The geographically widespread secondary sceatta issue of Series J (Fig. 1) has consistently presented difficulties in mint attribution. Suggested locations for potential mints range from Kent through the Midlands into Northumbria, although none have been seen as providing conclusive evidence to secure their case. Michael Metcalf made the most recent suggestion, of a Northumbrian origin, over a decade ago. He argued this on the combined grounds of its overall distribution, iconography, occurrence in relation to other secondary phase types in the possible areas of origin, and the perceived gap in minting between the issues of the Northumbrian kings Aldfrith (684–705) and Eadberht (737–58). In my own work I have previously supported his conclusions. This was based around two factors: first, Series J is the most abundant secondary phase issue found in the area between the Humber and the Tees; and second, it was the most common secondary phase type from the Fishergate excavations in York. Remains of a regionally important trading/production settlement were uncovered there with its most active phase of settlement spanning the early to mid-eighth century. Such settlements may have gone hand-in-hand with the minting of coinage (as seen, for example, for Series H at Hamwic, Series R at Ipswich and Series L at London).

The period since Metcalf’s proposal has witnessed a massive increase in the numbers of finds known, mostly through the links built up between metal-detectorist groups and archaeologists/numismatists. One hundred and seventeen finds of Series J coinage are now known from England, more than double that available to Metcalf in the early 1990s, and it is now possible to give further consideration to the origins of the series.

Series J is the amalgamation of Types 36, 37, 60, 72 and 85. Of these, Types 37 (46 finds, 39 provenanced) and 85 (29 finds, 27 provenanced) were large-scale issues, and Type 36 (20 finds, 17 provenanced) moderately substantive. Types 60 (2 finds, neither provenanced) and 72 (9 finds, all provenanced) are much less common. Metcalf argued that Types 37 and 85 were produced at the same mint in Northumbria and suggested that Type 36 shared this origin from its level in the make-up of Northumbria’s overall secondary sceatta assemblage. Type 72 was less clear, and Metcalf preferred a Low Countries source which borrowed the Type 37 obverse, rather than seeing Type 72 as a member of a related series of English coinages. Given the wide distribution of the types, the crux of Metcalf’s argument, especially relating to Types 37 and 85, lay in the
Fig. 1. The distribution of all finds of Series J in Britain.

stylistic analysis of the obverse iconography. He argued that Type 85 was a royal issue, with Type 37 a contemporary issue by king and bishop. Although a reasonable interpretation, Metcalf himself admitted that this did not necessarily lie easily with the political history of early eighth-century Northumbria.\textsuperscript{11} Indeed, it has been pointed out that, if this was the case, the length of the entire issue may have had to be as short as two years.\textsuperscript{12} In addition, Archibald found it difficult to accept that Series J could be attributed to York given its very different style when compared to both the preceding coins of Aldfrith (684–705) and the subsequent issues from Eadberht (737–58), both of which share stylistic elements and carry a regal signature.\textsuperscript{13} Gannon, in fact, has interpreted the beasts found on the reverses of these Northumbrian coins as lions and suggested that that they may be seen as some form of 'royal badge'. If correct this would also make the attribution of Series J to York difficult.\textsuperscript{14} The notion of the royal/ecclesiastical link to Type 37 is

\textsuperscript{11} Metcalf 1994, 344.
\textsuperscript{12} Pirie 2003, 72.
\textsuperscript{13} Archibald 1997, 152.
\textsuperscript{14} Gannon 2003, 125–7.
also discounted in Gannon's analysis, in that this imagery is generally considered apotropaic rather than overtly political, and there is little reason to expect Type 37 to be any different.\textsuperscript{15} Finally, a recently discovered sceat of Offa shows a whorl of four birds around a cross in a similar manner to that seen on Type 37, which may indicate that this at least may be more suitably placed within the remit of issues made south of the Humber.\textsuperscript{16} Overall, the attribution of Series J to York on stylistic grounds is insecure and cannot form the core argument in any discussion of mint place. We must now turn to the distribution evidence.

Figure 1 attests to the widespread nature of Series J, with a discernable concentration of findspots along the Humber corridor and a general correlation with the Rivers Trent and Great Ouse. In addition, Series J is well known from the Midlands, a situation which has previously suggested a southern Midland origin.\textsuperscript{17} However, although a widespread issue, variation in distribution by type may hold further clues to their origin. There is no reason to suppose that the individual types making up Series J need necessarily have come from the same mint, although they do appear to be stylistically related.\textsuperscript{18} In the period since Metcalf suggested a Northumbrian origin, the steady increase in numbers of finds has fleshed out the distribution pattern of each type, although, notably, the numbers north of the Humber are little affected, with the exception of the finds from Fishergate. The new finds, alas, offer few additional clues to their mint place, being an even mix of Types 36, 37 and 85. The three substantive issues (Figs 2–4), Types 36, 37 and 85, remain widespread, although the concentration of Type 85 along the south bank of the Humber and along the Lincolnshire coast is a new feature. Most new finds of Type 36 are in the corridor from south Lincolnshire to Norfolk. Type 37 shows little overall change in its distribution, being widely found east of the Pennines down to the southern Midlands. Type 72 (Fig. 4) remains unknown north of the Humber, but a few more finds have been made in the southern Midlands. When considering this data mention must be made of the relatively high numbers of possible imitative coins that have been found.\textsuperscript{19} These are concentrated in the southern and eastern Midlands, and around the south coast from Southampton to Essex. They account for a high proportion of the total finds of Series J in these areas. Further north, in Lincolnshire, a few possible imitations are known, but they form a very low percentage of the total finds there. Even taking account of the possible imitations these distributions are little more helpful in assessing mint location than they were ten years ago. It would, though, seem more likely that Types 37 and 85 can be placed somewhere either immediately north or south of the Humber (if the latter, somewhere in Lincolnshire on this evidence).

One of Metcalf’s strongest arguments for the Northumbrian origin of Series J was his calculations regarding proportions of Series J compared with finds of other contemporary coinages.\textsuperscript{20} At that time, Series J made up the overwhelming majority from York itself and his conclusions were realistic. With the large increase in the numbers of known finds it is informative to repeat these calculations. In Yorkshire Series J now accounts for 22.5\% of the total contemporary coin assemblage, 41.9\% of the total for English issues and 58.3\% of those from the city of York. In Lincolnshire, Series J accounts for 17.6\% of all contemporary issues, and 32.4\% of English issues.

At first glance Northumbria may perhaps appear a more acceptable minting location than Lincolnshire, but in neither case is the evidence overwhelming. Here it may be instructive to undertake regression analysis on the data.\textsuperscript{21} Figure 5 shows the regression analysis for Series J as a whole, exhibiting the greatest proportion within the area from York to southern Midlands along

\textsuperscript{15} Gannon 2003, 38–9.
\textsuperscript{16} Archibald and Dhein 2004, 21–7; Gannon 2003, 110–11.
\textsuperscript{17} Metcalf 1977.
\textsuperscript{18} Metcalf 1994, 342–3.
\textsuperscript{19} All of the data regarding imitations have been taken from individual entries on the EMC database. Coins are listed as potentially imitative if they are stylistically inconsistent with most finds, are made of base metal, or are made of base metal cores plated in silver.
\textsuperscript{20} Metcalf 1994, 358–61.
\textsuperscript{21} This follows Metcalf’s argument that by plotting a certain coin type as a proportion of the total contemporary assemblage, its region of origin should become apparent (see, for example, Metcalf 2000). The method here is a slight variation on Metcalf’s, using grid squares of 625 km\(^2\) (25 \times 25 km). Likely imitations were not included in this analysis.
the line bounded by the Rivers Trent and Great Ouse. The outliers in the south-east represent very few finds, which as good as precludes mint attribution to these areas. Within the main focus, the central and southern Midlands exhibit relatively high proportions, although we should take note of the overall numbers of finds made there in comparison to Lincolnshire. The area including York is the only place north of the Humber which reliably produces a density above 0.25. The evidence from Lincolnshire would appear to be most compelling. Within Lincolnshire, there is a zone of highest density running parallel with the coast from the Humber to the edge of the fenland, roughly equating with the kingdom of Lindsey. Another region of high density lies within a central area bordering the eastern edge of the fens.

Regression analysis for individual types provides less certain results owing to the smaller number of finds. Type 37 (Fig. 6) certainly seems to fit into Lindsey, given that imitations are most prevalent in the southern Midlands, and the overall lower levels of finds north of the Humber. Type 85 (Fig. 7) again seems to home in on the Lindsey region. Type 36 (Fig. 8) is not particularly clear, but is only found with a reliable density in excess of 0.1 in the southern half of the Lincolnshire to the Wash region, with the exception of York. The high density seen in Cambridgeshire is a statistical anomaly relating to a single find in an otherwise blank area. The
small number of finds of Type 72 inspired little confidence, although it is strongest in the southern Midlands, but there were too few finds to undertake meaningful regression analysis. However, given that it is relatively well represented among the Domburg finds, a Low Countries attribution may be more appropriate, as argued elsewhere.22

Overall, the combined analyses of finds distribution, finds concentration and regression analysis have highlighted certain patterns in the data. These all point towards an origin for Types 37 and 85 in the Lincolnshire/Lindsey region, with Type 36 also likely to be from this area. There are not yet enough finds of Type 72 for it to be evaluated satisfactorily. The concentration of finds in York is not matched elsewhere north of the Humber and can be explained on archaeological grounds, given the argument above. The excavations at Fishergate (York) showed that York had strong links with Lincolnshire. Around a quarter to a third of the pottery in each phase at the site is of a shell-tempered fabric with a Lincolnshire provenance, and as such must represent traffic from there moving northwards.23 It is possibly indicative of the trade in salt, likely to have been an important

product from the Lincolnshire coast and fenland during the period. It is not unreasonable to suggest that the relatively large numbers of Series J coins found in York are a result of this trade.

Nevertheless, the attribution of Series J to Lincolnshire is not without its problems. The incidence of the series at the region’s most prolific pre-Viking sites, Flixborough (53 coins), South Lincolnshire (67 coins) and Torksey (44 coins), is surprisingly low. Only single finds of Series J have been found at Flixborough and South Lincolnshire, and none at Torksey, with continental intermediate phase sceattas dominating the contemporary assemblages (15 at Flixborough, 30 at South Lincolnshire, and 7 at Torksey), as they do across Lincolnshire. However, English secondary phase sceattas are not frequently found at any of these sites: one of five contemporary English coins at Flixborough, one of eight at South Lincolnshire, while all the sceattas at Torksey were of continental derivation. This may indicate that Series J’s core area was more centrally located in Lincolnshire, or that its use was predominantly within the internal economy of the region. Alongside this, the possible area of origin approximately equates with the Anglo-Saxon kingdom of Lindsey, which was firmly within the political orbit of its powerful neighbour Mercia.

by the later seventh century, and this situation continued until the ninth-century Viking incursions. The origins of the coinage must, therefore, be sought within the remit of Mercian hegemony in the early eighth century.

The chronology suggests that all types of Series J were minted during the period 710–25, although definition between types has not yet been achieved. Types 37 and 85 certainly appear contemporary, however, given their presence together in three separate hoards. This places the coins within the reigns of the Mercian kings Ceolred (709–16), Ceolwald (716) and Æthelbald (716–57). We know that during Æthelbald’s reign the consolidation of Mercian power seems to have been such that surrounding kingdoms were absorbed into the Mercian realm. Unfortunately, the documentary record remains almost totally silent on the reigns of Ceolred and Ceolwald, and little can be inferred, although it is most likely that Lindsey was under Mercian dominance throughout the period, losing any independence after the late seventh century. The status of Lindsey’s royal line is also unclear, and it probably disappeared at an early date.

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26 Metcalf 1994, 364: at Fishergate (York), a grave at Garthorpe-on-the-Wolds (Yorkshire), and Fohr (Jutland).
28 Yorke 1990.
29 Foot 1993.
30 Yorke 1990, 113.
credible, therefore, to expect that minting of coins and regulation of trade was firmly under the aegis of the Mercian overlords. If Mark Blackburn was right to assert that ‘Lindsey was one of the wealthiest regions of England in the eighth and ninth centuries’, then full economic control and regulation would no doubt have been a Mercian priority.

An interest in the regulation and exploitation of trade is known from Æthelbald’s reign. The survival of charters relating to the remission of tolls for religious houses in Worcestershire and Kent at the ports in south-east England attests to the importance afforded to the proper regulation of economic activity. Although there are no such textual sources relating to Lincolnshire, the Rivers Humber and Trent would have been potentially important entry points for goods into Mercia via northern areas, with the Rivers Great Ouse and Witham or overland routes from the Wash and fens serving the same role in the south. The regulation of trade in these areas would have been warranted, especially given the number of artefact-rich sites, including Flixborough, Quarrington and Riby Cross Roads, which illustrate the wealth of Anglo-Saxon Lincolnshire.

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1 Blackburn 1993, 83.
33 Ulmschneider 2000, 54 fig. 1.
34 Taylor 2003; Ulmschneider 2000, 63–72 and 55 fig. 2.
The minting of coins here would not be out of place, and Lincolnshire is a rich source of early eighth-century coin finds. Within such an environment local minting would be an important part of any strategy of economic control by the emergent Mercian state, with reminting of imported coin into local issue a useful source of revenue. The lack of a known urban centre or wic does not necessarily hinder such an interpretation, but more likely reflects different means of economic organisation. In addition, the distribution pattern shown by Series J fits more comfortably into ideas regarding Mercian hegemony than a Northumbrian origin, and also provides a plausible reason for the high level of imitations. Metcalf suggested that the coins spread out from York to the south and into Mercia via rivers and roads. However, given that the issues of kingdoms of similar status (Series R in East Anglia, Series H in Wessex, and the later Northumbrian issue, Series Y) are very much more restricted than Series J, placing the origins of the issue within the remits of Mercian hegemony would appear to be more appropriate than with a lesser authority such as Northumbria.

As seen on the EMC (see above, n. 5).
Naylor 2004a, 122–33; Naylor 2004b.
Metcalf 1994, 341.
Fig. 8. Regression analysis for all finds of Type 36. The contours are at intervals of ten per cent.

If indeed the origins of Series J did lie in Mercian ambitions, what would have been Mercian interest in Lindsey? It may prove to be a combination of the region’s location and its productive potential. Archaeological evidence from both north and south of the Humber, from sites including Beverley, Fishergate (York), Flixborough, and Riby Cross Roads, has shown that long-distance trade along the Humber corridor was active throughout the period. The finds of coinage made along the Trent and the Great Ouse into the Mercian heartland attest to the region’s potential importance to its neighbour and its economic significance in Mercian affairs. That such a link is rarely made may be due to a general bias in research towards Mercia’s relationship with south-east England, especially London, owing to the city’s importance, its steadily increasing levels of archaeological evidence and the survival of a number of documentary records. There is no reason to suppose that some imports did not enter the Mercian heartlands via the Humber and Trent rather than through London and the Thames.

Lincolnshire’s resources included two very valuable commodities: salt and wool. There are, of course, the famous salt pans at Droitwich (Worcestershire), of well-documented importance, and it is known that ownership of land at salt production sites was highly sought after. The

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39 Malcolm, Bowsher, and Cowie 2003. For example, many of the papers relating to economic aspects in Brown and Farr 2001 are more concerned with Mercia’s relationship with London and the south-east than with its other territories.
40 Whitelock 1952, 115–16.
Lincolnshire fenland and coast have also been centres of salt production since at least the Iron Age. By Domesday, over 260 salt pans were documented in the county, and ancient saltways are known from the area. Although there is no certain evidence for eighth-century salt working in Lincolnshire, the longue durée of the industry makes it unlikely that there was a hiatus in production of such an important commodity in the post-Roman period. Another factor relating to the potential importance of Lincolnshire to Mercia is the possible status of Droitwich in the eighth century. The excavations at Upwich, the most important of the area's salt pans, showed that the mid-late seventh-century salt working was covered by thick alluvium, deposited in a large number of episodes during the eighth century. This indicates that the river had become prone to major inundations during the period, and attempts were made to control its course with revetments built along the bank. Although we cannot be certain what effect this flooding had on overall salt production at Upwich, it may have resulted in the Mercian elite having to look elsewhere for adequate supplies, and Lincolnshire would provide an ideal candidate.

Wool and textile production was also becoming a major commodity in middle Saxon England. In areas such as Lincolnshire it was, by the later medieval period, one of their most important export materials. Analyses of excavated sheep bones have indicated that there were changes on a number of sites across the country towards intensive rearing of sheep for surplus wool production. Within Lincolnshire, this appears to be the situation at both Quarrington and Riby Cross Roads by the early eighth century, and large numbers of tools for textile manufacture were found at Flixborough, although whether large-scale production appears quite early at the latter is uncertain. However, that sheep rearing was an important part of Anglo-Saxon animal husbandry is unquestionable, with wool and textile manufacture an important part of the region's rural economy. Again, local minting would have aided in the exploitation of this activity through the payment of tolls on these goods as they were transported around the region.

There may, therefore, have been a keen interest in the exploitation of Lincolnshire by Mercian royalty for its natural resources (including salt), its potential regarding surplus production, and its easy links to the North Sea and networks of long-distance coastal trade. In such an environment, minting of coins in Lincolnshire is a likely outcome of the political and economic interest in and dominance over the kingdom of Lindsey. However, if the coins were minted in Lindsey itself it is not easy to suggest with any confidence a potential mint location. Archaeological evidence for Anglo-Saxon Lincoln supports Bede's assertion that there was an important ecclesiastical presence in the city, but there is scant information regarding secular or commercial activity and no reason to assume minting took place there. Alternatively, it is entirely plausible that minting could take place in a rural location, most likely at a royal villa. By the late seventh/early eighth century a well-defined settlement hierarchy was developing across England, with royal estates and monasteries becoming important central places, and the minting of coins in such an environment is not out of the question. Within Lincolnshire there are a number of excavated sites that could have fulfilled such a role, located on main routeways and exhibiting evidence for long-distance contacts, and economies based on surplus rather than subsistence production, including Flixborough and Riby Cross Roads in northern Lincolnshire and Quarrington further south.

To conclude, Types 36, 37 and 85 certainly appear to be attributable to northern or central Lincolnshire and as such can still be usefully grouped together. However, Type 60 remains of

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41 Lane 2001, 154; Fenwick 2001; Sawyer 1998, 15; Ulmschneider 2000, 70.
43 Ulmschneider 2000, 73.
44 Crabb 1996.
46 The nature of toll payment in Middle-Saxon England is somewhat unclear owing to the general lack of documentary sources on the subject, although it is certain that tolls were levied (see, for example, Kelly 1992). Continental sources indicate that agricultural produce was one of the types of goods on which tolls were levied (Wood 1994, 215–16).
47 Stow 1316; Vince 1993.
49 Ulmschneider 2000; Taylor 2003. I should point out that I am not necessarily advocating any of these sites as actual mint places, but they show that rural sites which may be interpreted as central places did exist in eighth-century Lindsey, and so the notion of minting at a royal villa in the region is not implausible.
unknown origin and Type 72 probably originated from the Low Countries. As a result we should perhaps question whether these Types should still be included in Series J, which may need to be redefined as comprising only Types 36, 37 and 85. If so, the origins of Series J can be placed within the remit of a Mercian-dominated Lindsey on the combined grounds of geographical, historical and archaeological evidence.

REFERENCES