DETERMINING THE MINT-ATTRIBUTION OF EAST ANGLIAN SCEATTAS THROUGH REGRESSION ANALYSIS

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The East Anglian sceattas of Series R have been classified into a dozen varieties, R1 to R12, with declining silver contents, and the question arises whether they should all (oddsities excepted) be attributed to a single mint, and if so where, or whether there might have been more than one mint in East Anglia, striking coins of essentially the same type concurrently, as a coordinated exercise of what was in any case doubtless royal power. The only way to approach this question (in principle, there is no other way) is to study the circulation of the various stylistic groups within East Anglia, with a view to detecting any signs of localization, such as might point us towards the locality where a variety was concentrated, and where presumably it was minted. Miss Archibald has led the way with this technique by mapping the different issues of King Beonna, drawing attention to Thetford as well as to Ipswich or its region as probable mint-places. We should be well advised to bear this slightly later evidence in mind, on the presumption of continuity. At the earlier end of the sceatta series, we have some evidence of the localization of royal power in the Sutton Hoo ship burial, on a bluff overlooking the town of Woodbridge across the Deben estuary; and not far away, archaeologists have explored the early history of the trading wic of Ipswich. Thus, from a date before the introduction of sceattas, there seems to be a power base in the southeastern quadrant of East Anglia. From the period of the sceattas, however, there are surprisingly few useful topographical indicators within East Anglia to help us interpret the political geography of the coinage, other than the coins themselves. The number of places within East Anglia mentioned by Bede is very limited, and the whereabouts of some of those, even, are not quite certain.2

The evidence of thrymsa and sceatta finds from East Anglia is denser than from any other major region of England. Finds are recorded from at least 131 localities scattered thickly all over Norfolk and Suffolk (and the total is growing year by year). The list includes some 214 primary sceattas and 323 secondary sceattas. This distribution is shown in Fig. 1, where each dot represents a locality, e.g. a parish. The numbers beside the dots show that more than one coin has been found in the locality, although not necessarily on the same site. All these finds are single finds: hoards have in principle been excluded. The map includes a few additional recent finds in Norfolk and Suffolk, plus a dozen finds from that part of Essex which falls within the map area. Similarly, finds from the western borders of East Anglia, in the Fenlands, have been mapped, for reasons that will become clear.

The large number of recorded sites is in itself an argument that the use of sceattas was widespread. Historians and archaeologists have often been reluctant to recognize the possibility of a monetized economy in the eighth century. Williamson, for example, in his thorough and judicious book, The Origins of Norfolk,3 says that 'The earliest Middle Saxon coins seem to have been used for high-level exchange within elites, for the payment of tribute or the purchase of foreign commodities, but the sceattas appear to have been more widely employed. Large quantities recovered from outside the walls of the Roman forts of Burgh Castle and Caister-on-Sea perhaps indicate the sites of fairs ... Sceattas have also been found on a large number of rural sites, including Tibenham, Cockley Cley, Watton, Harling, and Costessey ... Nevertheless we should not exaggerate the extent to which market exchange impinged upon Middle Saxon society in Norfolk ...

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many goods appear to have moved through the medium of social relationships rather than by market exchanges ..." Virtually every clause of the passage just quoted makes a judgement which might or might not be true, but for which it is difficult to see how there could be any surviving evidence. In terms of eighth-century evidence, how would goods that had moved through the medium of social relationships look any different, in the archaeological record, from goods which had entered a monetary market? In response, one may say that the argument for monetization rests generally on a ‘double whammy’ or combination of an assessment of the quantities in which sceattas were struck (through die-estimation), plus an assessment of how they circulated (through an analysis of distribution patterns). Ten years ago, when Williamson was writing, there was perhaps more justification for what he said. Since then, the Coin Register has added annually to the evidence. By definition, not all these 131 sites in Norfolk and Suffolk are special sites: people were accidentally losing the odd coin in places all over East Anglia.
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The raw numbers should not, of course, be used to judge the relative importance in monetary terms of different places. The totals shown in Fig. 1 are to a large extent influenced by the intensity of searching. Certain sites have been very productive, prompting the hypothesis of centres for the exchange of goods which were not necessarily at or near settlements. Some of these may have been periodic fairs, held in what was otherwise probably just open pasture land.4

Explanation of the method. The diversity in the numbers of finds from each locality makes it difficult to visualize, from Fig. 1, how relatively plentiful any particular variety is in different parts of East Anglia, from a simple map showing where that variety has been found. In order to overcome that problem, a method of presentation of the data has been developed, which is a kind of rolling or over-all regression analysis. One places a transparent overlay on the map, with a circle representing, for example 1,000 square kilometres. Part of such a circle is shown on Fig. 1, to give an idea of its size. If \( \pi r^2 = 1,000 \), \( r = 17.8 \) km, or about 11 miles. Selecting a suitable position on the map, one counts up the number of finds (not the number of dots!) which fall within the circle, and similarly the number of finds of the variety being studied, to obtain a ratio or percentage. This is a measure of how plentiful the variety was in that general locality. One repeats this procedure numerous times, moving the circle about to give a thorough coverage of the map. As a refinement, it is better to do this exercise separately for primary and secondary sceattas, because the monetary picture may have changed between the two phases — or at least, one does not know that it did not.

Figs 2–4 below use a data-base of secondary sceattas only. Because East Anglia is so thickly covered with finds, one ends up with a map covered with percentages at specific points (the centre of each position of the circle), from which one can, reasonably objectively, draw lines analogous to the isobars on a weather forecast map. (When a version of this paper was presented at a BANS Weekend at Hertford College, Oxford, there was some light-hearted discussion whether the ‘isobars’ should be called isonums or sceattabars. As regards the term isonums, it is important to be clear that the lines do not join points where an equal number of coins have been found, but rather where the ratio in question is equal.) The data-points have been left on the maps, so that the reader may judge for himself or herself whether the ‘isobars’ are a fair interpretation of them.

The resulting maps, if we are prepared to read them closely, tell us interesting things about how different sceatta varieties circulated differently in East Anglia, and create an idea of regionalism within the kingdom, which certainly could not be obtained from any written sources of the eighth century, nor, one suspects, from archaeological exploration. What exactly each map portends is a matter for interpretation, because the percentages reflect the ‘competition’ between various sceatta types circulating in a locality, which is a complex balance, rather than just providing information about one type. In general, one might expect a type to be at its most plentiful (percentage-wise) at and near the place where it was struck, declining as one goes further afield. This is the classical version of regression analysis. The method may be useful, therefore, for discovering the places where the East Anglian mint or mints were located. In principle, our ‘isobars’ will only point to the general locality; but within that locality, it may seem obvious from general considerations where the mint-place lay, e.g. in the Gipping valley one might look to the wic of Ipswich.

The percentages, obviously, will be subject to margins of statistical imprecision. The size chosen for the data-gathering circle, which does not affect the general result, is a practical compromise between having enough finds within each circle to be statistically acceptable, and topographical precision. Actually, as far as one can see, one could mix data from circles of different size on the same map without affecting the validity of the data, but that refinement has not been attempted.

In practice, the way forward is through discovering contrasts between the map for one variety and that for another. These will give clues to the character of monetary affairs. In interpreting the maps, it seems clear that experience counts. The present study of East Anglia in the secondary phase of the sceattas is a pilot study for a major project, on which the writer is working, to synthesize

Fig. 2. Percentages for Series QI–III as a proportion of secondary sceattas, with suggested 'isobars' based on the percentages. Each data point is at the centre of a 1,000 km² circle. The 'isobars' have been drawn at proportional intervals of half as much again, as shown in the inset diagram.

the same kind of evidence for the whole of England and the whole period of thrymsas and sceattas - a book, in fact, about monetary circulation in England in the seventh and eighth centuries.

Commentary on Fig. 2 (Series QI–III). Fig. 2 shows the 'isobars' for Series Q, Types 1–III, which (as we already knew) are concentrated in west Norfolk. Regression analysis improves the quality of the evidence by quantifying the difference between west Norfolk (16–18 per cent) and the Ipswich area (7 per cent): the former more than twice as plentiful. The map shows a 'plateau' tilting gently southwards from 19 per cent, to 16 per cent in the Thetford region. One must remember that the evenness of the dozen data points shown is partly due to the smoothing effect of the circle size. In the broader view, however, the contrast between the four quadrants of East Anglia (NW, NE, SW, and SE) is dramatic. The map reveals that the 'edges' of the plateau are cliff-like, the proportions falling apparently quite abruptly to zero, both southwards and eastwards. Again, one must not push the data too hard, but in so far as this is a fair representation of the facts, it seems almost unnatural. From what we know of settlement patterns, soil types, etc., there were no natural barriers to monetary circulation within the zones indicated (except, perhaps, the Brecklands). Could the barriers have been in some sense political? - And yet coins of Series Q were acceptable
in the currency of the Ipswich area, where they fetched up in some quantities. Given that at least three-quarters (we may guess) of the output of the Q mint stayed within East Anglia, the volume of monetary transfers from the NW to the SE quadrant can be envisaged, very roughly, in terms of the output of an estimated number of dies. There were corresponding, and perhaps even larger, transfers of Series R in the opposite direction.

The mint-place of Series QI–III, within the west Norfolk orbit, is a mystery. It is likely to have been a wic with access to the sea, via the Wash, but where it was is puzzling. Various places, including Wisbech, Hey Green, Castle Rising, Burnham, and Ely have been canvassed. Ely (suggested by John Newman), is mentioned by Bede as lying ‘within the province of the East Angles’; it is marked on Fig. 1. Because the distribution-patterns shown in Figs. 2 and 3 (below) suggest that the core of the west Norfolk circulation area lay at its northern end, and stopped well short of Thetford, it might be argued that one should be looking for a more northerly location for the mint, e.g. in the vicinity of Castle Rising, or even (as Andrew Rogerson has suggested) at a wic at Burnham.

The implication of the reversed gradient half-way between west Norfolk and east Suffolk (16; 5; 7) would seem to be that sums of money were carried directly from wic to wic – and that from Ipswich coins of Series Q diffused back in a north-westerly direction.

The cut-off westwards from Norfolk is less precisely defined, because there are (unsurprisingly) few finds recorded from the northern Fenlands, until one gets as far west as Spalding. The percentages of 67 in fact merely mean that two secondary sceattas out of three are of Series Q. One of these is the mysterious ‘L. Sutton’ find, which may be from Long Sutton, and the other is from West Walton, just north of Wisbech. In principle, of course, the ratio Q/all secondary sceattas should be the same however small the total numbers, subject only to the wider margins of statistical uncertainty. Even one new find would alter the percentages significantly. In practice, an added problem is that the data-gathering circle, when it is positioned along the line of the Ouse or thereabouts, will tend to have many more coins in its eastern than in its western half – a problem that would be overcome if one could afford to operate with a smaller circle.

The political boundary of East Anglia in the period c.715–755 is not known from any specific evidence: it could still have been shifting westwards, as the kingdom absorbed some of the smaller tribal groupings of the Fenland edges. Could Q conceivably be the coinage of an independent or semi-independent political entity? The wealth of this region is indicated by the number of substantial Ipswich ware scatters. Could the sharp edges reflect some sort of political boundary, within which Q circulated with political backing, and if so what was the relationship of the region to the East Anglian kingdom as a whole? It seems a very tall order, but let us reserve judgement until we have acquired a bit more experience, by looking at the ‘isobars’ for Series R.

One could just add that QI–III occurs unexpectedly at York (and Carlisle), but not in Yorkshire generally, thus hinting at some sort of high-level political contacts between East Anglia and (the bishops of) York.

Commentary on Fig. 3 (Series R, Types R3–12, except R5 and R9). Series R is completely different from Q in its iconography and style, except that eventually the two designs are muled in a runic type reading er which belongs with Q. The ‘isobars’ generated by R delineate a very different pattern of circulation, with roughly similar proportions in the NW, NE, and SE quadrants of East Anglia, and with no cliff-like discontinuities within the kingdom. The west Norfolk ‘platform’ extends less far south. The proportions are generally around 30 per cent in the Gipping valley and also the Norwich region, and even higher in west Norfolk (the latter in spite of the localization there of QI–III – perhaps because fewer extraneous issues entered the currency there than at Ipswich, etc.). Series R served the whole East Anglian kingdom. The cut-off between west Norfolk and the Fenlands is again statistically imprecise because of the shortage of evidence.

The total numbers of finds from the Gipping valley are large, e.g. over 100 within the data-gathering circle (see Fig. 1), making the percentages from there particularly secure, whereas some

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of those from the hinterland are probably erratic (e.g. 13/17 = 76 per cent). The lower percentages in the coastal belt directly north of the estuaries may be caused by coastwise trading, or it may be more chronological, reflecting the unusually large proportion of coins of Beonna, for example, from the Burrow Hill excavations.

Find-spots from Essex, within the map area, have been plotted, in order to help to define the southern edge of the circulation area of Types R3–12. The cut-off is quite sharp – partly, perhaps because forested areas imposed a natural barrier between Suffolk and Essex.6 The lack of Ipswich ware in any quantity south of the River Stour helps to confirm that this is not merely a monetary discontinuity. Note the figure of 16 against one dot on the map (Fig. 1). This represents finds reported guardedly as being from 'north Essex' (11) and 'north-west Essex' (5) without further localization. The 'north Essex' group could, one imagines, have come from further east than the position shown on the map, but in any case all 16 can fairly safely be accepted as valid evidence for this question concerning the discontinuity at the Suffolk/Essex border.

The percentages in west Norfolk are even higher than in east Suffolk, which is curious, if the coins in question originated in east Suffolk. Although the list of finds is lengthy, so many of them are inadequately published that one cannot begin to tell whether, for example, Types 3a and 3b show any differences of distribution within East Anglia. Likewise, a corpus of Type 8 will be needed before one can ask similar questions about it.

The ‘col’ or saddle in the percentages between the SE and NW quadrants is very adequately attested. It hints at other types entering the currency in the intermediate zone, from Cambridgeshire, etc.

The proportion in the Burgh Castle – Norwich region is very similar to that in the Gipping valley. Again there seems to be a ‘col’ of lower percentages between east and west Norfolk, and even more so between east Norfolk and east Suffolk, implying perhaps that the secondary runics entered the region predominantly by sea.

Because Types R3–12 are spread rather evenly over such a large part of East Anglia, involving three of the four quadrants, in principle we cannot deduce from the distribution map the quadrant(s) in which they were minted.

Commentary on Fig. 4 (R5 and R9). These two related types, characterized by the runic legend spī on some specimens, provide the big surprise so far: there is persuasive evidence of localization in east Norfolk, with the highest values at and near Caister-on-Sea and Burgh Castle, the shore fort guarding Breidon Water. It seems virtually certain that R5/9 was minted over a significant length of time in the NE quadrant; and within that quadrant, the figures are below-trend in the vicinity of Norwich. Apart from the vicinity of Breidon Water, the NE quadrant is archaeologically a bit of a ‘backwater’. Can the mint-place have been Caister or Burgh Castle? The map does not help us to choose between them, but one may note that Bede mentions Cnobheresburg (= Burgh Castle?) as a monastic site.

The general contrast with Fig. 3 is unmistakeable, and the quantified differences (10–15 per cent in the Norwich region, compared with only around 5 per cent in the Ipswich region, and even less in west Norfolk) are impressive. What was the political context in which coins of the same type, differing only a little in style, so far as the users were concerned, were issued concurrently at more than one mint within the kingdom?

Type R7 (runic rhy). The localization of a regionally distinct mint-place for R5/9 creates a presumption that R7 is similarly from another (very small) mint. The only provenances so far on record are Caister-by-Yarmouth and Caister-by-Norwich, both in the NE quadrant. Perhaps R7 is simply by another die-engraver working for the R5/9 mint? But the evidence is still slender.

Series QIV. A map for QIV (in distinctive modelled style) shows an altogether different distribution pattern from QI–III. It is absent from west Norfolk (where QI–III is so strong), and shows 7–8 per cent beside the Deben estuary (i.e. the access to Woodbridge), but 6 per cent at Ipswich and in the Gipping valley. North-westwards from there, there is a long ‘tail’ reaching as far as Thetford and the Little Ouse (2–3 per cent). Once again, the Gipping valley/Lark valley corridor shows up in the monetary evidence as an important routeway. Otherwise, there is just the odd stray find from the Norwich region, on which one should not build large conclusions.

Where was QIV minted? – Somewhere in the Ipswich region, plainly. Is it in any administrative sense connected with QI–III, or are its bird and animal motifs merely reminiscent in a general way of QI–III? How can its minting have coexisted in the SE quadrant with the minting of Series R? Could Series R have been minted, for example, at Ipswich, while Type QIV was (for part of the same period) minted at Woodbridge? Or vice versa? Of course, both series, and also QI–III, circulated together without let or hindrance, as our distribution maps imply, and as the Cambridge

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Fig. 4. Percentages for the secondary runic sceattas of the 'spi' group (R5 and R9), as a proportion of secondary sceattas, with suggested 'isobars' based on the percentages. Each data point is at the centre of a 1,000 km² circle. The 'isobars' have been drawn at proportional intervals of half as much again, except for the 20 per cent line, as shown on the inset diagram.

Hoard illustrates. It is just a question of where they were minted. But (speculating wildly) could one series be commercial, the other royal? Why was one distributed throughout East Anglia, and the other not? These are pregnant questions, which we are certainly not yet in a position to answer, but which might have far-reaching implications, assuming that the facts are secure.

Series QIV would seem to have been quite a compact issue, with a restricted date-range, whereas R was an exceptionally long-lasting series. The relative dating of QIV can only be judged from its alloy, which seems to be quite good. Attempts have been made in the past to envisage a late phase of the sceattas, associated with a somewhat restored alloy-standard, but there is no cogent evidence for such an improvement before the time of Beonna. The small percentage difference between Ipswich and the Deben estuary could be fortuitous, or it could perhaps be chronological again.

Superimposing the maps. If one can imagine superimposing Figs. 2, 3 and 4, plus similar maps for R7 and Series QIV, they would together create a picture of coin types circulating in the same region (East Anglia), and yet behaving differently, in ways that presumably arise out of the differ-
ent contexts in which the coin-types were issued – a major wic on the North Sea coast, a lesser wic further north along the coast, and a third presumed wic with access to the Wash. Series R3–12 had a widespread, uniform use, in contrast with the more localized R5/9, even though the two groups would have been indistinguishable to most users. The wide scatter of finds through East Anglia has already been adduced, in combination with the quantities minted, as evidence of a monetized economy. The within-sample variation in the ways that the different types circulated should, one feels, sharpen that argument, although it is probably too soon to specify exactly how.

For the four quadrants of East Anglia, the percentages of the sceattas of Series Q and R stack up (approximately) as follows:

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<th>NW</th>
<th>NE</th>
<th>SW</th>
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<tr>
<td>QI–III</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>R3–12</td>
<td>39</td>
<td>30</td>
<td>10</td>
<td>30</td>
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<tr>
<td>R5/9</td>
<td>3</td>
<td>20</td>
<td>0</td>
<td>5</td>
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<tr>
<td>QIV</td>
<td>0</td>
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<td>8</td>
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<td>Total</td>
<td>60</td>
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Other types with, apparently, an East Anglian focus

Types R1–2. The earliest runic epa coins, present already in the Aston Rowant hoard, account for around 4 per cent (of primary sceattas) in the Gipping valley, and very little elsewhere in East Anglia, except for a coastal swathe, running at about 15 per cent, in north-central Norfolk, suggestive of coastwise penetration. The type reached York and its vicinity.

There seems to be a contrast with Series C, which shows relatively heavy penetration into west Suffolk; about 5 per cent in east Suffolk, 10 per cent in east Norfolk; and a similar level in west Norfolk, where, however, imitations (of very variable quality) are in the majority. Recognizing good-quality ‘imitations’ of Series C is usually fairly cut and dried, but their organizational significance, i.e. whether they could after all be from the main mint-place, is to some extent debateable, unless the stylistic evidence is supported by a distributional contrast.

The mint-attribution of Types A, C, and R1–2 as between Kent, (Essex), and East Anglia is a thorny topic, for which regression analysis would seem to be an excellent method to apply. It calls for fuller treatment on another occasion, and the above remarks, while going far to localize R1–2, do not amount to a rounded judgement.

Type BZ. With eight specimens from East Anglia, the evidence is flimsy. Taking it at its face value, we can perhaps say that that the proportions are running at about 3–4 per cent in the Ipswich region, 4–6 per cent in west Norfolk, 8 per cent in the Norwich region, and even higher in the Thetford region (but on the evidence of a single coin). Apparently a Norfolk type, but it is too soon for any settled judgement. From Yorkshire and Lincolnshire there is just one find, from Whitby.

Types 30, 51, etc. There is an intriguing cluster in west-central Norfolk (Burnham Market, 2; East Rudham; Fakenham; Shipdham). Cf. North Ferriby, Sancton, Alford, and Alkborough, around the Humber estuary.

Type 70. Even with just half-a-dozen finds, a west Norfolk focus is apparent (Heacham, Brandon, and Congham). Cf. Humberside finds from Elloughton and Welton (ERY) and from Market Rasen (Lincs).

Summing-up. The location of minting in the secondary phase is clearer to us than in the primary phase, mainly because the circulation of sceattas was becoming more localized, and we can see the core areas of circulation from an adequate number of finds. Series R3–12 seems to coincide in its distribution, so far as one can judge, with the boundaries of the East Anglian kingdom, and it is difficult to envisage it as anything other than a royal coinage. Because it was spread quite evenly
throughout Norfolk and Suffolk, its mint-place (or mint-places) are not obvious from an analysis of the single finds. One's instinct is to look towards Ipswich, where excavations have yielded 18 specimens of R3–12, and two of R5/9, out of some 60 secondary sceattas; but this is not strictly a conclusion derived from the find-evidence.

Series QI–III, by contrast, is very clearly localized in west Norfolk, where its circulation seems to have had quite sharp edges. It will have been minted there, or (less probably) in the Fenlands, but in either case at a site with access to the sea. The political circumstances in which QI–III and R3–12 coexisted, over a long period, in west Norfolk are completely obscure. There were evidently monetary transfers on an ongoing basis between the Ipswich region and west Norfolk, and vice versa. These seem to have been the two dominant areas of monetary circulation in East Anglia. Money may have been carried from one wic to the other, and then diffused locally. Between the two areas, there was a corridor of monetary influence stretching from Ipswich to Thetford, but this middle ground seems to have been open to monetary influences from outside East Anglia, from the south-west. There is no distributional evidence to suggest that Thetford was a mint-place at this stage.

The Norwich/Caister region is the focus for the runic spi group, namely Types R5/9, which were evidently minted locally, and apparently at the coast. The concurrent issue of R3–12, R5/9, and R7 within the East Anglian kingdom may reflect royal control enforcing the same coin type at two or even three North Sea coastal mints. This makes more acute the dilemma of the iconographical independence of Q. The final, very debased QII coins mule the traditional R design: could this reflect a political accommodation at a date around the middle of the century? Series QIV, finally, has a completely different localization from QI–III. It is concentrated in east Suffolk, possibly (but the percentage differences are tiny) at another mint-place from R, e.g. Ipswich and Woodbridge. This is extremely intriguing but problematic.

The localization of minting in East Anglia in the primary phase is less well evidenced. The region seems to have been supplied with currency much of which came from Kent, London, and the Rhine mouths area. Local issues of sceattas started from a surprisingly low base-line, in spite of an earlier monetary history of inflows of gold tremisses from the Continent. The spread of Series C into East Anglia is the context for interpreting the runic epa coins of Types R1–2. They belong to the Ipswich area, and it is slightly unexpected that they have not turned up more freely in the Ipswich excavations. They are rarely found in Kent. They originated shortly before the t.p.q. of the Aston Rowant hoard, thus c.705–10, which is well after commercial activity began at Ipswich.

If Series QI–III had a precursor at its west Norfolk mint-place, the most likely candidate seems to be Type BZ, but there is no iconographical continuity. There are several other types which seem, on rather flimsy evidence, to be localized in Norfolk or around the Fenland margins, into the politically fragmented area of Middle Anglia. Their relatively sparse occurrence further north can be taken into account. The rag-tag of what may be loosely described as R5/1 ‘mules’ are not very coherent stylistically, and should be treated as a group for analytical purposes only but with due reserve. The Garon grave-find, however, establishes an unexpectedly early date for at least some of them. In general, it is by no means clear that there was continuity of minting between the primary and secondary phases in East Anglia, and the primary phase should be investigated, not exactly in isolation, but in its own right.

Possible changes in the political frontiers of East Anglia are entirely speculative. Bede offers so little information about the political geography of the kingdom that one is, to all intents and purposes, reduced to the unconfirmed evidence of the coins themselves. They offer intriguing hints of a degree of political independence in a coastal region of west Norfolk. The emergence of a coherent kingdom of the East Angles, however, was much earlier, in 571 or thereabouts. The creation of Norfolk and Suffolk may have been in the 680s (again, preceding the sceattas), when the East Anglian diocese was divided in two. The old see of Dommoc (Dunwich?) continued in use, and a new see was established – according to William of Malmesbury – at Elmham (North Elmham?). It has to be said that this arrangement does not harmonize in any clear way with the Q/R division which is the most conspicuous line of cleavage in eighth-century monetary affairs.
Further research. ‘And at my back I ever hear’ – not Time’s wingèd chariot, but the cryptic utterance, ‘Hun, Beonna, and Alberht divided the kingdom’. If political stresses and strains, or personal strains within the ruling class, led to a temporary partition of the kingdom in the 750s (which some have doubted⁹), the silence of the written sources is such that there is simply no written evidence to explore. This is post-Bede. Could there have been similar stresses and strains at an earlier date (about which Bede is silent)? Series R and Q both begin around 710–15, Q perhaps five or ten years later than R. The most the numismatic evidence allows us to say is that west Norfolk was the area most likely to secede.

Let no-one imagine that we have enough single finds! Future discoveries will add to the database and sharpen the focus of the regression analysis, and they will probably modify the conclusions here and there. The dip in the ‘isobars’ mid-way along the Gipping valley?–Lark valley routeway between the NW and SE quadrants merits better definition. A line on the dating of QIV would be welcome; probably only a hoard could provide such information.

Some die-estimates for Qi–III would be interesting, and might help to show its (modest?) scale in relation to R, and perhaps also the changing curve of mint-output – although the absolute chronology of the numerous Q types is very imprecise, and will remain so without an improbable amount of new hoard-evidence. The detailed location of the Q mint could only emerge if archaeologists discovered an impressive wic, and excavated its rubbish pits – with sceattas of Series Q a-plenty.