. Found in mid eleventh- to mid twelfth-century levelling dump.
- 109.** F74 <ae221> plain copper-alloy wire ring with knotted ends, square cross-section, *c.* 1.5 mm. 14 x 14 mm. Found in mid- to late eleventh-century context.
- 110.** F74 <ae470> plain copper-alloy wire ring with knotted ends, circular cross-section, *c.* 1 mm. 19 x 19 mm. From early to mid tenth-century context.
- 111.** F74 <ag3> plain copper-alloy wire ring with knotted ends, square cross-section, *c.* 1.5 mm or less. Damaged; originally *c.* 17 mm in diameter. From early to late tenth-century context.

Hungate (H83)

- 112.** H83 <733> plain copper-alloy wire ring, circular cross-section, *c.* 1.5 mm. 21 x 19 mm.

West Parade (WP71)

- 113.** WP71 <ae41> copper-alloy finger-ring formed from a tapering strip decorated with three parallel rows of punched decoration. Ring 12 x 16 mm in diameter; width of strip 5.5 mm or less, thickness less than 1 mm. Included in Mann 1999, 226, fig 109 (4). Found in late eleventh- to twelfth-century pit.

114. WP41 <ae55> plain copper-alloy wire ring, c. 13 mm in diameter.
Included in Mann 1999, 226, fig 109 (5).

Wigford

181–3 High Street (aka Holmes Grainwarehouse) (HG72)

115. HG72 <ae12> unfinished copper-alloy finger ring. Tapering strip less than 1 mm thick, broken into four pieces (8 x 2 mm, 6 x 3 mm, 12 x 4 mm and 16 x 4 mm). Found in early to mid eleventh-century context.
116. HG72 <ae50> unfinished copper-alloy finger ring. Tapering strip, 43 x 4.5 x <1 mm. Found in early to mid eleventh-century context.

Buckles

Upper City

St Paul-in-the-Bail

117. Silver Trewiddle-style buckle of ninth-century date, published in Vince 2003a, 151, fig 8.10.
118. Silver Carolingian buckle of ninth-century date, published in Vince 2003a, 151, fig 8.9.

Lower City

Flaxengate (F72; F74)

119. F72 <ae44> copper-alloy D-shaped buckle with associated buckle-plate. Undiagnostic, probably eleventh century or later. Buckle 17.5 x 13.5 mm. Top of buckle with segmented decoration. Buckle-plate consists of double copper-alloy sheet, 32 x 9 mm. Two of three boss-capped rivets still in place. Rivets 9.5 mm in diameter, 5.5 mm in height and their flat, circular top

measures *c.* 2.5 mm in diameter. Deposited in a twelfth-century levelling dump. **Fig. 25.**

120. F72 <ae297> copper-alloy D-shaped buckle; part of the pin still attached to the bar. Romanesque zoomorphic decoration with two animal heads in profile facing each other, biting the bar. Buckle loop segmented with incised ribbing. Eleventh or twelfth century date. 27 x 21 x 4 mm. **Fig. 26.**

121. F74 <ae346> copper-alloy D-shaped buckle. Undiagnostic type. Damaged, broken in three pieces. Whole object 30 x 26 mm. Incised radial decoration. Associated with eleventh-century building T20.

Michaelgate

122. Ninth-century copper-alloy buckle with a triangular buckle-plate, published in Vince 2003a, 153, fig 8.14.

Wigford

St Mark's Station (ZEB95)

123. ZEB95 <443> copper-alloy D-shaped buckle in *Borre*-style, with an animal head with a rounded snout, beady eyes and looping ears on the lip. Not cleaned/conserved. Buckle 33 mm x 29 mm; buckle plate measures 25 x 24 mm x 10 mm. Traces of iron pin remain as corrosion near the buckle plate. Found in a ninth- to tenth-century layer.

Strap-ends

Upper City

St Paul-in-the-Bail

124. Silver Trehwiddle-style strap-end of ninth-century date, published in Vince 2003a, 151, fig 8.10.

Wigford

181–3 High Street (aka Holmes Grainwarehouse) (HG72)

- 125.** HG72 <ae5> copper-alloy strap-end of Thomas Class B, type 4 (multi-headed strap-ends), similar to Thomas cat no 1009 from York (Rogers 1993, 1351, fig 652, 5320). 51 x 11 x 4 mm. Published as Steane et al 2001, 130, fig 8.33. Found in an early to mid eleventh-century dump.

Mounts, studs and strap-loops

Upper City

Castle Westgate (CWG86)

- 126.** CWG86 <106> rectangular copper-alloy stud with zoomorphic gilt inlay decoration. Object 34 x 18.5 x 2 mm; protruding stud on reverse with circular cross-section of *c.* 5 mm, and *c.* 10.5 mm long. Decoration depicts two symmetrical beasts with intertwined tails, ribbon-like bodies and back-turned heads facing each other, inside a 2 mm wide twisted rope-like decoration. Animal heads display certain similarities to those on the eleventh- to twelfth-century Sutton Brooch (Wilson 1964, pl. 83). Residual, from a modern levelling layer. **Fig. 23.**
- 127.** CWG86 <1384> decorative copper-alloy stud, possibly part of horse harness gear, with traces of gilding, formed of four hollow lobes. 31 x 27 x 17 mm. Heavily corroded.

Lower City

Danes Terrace (DT74)

- 128.** DT74 <ae108> copper-alloy openwork mount in eleventh-century Scandinavian-derived insular *Urnes*-style. Sub-rectangular, measuring 62 x 31 mm. Openwork decoration executed to high level of craftsmanship, incorporating five intertwined animals with fine tendrils and canine heads. Separately published as Owen 2001. Found associated with high to late medieval building phase.

Flaxengate (F72)

- 129.** F72 <ae234> irregularly shaped copper-alloy strap-loop. Decorated with simple incised parallel lines. 19 x 18 x 2 mm. Included in Ten Harkel 2013a, 185–6, fig 11.8; 2013b, 167–8, fig 4a. Found in late eleventh- to early twelfth-century pit.
- 130.** F72 <ae243> square-headed copper-alloy stud with crude geometrical decoration and traces of gilding. Convex head, 7 x 6.5 mm; length of stud 7.5 mm. Eleventh or twelfth century; found in a mid-twelfth to mid-thirteenth-century levelling dump. **Fig. 24a.**

Saltergate (LIN73)

- 131.** LIN73 <44> copper-alloy stud with convex head and incised geometric decoration. Head 14.5 x 13 x 5.5 mm. Stud *c.* 20 mm long, with square cross-section; diameter *c.* 3 mm but tapering towards tip. **Fig. 24b.**

Other (casual find)

- 132.** BM <1867,0320.20> openwork copper-alloy stirrup mount with a zoomorphic pattern, sub-triangular in shape and decorated with niello. Full description of the object available on http://www.britishmuseum.org/research/collection_online/collection_object_details.aspx?objectId=65239&partId=1. Included in Wilson 1964, 167-8.

Bells

Lower City

Flaxengate (F72; F76)

- 133.** F72 <ae166> well-preserved copper-alloy hexagonal bell with cusped bottom. 32 mm in height; bottom diameter *c.* 29 mm. Clapper missing. Ring-

and-dot decoration along cusped bottom and near attachment loop. Included as *Flaxengate 1* in Richards and Schoenfelder 2011, 164. Found in fourteenth- to fifteenth-century deposit containing much residual twelfth-century material.

- 134.** F76 <ae72> damaged copper-alloy hexagonal bell with cusped bottom. 30 mm in height; bottom diameter *c.* 29 mm. Heavily corroded iron clapper inside. Attachment loop broken off. Corrosion too heavy for decoration to be visible. Included as *Flaxengate 2* in Richards and Schoenfelder 2011, 164. Found in tenth-century context.

Wigford

181–3 High Street (aka Holmes Grainwarehouse) (HG72)

- 135.** HG72 <ae49> complete copper-alloy hexagonal bell with cusped bottom. 29 mm in height; bottom diameter *c.* 23 mm. Iron clapper corroded but still present. Double row of ring-and-dot decoration along cusped lower edge. Attachment loop measuring 7 x 6 mm separated from bell by a 2 mm wide collar. Included as *Wigford 1* in Richards and Schoenfelder 2011, 165. Found in eleventh-century context.

St Mark's Station (Z86)

- 136.** Z86 <82> complete hexagonal copper-alloy bell with cusped bottom. Published as Vince 2003b, 296, fig 9.122; drawing suggests it was undecorated. Included as *Wigford 2* in Richards and Schoenfelder 2011, 165. Residual find from much later context.

Miscellaneous

Lower City

Grantham Place (GP81)

- 137.** GP81 <57> iron-plated hasp or hinge, possibly for a box, with rough zoomorphic terminal decorated with silvery lines. 71 x 22 mm. Corroded

remnants of two iron attachment bands run across the object, both *c.* 15 mm wide. Found in earlier eleventh-century levelling layer containing tenth-century pottery. **Fig. 18.**

Hungate (H83)

- 138.** H83 <269> possible copper-alloy stylus-fragment, representing the splayed terminal (eraser) with short length of stylus still attached. Heavily corroded. 34 x 12 mm. From early to mid eleventh-century pit. **Fig. 2.**