Forty years ago in the pages of this Journal Stuart Rigold, in a paper of exceptional attainment, created the perspectives which still govern our understanding of the early sceatta coinages, minted in the late seventh and early eighth centuries. He drew attention to the eclectic design of the sceatta type which, although it was not quite the earliest English coinage in silver, he thought of as the true beginning of the sceattas, and which he labelled Series A. It amalgamated elements taken over from several of the preceding issues, in base gold and silver, which it replaced. Grave-finds in east Kent, and also occasionally further afield, e.g. across the Thames estuary on the coast of Essex, show another early type of completely different design, Series B, occurring in association with A. Rigold’s instinct was that east Kent was the monetary gateway to seventh- and early eighth-century England, where the spreading use of coinage was in some sense driven by contacts with Merovingian Gaul, using the short sea crossings across the Straits of Dover. His original thought, therefore, based largely on the grave-finds, and hardly at all on single finds, of which very few had been reported by 1960, was that both Series A and B were the coinage of the reign of King Wihtred of Kent (691–725), and that they were east Kentish issues, closely associated with the centre of political power of the kings of Kent, at Canterbury. The consistently pure silver of the coins, and the pattern of using more than one reverse die with each obverse, both reinforce the impression of an official coinage. Upwards of 60 obverse dies were used in Series A, and substantially more in Series B.

Rigold’s chronology has been pushed back, in line with a revised estimate of the t.p.q. of the Cimiez hoard, to allow for the fact that Series A was already old and falling out of circulation when the Aston Rowant hoard was concealed. Also, it has been suggested that Canterbury is not the only possibility as a mint-place in east Kent. The coins might have been struck a few miles further east, in one or more of the wics adjacent to the Wantsum Channel, such as Sandwich. That would match the analogy of Winchester and Hamwic, the former the royal and episcopal seat, the latter the commercial centre. The Isle of Thanet was still – just – an island. Ships coming from the continent could almost certainly still sail through the Wantsum Channel at high tide, avoiding the navigational hazards of sailing round the North Foreland. As well as this short cut into the Thames estuary, the east Kentish area included landfalls at Dover and Folkestone, and perhaps also further west, at the salter (and small wic?) of Sandtun (West Hythe). From there, the line of the Roman road, Stone Street, ran more or less due north to Canterbury. The sceattas so far reported from Sandtun are nearly all of the secondary phase.

The idea that two quite different types of primary sceattas were produced concurrently in east Kent does not much commend itself, even though there is no difficulty in suggesting more than one potential mint-place. The broader picture from England as a whole, including the secondary phase, seems to be that each wic or other mint-place tended to keep to its own distinctive type or cluster of related types. (Rigold, noting that Type A2 was appreciably heavier than B1 (1.27 g. cf. 1.23 g), toyed with the thought that they were both Kentish and circulated together like half-crowns and florins; but this was not a felicitous idea.) Series A and B are likely to have been the issues of separate mints: but where? Were they even both from Kent? The writer suggested in 1993 that they belong south and north of the Thames estuary respectively, with a presumption that

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1 S.E. Rigold, ‘The two primary series of sceattas’, *BNJ* 30 (1960–1), 6–53.
2 P. Grierson and M.A.S. Blackburn, in *MF.C.,* vol. 1, at p. 142.
Series A was from east Kent and Series B from London. Series C, which replaces the legend 'TIC' of Series A with the runic æepa, but is otherwise almost identical (at least in the earlier Type C1), would seem to follow on directly from A, if one can safely judge from the close similarities of style. The coins signed in runes by the moneyer Pada, which preceded A, will perhaps also belong to the same mint-place, although they are only one of the types echoed in A's eclectic design. Series Pa is so varied, typologically, that one should not completely exclude the idea that it was produced at more than one mint. It is less open to doubt that Series Va, the 'Vanimundus' types, were produced at the same mint-place as the coins of Series B, which at first (types BX and B1) have garbled Vanimundus legends. So we seem to have two sequences, namely (Pa) – A – C1 – C2, and Va – BX – B1 – BII. But some of the continuities between the types are not altogether beyond debate. The single finds show that Series A and B as a whole were both in use indiscriminately both north and south of the Thames; and it has been suggested that Series C might be a clever copy of A, originating in East Anglia. Another hypothesis might be that Type C2, which is rather different in style, was East Anglian, while C1 was Kentish. All hypotheses such as these are in principle testable, from the accumulating information of single finds. Distribution-patterns of single finds are capable of providing evidence of the most unassailable kind.

The first and main point that needs to be established is whether Series A was relatively more plentiful in the currency of Kent, and B in Essex. Given a reasonably clear differentiation, one might think that this would go a long way towards proving that A was minted in Kent while B was minted north of the Thames. We should be alert to the possibility, however, that a difference in the distribution-patterns for A and B might be partly chronological, if B continued in issue for longer than A (which it did), at a time when monetary circulation was expanding from the southeast onwards. The proportions of single finds of the two series are best measured against the total for the primary phase, rather than for the primary and secondary phases combined, for similar chronological reasons. The primary phase has been taken to include all the types present in the Aston Rowant hoard, plus Aldfrith, plus Series W if in good silver, plus coins of Pada and 'Vanimundus' if in silver rather than base gold, plus (debateably) the 'Æthilræd' porcupines, about which more will be said below. One could simply compare the single finds from Kent and Essex respectively, but it seemed possible that the data might yield more information if broken down into rather smaller regions. As a first approximation, therefore, four regions were defined. East Kent and west Kent were treated separately. Between 688 and 694 they were politically separate, west Kent being ruled by Sæbbhard, a prince from Essex, as a client of the Mercian king Æthelred, while east Kent was ruled first by Oswine (also imposed by Æthelred), and then by the Kentish king Wihtred, who in due course regained control of the whole kingdom. Sæbbhard and Oswine apparently exercised a kind of joint rule, in so far as they acknowledged each other's charters. The boundary between east and west Kent, for the purpose of mapping the single finds, has been taken to be the same as the boundary between the dioceses of Canterbury and Rochester, which is doubtless ancient, and may well preserve, in some detail, an old political boundary. When he had regained control, in 695, Wihtred promulgated his law-code at Bearsted, which lies on this boundary.

Essex was also split into two for purposes of numismatic analysis. Because the Thames estuary was used by shipping to and from London, with obvious opportunities for coinage to enter the kingdom at various landfalls along the coast, the (modern) county was provisionally divided into estuarine Essex, and north Essex, arbitrarily separated by the boundary between the National Grid 100 km squares TL and TQ. If coastwise shipping had an influence on the composition of the local currency in any way, this division should serve to pick up the difference. London has been included with estuarine Essex, even though it belonged to the Middle Saxon province, and tended to be under Kentish or Mercian rather than East Saxon domination for much of the period with which we are concerned.

5 Compare the maps for Series A and B in 'Tirynsas and Sceattas', vol. 1, at pp. 89 and 103.
A data-base of single finds (omitting hoards and grave-finds) now comprises some 225 primary sceattas, divided between east Kent (119), west Kent (31), estuarine Essex with London (42), and north Essex (33). (See the Appendix.) These sub-totals include finds from Reculver (with the north coast of Thanet) (22 primary sceattas), Canterbury (8), Hollingbourne (9), and London (15), and in Essex, East Tilbury (14). Some of the numbers are too small for comfort, statistically; but otherwise their main systematic defect is that a number of porcupines have had to be omitted, because it is not on record whether they were primary or secondary varieties. So the true total for east Kent might be up to c.125. This uncertainty will not affect the argument.

In the four regions of the south-east that have been defined above, the proportions of the early south-eastern sceatta types (as a proportion of primary sceattas) are:

<table>
<thead>
<tr>
<th></th>
<th>EKent</th>
<th>WKent</th>
<th>London, EstEss</th>
<th>NEss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pa</td>
<td>4/119 = 3%</td>
<td>3/31 = 10%</td>
<td>2/42 = 5%</td>
<td>0/33 = 0%</td>
</tr>
<tr>
<td>A</td>
<td>19/119 = 16%</td>
<td>10/31 = 32%</td>
<td>4/42 = 10%</td>
<td>3/33 = 9%</td>
</tr>
<tr>
<td>B</td>
<td>24/119 = 20%</td>
<td>4/31 = 13%</td>
<td>10/42 = 24%</td>
<td>9/33 = 27%</td>
</tr>
<tr>
<td>C</td>
<td>14/119 = 12%</td>
<td>3/31 = 10%</td>
<td>5/42 = 12%</td>
<td>4/33 = 12%</td>
</tr>
</tbody>
</table>

From the percentages in the table it is very clear that there is indeed a tendency for A to be relatively more plentiful in Kent, and B north of the Thames. This can perhaps be appreciated more readily if the same information is presented as a diagram (Fig. 1) The ratio or relationship between A and B is what attracts the eye. In Essex, B amounts to 70–75 per cent of (A + B), whereas in Kent B is only 30–55 per cent of (A + B).

One should perhaps just add that in other regions of England, further afield, the proportions of Series A and B decline, as one would expect. Thus in East Anglia Series A makes up 10 per cent of the single finds of the primary phase, cf. 20 per cent (on average) in Kent; and B makes up 16 per cent, cf. 25 per cent in Essex.

The coins of Rigold's two opening series were used together, and mingled in circulation, as the hoards (West Hougham, Aston Rowant) and grave-finds all illustrate. From their mints of origin, wherever they were, they entered a 'money-go-round' in Kent, London and Essex. The table of statistics, above, makes that clear. The south-east, as a region, had an integrated monetary system in the primary phase of the sceattas. Nevertheless, the coins did not mingle in circulation so completely as to obliterate all differences between the currencies of Kent and Essex.

The motor of this very lively monetary circulation was doubtless, to a large extent, trade. When, in c.679, King Hlothære of Kent gained (at the minimum) a footing in London, he maintained a royal hall there, with a port-reeve to look after the affairs of Kentish folk trading there. Barbara Yorke has pointed out that two charters, granted in 733 and 734 respectively, refer back probably to the time of Hlothære. The earlier of the charters grants to Mildred, abbess of Minster, the remis-
tion of toll on one ship a year in the port of London. The second charter makes a similar concession to the bishop of Rochester. Both charters evidently confirm a privilege of long standing, using the same form of words: 'many, not without cause, seek to have things which are known to have been conferred on them confirmed in a document'. (Archbishop Theodore of Tarsus, who arrived in Canterbury in 669, was influential in introducing written charters for land grants, etc.)

Coins of Series A and B were also used further afield, in East Anglia, Mercia and Wessex, but the find-evidence from those kingdoms is in principle very unlikely to help us to discover whereabouts, within Kent and Essex, they were minted. As with the rather notorious question of sceattas minted at Hedehy and Ribe in Jutland, where the evidence of finds from Sweden, however plentiful, has virtually no bearing on the attribution of the coins as between the two wics in their home territory of Denmark,9 similarly in England the problem of locating the mint-places of Series A and B within the south-east has to be solved using the evidence from the south-east. We have already assembled good evidence that the mints are to be sought south and north of the Thames respectively, in so far as the currencies of Kent and Essex show somewhat different ratios between A and B. This is the most important perspective on monetary circulation in the south-east in the primary phase.

But the glaring anomaly in the data as presented in the table above lies in the statistics from west Kent, and it will be rewarding to explore the discrepancy thoroughly. Not only is Series A relatively more plentiful there than anywhere else, as also is Series Pa, but Series B is conversely less plentiful than anywhere else in the south-east. (See the diagram above.) The normal explanation would be that Series A was nowhere more plentiful than in its region of origin, which the statistics appear to narrow down from Kent to west Kent. Within west Kent the obvious mint-place would be Rochester. Can this be? It seems a counter-intuitive hypothesis, when the majority of single finds, as well as of the hoards and grave-finds, are from east Kent, which had been the archaeologically rich and wealthy part of Kent since the sixth century,10 and which in the anarchy of the years 685–94 was the citadel of Kentish independence. Rigold assumed that the Kentish mint was at Canterbury, for obvious reasons. We may as well spell out one more obvious reason. The ninth-century mint of Rochester (which could be expected, by the way, to have antecedents), produced only about five per cent of the English coinage, while Canterbury produced 35 per cent.11 The relative importance of mint-places can change, of course, but this would be a big discrepancy to overturn.

Before we contemplate challenging the received wisdom, let us ask: is the information derived from the single finds reliable? – or, more specifically, is it reliable evidence for the general conclusions just essayed? That depends heavily on the recorded primary sceattas from Kent and Essex approximating to a random sample in respect of the varieties reported. The answer would seem to be that the data-base is technically satisfactory. There is no reason, for example, to imagine that in west Kent, but not in east Kent, detectorists reported finds of Series A more assiduously than they reported Series B. And the numbers from which the percentages are derived, while admittedly some of them are smaller than one could wish, and subject therefore to relatively larger margins of statistical variability, are unlikely to be yielding ratios so erratic that the general conclusion is unsafe.

But perhaps we have arrived at an answer that has been to some degree predetermined by the way that the regions have been defined? (To anticipate: this will turn out to be so.) For example, could the proportion of Series A in west Kent be high because it was minted in London? (But where then was Series B minted?) If one looked at the coins of Pada in isolation (10 per cent in west Kent, 3 per cent in east Kent), again one might wonder about London as a possible mint-place: two finds from London itself, one from Lambeth, one from Southfleet (just south of Gravesend), and one from Cobham.

Could the coins of Series A have been minted in Canterbury, but be more plentiful in west Kent because they were spent there? A regression profile for the ninth-century mints of Rochester and London has been published, showing that their coins were relatively even more plentiful in the distant Cotswolds than in Rochester and London respectively and their immediate vicinities: those mints had a long-distance function connected with trade. Could something analogous explain the west Kentish data? No plausible commercial context for a net transfer of money from Canterbury to Rochester suggests itself.

Or again, is the grouping of the coins by their series a potential source of confusion? The obvious question is whether Type B I, with its garbled ‘Vanimundus’ legend, and B II, usually with a crosslet in front of the bird, and usually reading just VAVAVA, are in fact sequential from the same mint. If they were not, might it not make our statistics deceptive? Fortunately, it is quite easy to distinguish between Types B I and B II, so the proportions at least, among the reported finds, should be fairly reliable. In the diagram, above, B I and B II are shown separated by a dividing line on the bar for B (BX plus B I below, B II above). One can see that the proportions are, within statistical limits (only two properly identified coins from west Kent!) and within the limits of accuracy of reporting, similar for all four regions, ergo, there is no reason to think that B II might be from some other mint-place, for example, an imitative coinage from the Rhine mouths area which might be expected to generate a different distribution pattern. The hoards and grave finds imply that B II is later in date than B I, and that conclusion is strengthened by the general contrast, in that respect, between the single finds and the hoards, etc. In the Southend-on-Sea grave-finds and in Aston Rowant, B I predominates over B I. The single finds reflect more fully an earlier phase. (But if B II is later, that makes it possible but not necessary that it should be from the same mint-place as B I. Only the matching distribution-pattern is evidence for the identity of mint-place.) B II is possibly a little more plentiful in west Kent than in the other three regions; and the riff-raff of imitations, BLD–G, etc., are possibly more common in Essex than in Kent. But that does not overturn any conclusions.

Series A 3 was almost certainly already in production before B II was introduced; and Series B undoubtedly continued in production longer than A: one would judge that it was still being minted alongside C. We should therefore be alert to the possibility, already mentioned, that a difference in the distribution-patterns of A and B might be partly chronological. The fairer comparison might be between A and B I. If the reader will refer back again the diagram, he will see that this in no way disposes of the anomaly of west Kent.

Similarly one should, just as a precaution, check that A 2 and A 3 occur in similar ratios to each other, in all four regions (even though it seems reasonably clear that they are sequential); and likewise with C 1 and C 2, where it is less clear.

Again, could we have distorted the answers by deciding to exclude grave-finds? This hesitation is prompted particularly by the coins of Pada from east Kent. There are two from a grave at Sarre, and two more from a grave at Dover. These would bring the total from east Kent up from four to eight. But the percentage would still only be six per cent and if, in fairness, we included all the grave-finds of Series A, B, and C, the total of 119 would rise to such an extent that 6 per cent would fall back to c. 4 per cent. And although there are no Padas from Essex, there are two from yet another grave in Ipswich (the Buttermarket cemetery), two other finds from Ipswich, two from Barham, and no fewer than five from Coddenham, all in the Gipping valley. It’s enough to make one ask oneself whether the Padas could have originated in Suffolk. To hold onto the whole picture, however, they were spreading into a vacuum so far as silver coinage in East Anglia was concerned; in the early days they were not in competition with other sceatta types (the very scarce coins of ‘Vanimundus’ excepted) and their London/Suffolk/East Kent distribution pattern should accordingly be viewed cautiously.

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13 B I, 3 and cognate dies are problematic.
14 The proportions of B I to B II are, in Aston Rowant, 5:8, and in Southend, 0:2. Compare the earlier grave-finds of Finglesham (5:0) and Barham (3:9). In spite of the statistically too small numbers involved, we may venture to conclude that B II had not yet been introduced when Finglesham and Barham were deposited. Yet both already include A 3.
15 See the preceding footnote.
Later, it was to become usual for grave-finds to comprise eight or even 20 coins. It seems that two was also a conventional number, in an earlier and perhaps less affluent phase.

By applying the same acid test, namely by examining the relative frequency of regional occurrence of Series C and B (as we did with A and B), we might hope to gain some indication whether C is a Kentish continuation of A, or whether it is (as has been suggested) perhaps East Anglian. The virtual absence of R1 from the south-east single finds, and its occurrence further north, makes it clear enough that it, at least, is East Anglian. I have pointed out elsewhere that C and R1 have different distribution-patterns within East Anglia. Regression analysis shows R1 focussed in the Gipping valley, and with some coastal penetration of north-central Norfolk, whereas C is altogether more diffused in East Anglia, and tended to enter west Suffolk, presumably from further to the south-west. If Types C and R1–2 had been produced at the same mint-place in East Anglia, one would have expected them to show a similar distribution-pattern within East Anglia. This is not the case. The ratio of C to B, in the table above (and in the diagram), shows less of a dramatic contrast between Kent and Essex than does A to B, but C is still relatively more plentiful south of the Thames – 0.61 in Kent, and 0.47 in Essex. The regional pattern in thus very much the same as for A/B, including the anomalously high figure of 0.75 in west Kent, although the contrasts generally are less pronounced.

Type CZ is, so far, strictly a south-of-Thames type. Perhaps it was an early issue of coinage in Surrey, imitating the current type (C) then being struck in the neighbouring Kentish kingdom. This too can be taken as an argument that Series C belongs to Kent; but one should not push it too hard.

A degree of blurring is introduced into the foregoing arguments by the prevalence of imitation in Series C, and by the insufficient descriptive information of several of the specimens on the list of single finds from the south-east. Some of the 'imitative' coins could, in principle, be official issues from the regular mint-place, in spite of their poor style. Others are arguably from further north (i.e. north of the Thames); but it lies in the nature of imitations that they are not necessarily or even probably all from one mint-place. If one attempted to strip out all the imitative and insufficiently described coins and to recalculate the ratios, the exercise would be to some extent subjective, and the numbers involved would become pitifully small, and subject to such wide margins of statistical uncertainty that the gain in clarity would be nugatory. The moral is the usual one, that it is not enough to publish single finds of sceattas simply by reference to their series. The detail is crucial, and a good photograph is almost always desirable.

The boundaries of our south-eastern region are, on the south and west, rather clear-cut in the primary phase. Although there are some coins from Holmedale, along the southern foot of the North Downs, there are none from the Weald; and Surrey is also an empty quarter in the primary phase. The west Kentish finds belong to a fairly narrow corridor, the line of the Roman Watling Street, leading to only one important monetary destination: London. Beyond that, of course, lay Mercia. Northwards, between Essex and Suffolk, there was a forested zone which was a barrier to contacts. The only other zone of contact was in the Hastings region, where Kent and Sussex came into rivalry. King Hlothhere in 685 was killed in battle against the South Saxons; and it was almost certainly through this same southern land-gateway into Kent that King Caedwalla of Wessex invaded the country in 686 and again in 687.

To return to west Kent: there is quite a little cluster of single finds just to the west of Rochester – at Shorne, two primary sceattas, both of Series A, a Pada at Cobham, among three finds from there, a Pada at Southfleet, an A from the Isle of Grain, and two primaries, both A, from Gravesend. Finds reported as being from Rochester itself include just one primary (Series F) while from 'near Rochester' there is another Pada among two or three primaries. A couple of finds from Cliff brought the total of primary sceattas at the itemized places to 14 or 15, which include three Padas and five of Series A. This is quite an impressive proportion, a little higher, over all, than for west Kent as a whole: regression analysis would certainly point to Rochester, rather than London, (if that were the choice) as the focus for the two series.

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16 M.A.S. Blackburn in MEC vol. 1, p. 166.
18 Metcalf, Thrymicas and Sceattas, at pp. 16–17, 114–16.
One’s reluctance to believe the rather clear evidence of the table of statistics arises partly from an underlying unwillingness to envisage that Rochester was more important as a mint-place than Canterbury, and from problems in trying to imagine a commercial need for a mint at Rochester. Canterbury, of course, has been much more extensively excavated than has Rochester. One’s unease may arise also from a sense that the quality of manufacture of the coins, the scale of their production (as evidenced by the die-ratios), and their presumption of political superiority (as evidenced by the eclectic design of Series A) all point us towards a political initiative by a powerful ruler. Rochester does not seem to fit the bill; but perhaps that is because of Rigold’s continuing influence on our thinking. King Hlothere, to whose reign much of Series Pa and A are likely to belong, could presumably have exercised his royal power in Rochester as well as at Canterbury. That would not be true, however, in the years when the kingdom was jointly ruled, or when it was divided.

We have spent some time and effort in considering whether the evidence of the single finds for an unexpected pattern in west Kent is reliable, without so far finding any obvious systematic defects which would cast doubt on the prima-facie reading that Series Pa, A and C were minted there rather than in east Kent. At the same time we have noted that this is a counter-intuitive and that both numismatically and historically it is an unwelcome conclusion. The numerical analysis has been made on the assumption of a level playing field. The idea that the patterns may be distorted by political considerations, e.g. that the stray finds from west Kent include a significant proportion of coins lost in the face of adversity during the years 688–94, and thus behaving more like hoards than accidental losses, can be briskly disposed of. Series A would have to have been the only type in issue. Series B not yet having been introduced, to generate the very unusual A/B ratio which we have calculated. While it cannot be categorically proved that Type BX was introduced before 694, the hypothesis of A as the sole type seems extravagant. Again, if it were true, the balance of A2/A3 would probably be different from elsewhere, with an undue proportion of early coins of Series A, namely A2. There is no sign that this is so. (We have seen, above, that A3 was almost certainly in issue before B11 was introduced; but the evidence of the available grave-finds does not serve to define the chronological relationship of A2 and B1 at all exactly.) Moreover, the west Kentish anomaly is repeated three times, for Series Pa, A, and C. and this seems a telling aspect of the evidence, in that it precludes any one-off event, e.g. an epidemic, as the context for unusually numerous coin losses.

Another extravagant hypothesis, mooted above, would be to give Series A to London, thereby leaving Series B without any obvious home. London’s commercial importance, already by the late seventh century, is not in doubt. As well as Bede’s well-known comment, there is charter evidence which gives us a glimpse of long-distance trade. The general historian may conclude that the case for London as a mint-place hardly needs to be debated; but if one wishes to stay close to the evidence of the single finds it has to be said that Series B looks distinctly more plentiful in Essex than in London, in spite of quite extensive excavation in the Aldwich area. The political status of London in the relevant period is intriguing. It belonged historically to the Middle Saxon province, which by this time was under Mercian rather than East Saxon influence, but the Kentish rulers (as we have seen) were apparently able to maintain a presence there, at least under Hlothere (n.b. the Padas from London and nearby) and again in the 730s.

The single finds of thrymsas and sceattas from London can be divided into two: nos I–XXXV are older and miscellaneous finds, while XXXVI–LVII are coins from controlled excavations in the West End since 1985 – the finds from the area of Strand and Aldwich, which reflect the commercial activity of Lundenwic. The latter are an impeccable random sample, of guaranteed integrity, while the earlier finds are less well documented. The latter include only one coin of Series B, among five primary sceattas; the earlier finds, three among ten. Thirty-three per cent is higher than any of the figures for B in our table of statistics. That should perhaps cause us to ask questions about the date when Lundenwic rose to importance, in relation to the chronology of the sceattas – and about the mint-place within the London area of Series B, assuming that it belongs to London.
Series B was a very large and prolonged issue, and there is no obvious other mint-place for it than London, except, conceivably, Colchester (where a thrymsa of Vanimundus has been found). The only other place that comes to mind as at all possible is East Tilbury, but that seems to be ruled out, because the 13 primary single finds include three or four of Series A and C, but none of B other than one specimen of BHIA. The best that can be made of a poor case for East Tilbury (a monastic site?) is that near-by Mucking has yielded four primary sceattas, namely three of Type BX from the floor of the excavated gräbenhaus, and one other, again of Series B.

The title of this paper, 'As easy as A, B, C', is intended to be tongue-in-cheek, and the reader should by now be able to see why. The three series mingled freely in circulation over a shared area (and also far beyond Kent and Essex), which means that the task of localizing their mint-places depends on identifying trends rather than sharp-edged contrasts. And, as we have insisted, it is the evidence from within the south-eastern region which is paramount. But the answer to which the table of statistics of the single finds seems to point is not easily believable, as regards Rochester. Imitation (some of it very skilful), insufficiently detailed reporting of some finds, and small numbers with their attendant statistical imprecision further blur the outlines of what seems to be a regional pattern that does not fit at all neatly into historical expectation.

Having followed what seemed like a scientifically rigorous method, by examining the statistics cautiously from every angle, it only remains to pull the rug out from under the whole approach. As hinted above, the flaw in the methodology turns out to have lain in the way the data were grouped into four regions (east and west Kent, estuarine and northern Essex). Let us turn, therefore, to more refined and more detailed methods of topographical investigation. The percentages for east Kent conceal local variations. These are brought out by regression analysis. Map 1,

covering east Kent and the Rochester area, shows the find-spots and the numbers of primary sceattas from each locality (one each unless otherwise stated). Map 2 picks out the finds of Series Pa, A and C, again with numbers, and adds percentage values based, at each locality, on a gathering circle with radius 8.75 km, or area 240 km squared. The size of the circle is shown in the corner of the map. The percentage values as calculated in this way are around 40 per cent in the Rochester region — but they are perhaps even higher, at around 45 per cent, in the Canterbury region. Everywhere else in east Kent, the figure is lower than it is just around Canterbury, and that brings the average down to below the figure for Rochester. That is what threw us off the scent. For London, the corresponding figure would be about 30 per cent, as it is, also, for the Channel ports. Along the Wantsum Channel they are around 25 per cent, while in the Isle of Thanet and in the hinterland of Deal they fall below 20 per cent (consult Map 2). If we remember the wide empty areas in the south of the county, with no stray finds of primary sceattas, it seems clear that traffic along the Dover/Folkestone–Canterbury–London route was the dominating context for monetary circulation. Series Pa — A — C are relatively as plentiful at one end of the route as at the other. That is contrary to the patterns normally revealed by regression analysis, of a decline in market share as one goes further away from the point of origin of a type.

Regression analysis is, in fact, not the ideal tool with which to analyse the Kentish finds, because it presupposes the uniform diffusion of coinage through the countryside. At least we can see that that happened only to a limited extent in Kent, where the routeways from the Channel ports to Canterbury, and from Canterbury to Rochester and on to London were where the money was.

The model sketched above includes the little word 'perhaps' — perhaps c. 45 per cent in the Canterbury region. That is because of some uncertainty about the productive site 'near Canterbury'. Here, four primary sceatta types have been reported, of Series Pa, A, and C, plus an undescribed porcupine which may have been either primary or secondary. Following the rules of engagement, the proportion for the productive site is 100 per cent (but in any case 80 per cent or more). With only four (or five) finds, this could be a statistical aberration, of course: but what can we do other than operate with the data that are available (while hoping, always, for more). Could the productive site be a wic, where Series Pa, A, and C were in fact minted — like Hamwic, the home of Series H? One recalls the contrast between Winchester and Hamwic. For the city of Canterbury itself, where extensive and varied excavations by the Canterbury Archaeological Trust have built up a corpus of sceatta finds which offers utterly reliable evidence, the corresponding proportion is three out of eight, or 38 per cent.

It is not in the public domain where the productive site is. Bonser, who published the finds in question, noted that 'the names of the sites mentioned here are a compromise, usually agreed with finders; near enough to give a usefully general area, far enough not to disclose the location.' He has to say that for present purposes the compromise would, unfortunately, be a rather frustrating obstacle to deciding the location of the east Kentish mint. The writer had wondered whether Sandwich was meant, even though that was not really 'near Canterbury'. Other students have, evidently, been well aware of the location of the site, although without any help from Mr Bonser, who is (quite rightly) the soul of discretion. Mr Derek Chick has kindly advised me, from local knowledge, that it is at Fordwich, just two miles east of Canterbury, and on the southern side of the River Stour. Two responsible finders began to discover coins in 1984, and continued into the late 1980s, when the two large fields which were yielding sceattas were taken out of traditional farming, e.g. for set-aside. Since then, it has not been possible to add to the list of known finds on any scale. Full investigation would probably confirm that Fordwich was the wic, or one could almost say the commercial suburbium, of Canterbury. Sandwich would have fallen outside the gathering circle centred on Canterbury, resulting in decidedly lower percentages for the Canterbury area. Fordwich is, of course, easily within it, and helps to generate the high percentages seen on Map 2. If the available data are a fair indication, one should conclude that the 'productive site', rather than Canterbury itself, was the mint-place. We have to try to imagine a much larger total of sceatta finds, if circumstances for searching had continued to be favourable. If we knew of only four finds from Hamwic, how could we imagine the distinctive emphasis on Series H, revealed by excavation? At the productive site, the proportion of Series Pa – A – C is high; at Minster-in-Thanet and Reculver (always to be understood as including the north coast of Thanet) the percentages are lower. All routes, it seems, led through Canterbury; and the pattern of currency in Kent was dominated by the long-distance routes, across the Channel and towards London. To be able to assert that much on the evidence of the regression analysis is by no means purely negative, in establishing the character of monetary affairs. On Map 2, the contours based on the percentages have been sketched in on the basis of that general understanding.

The idea that Rochester was the mint-place of Series A can now be dismissed, in favour of rein-stating the historically more obvious choice, Canterbury — or rather, Fordwich. The only limiting factor on the evidence for this statement lies with the too-small total of primary sceattas which the Fordwich site has so far yielded.

A final backward glance: figures of around 40 per cent at Rochester are, after all, almost as high as in the Canterbury region. Could Series A, etc., have been minted at both places? Could Types A2 and A3, for example, be from different mints? The evidence which makes that very unlikely has already been discussed in connection with Fig. 1. It is in principle possible that the classification is defective, in the sense that some individual dies have been, as it were, pushed in with A2 or A3 in spite of small but significant differences of style. There is no reason, in fact, to think that

this might have happened. The easiest way to check on it would be to trawl through the finds from west Kent for stylistically unusual specimens. But one cannot make a list of the individual dies of Series A found in west Kent, because the coins have been published only summarily. This illustrates the point, that a find-record which merely says 'Series A' is not enough: a photo good enough for die-identification is needed.

We turn, next, to the Æthiliræd runic porcupines. The difficult questions of their date and attribution are inter-connected. Rigold dismissed any notion that they were Mercian, on grounds of chronology. Now that the dating has all been shifted back, the rejection is not quite so easy. It is tempting to give them, after all, to King Æthelred of Mercia (674–704), and to think that he may have been imitating the signed coins of King Aldfrith of Northumbria. We have seen that he was involved in Kentish affairs, as the overlord of both Suæbbhard and Oswine. The Æthiliræds were unrepresented in the Aston Rowant hoard, but is that because their issue post-dates the hoard, or because (like Series A) they were already old and had largely fallen out of circulation? Statistically one would in that case expect fewer specimens in the hoard than there were of Series A – of which there were only three. Their absence if early is unremarkable. Their absence from the large West Hougham hoard is, however, more difficult to explain, if they are early. Other inconclusive arguments also favour the later option, i.e. that they belong right at the end of the primary phase. There was one in the Woodham Walter hoard, for example, and three from the plundered 'North of England' site (??Flixorough) where they seem to have been in association with Series G and early I. Their alloy (two specimens analysed, 86–88 per cent 'silver') would be distinctly sub-standard for early in the primary phase. And, of course, they have to be later in origin than their porcupine prototype (c.695?).

Map 3  Finds of the Æthiliræd type. Base-map: finds of primary sceattas.
But we no longer need to rely just on arguments about chronology. We can use distributional arguments. There are now no fewer than eight single finds of the Æthilhræd porcupines from east Kent, but none so far from west Kent, none from London, and only one from Essex. That the Æthilhræds are east Kentish seems obvious. Moreover, if they were nearly half as plentiful in east Kent as finds of Series A, the quantities in which they were originally issued were presumably considerable. (Note that this argument is not affected by possible differences in average die-output between the types compared.) Their absence from the grave-finds, and from the West Houghton hoard, takes on extra force from the quantities involved, and thus becomes an additional argument against an early date. The eight finds are from Canterbury, Fordwich, Minster-in-Thanet, Reculver, St Peters, Eastry, West Hythe (Sandtun) and Stone-next-Faversham (Map 3). The national distribution includes a further four finds from Norfolk and one from Suffolk (but only one from Mercia!), thus an easterly pattern. As to whose coins they were, the only official candidates would seem to be the archbishop of Canterbury, or the abbot of St Augustine’s (who is mentioned in the Greatey deecres, where Canterbury had four royal moneyers, Rochester had three moneyers, the archbishop had two, and the abbot had one). Some students may prefer to entertain the idea that Æthelhræd was a free-lance moneyer, although the quantities issued make that thesis difficult.

Given that 19 coins of Series A from east Kent are matched by ten single finds from the Rochester area and beyond, the eight Æthilhræds in east Kent should have been matched by about four, cf. none so far – which is too close to the margins of statistical significance for comfort. But assuming for the moment that the facts are not misleading, why should this be? One’s instinct is that monetary circulation slowed down and became more local for a few years around the end of the primary phase, but this would be difficult to demonstrate.

The writer has recently argued that the joint coinage of Archbishop Ecgberht of Northumbria with King Eadberht of Northumbria was sometimes used by the archbishop to give financial support to outlying churches in his province.1 It crossed his mind to wonder whether the archbishop of Canterbury might have acted similarly. That could perhaps have generated a distribution-pattern that was inexplicable in a straightforwardly commercial context, as it does in Northumbria. The only interesting evidence from Kent concerns the Æthilhræd from Stone-next-Faversham, a relatively empty area of the finds map, and probably eccentric to the distribution-pattern for the type. The coin comes from the excavations of a Roman mausoleum converted to a Christian chapel – as does a Series W, far from its West Saxon home, to which a special explanation might also apply.

Finally, how do the grave-finds from Kent and Essex fit in with the arguments that have been sketched? It is intriguing that they so rarely contain porcupines alongside Series A, B and C. The question arises whether this can really be because they were deposited before porcupines were struck (i.e. before c.695?) or (alternatively) before they reached south-east England in any numbers (but surely there would be little delay). The King’s Lynn find, of 20 coins, conjecturally a grave-find, is late primary in date, but it already contains three continental runics (Series D) and four porcupines, of which one is secondary. The association of these coins in a single find may be taken as secure.2 The problem is sharpened by the evidence of the single finds from the south-east: we now know that primary porcupines make up close to a quarter of all the primary sceattas. A more detailed examination of their distribution in Kent shows that they are not, for example, significantly coastal, and that they show no obvious local concentrations.

The relative chronology of the grave-finds has been assessed on the basis of the dwindling proportion of Series A and the appearance of C, particularly C2, and of B1. It is virtually certain that porcupines had been reaching England in quantity for some time before the deposit of the Southend grave-find. Hoards, such as Aston Rowant (concealed before the end of the primary phase) and another from the Rodings, apparently concealed at much the same date, show a mixed


2 Metcalf, Thryrsas and Sceattas, at pp. 176 f., 183 and 230, where the secondary porcupine is illustrated.
currency in which continental coins were plentiful. Were the porcupines and continental runes

demed somehow unsuitable for funerary use? Did the Anglo-Saxons, like Rupert Brooke, dream

do an English heaven?

So much for the primary sceattas. An obvious supplementary enquiry, at this point, is to
ask whether the secondary sceattas found in Kent can help our understanding of the primaries
by revealing the same (or different) sorts of patterns in east and west Kent. Were any second-
ary sceatta types relatively more plentiful in west Kent than in east Kent? How do the assem-
blages from the two parts of Kent compare with what is found in London, from the secondary
phase? This enquiry is unfortunately not yet fully viable, because only 16 single finds of the
secondary phase are on record from west Kent (compared with 116 from east Kent).

Percentage values are therefore subject to unacceptably wide margins of uncertainty. That
said, there are no types that offer themselves, even provisionally, as candidates for a

Rochester attribution.

It is reasonably clear that foreign sceattas (secondary porcupines and Wodan/monsters) make
up a significantly larger proportion of the currency in east Kent than they do in west Kent or in

London. Series K, Types 32a, 33, and 42 are clearly east Kentish. Series V is almost certainly
east Kentish, as is Series M. London shows its East Saxon connections by the prominence of
Series S, which is otherwise quite localized in Essex. Series N and U both appear to be more
plentiful in east Kent than in west Kent or London.23 The assemblage from west Kent is, in short,
rather miscellaneous.

Map 4  Regression analysis for Series K, Types 32a, 33 and 42 (together). Base-map: finds of secondary sceattas. The
gathering circle is the same as for Fig. 2.

23 But let us remember that there are only 36 finds from west Kent. The political dimensions of the problem of localizing Series U, Type 23d
are discussed in conclusively in "Thywines and Sceattas," at pp. 554–62. The reader may wish to scan those pages with Rochester now in mind.
The beginnings of the secondary phase in the south-east should perhaps be seen in the context of King Wihtred’s consolidation of power. Rigold quoted the annal, from the bilingual Canterbury chronicle, s.v. 725, ‘Obitus Wihtredi gloriosi regis Cantiae’. It must have been Wihtred, and his archbishop Berhtwald (693–731), who, very early in the secondary phase (c.715?) were obsessively interested in coin types showing wolves (Series V, and K, Types 32, 33 and 42). There may be an element of anti-Mercian typology here. As regards the chronology, the Garth-on-the-Wolds grave find, from the East Riding of Yorkshire, offers an early context for Type 32. Metal analyses suggest that Series K, Types 18/20 come later. That little cluster of types is far less well represented in east Kent than are Types 32–33–42. A regression analysis of these three types is shown in Map 4. It differs from Map 2, interestingly, in being very localized in east Kent, and in having its focus not in Canterbury but in Reculver and, perhaps, along the Wantsum Channel. Although more finds would be welcome (as always!), the contrast between the two maps seems to be clear enough. Whatever the mint-place may have been in the primary phase, it looks as if it was different at the beginning of the secondary phase. Had minting been transferred, with the introduction of Series K, from the productive site ‘near Canterbury’ to some other wic? – or is the contrast between the maps the result of contraction to a more localized monetary circulation? There is only one specimen of Series K from the city of Canterbury itself, and none from the productive site, where admittedly only four or five secondary sceattas have been reported. The site did not disappear from monetary history in the early eighth century, as the rich haul of coins of Offa testifies.

The three east Kentish types of Series K turn up further afield throughout much of eastern England; money may well have left east Kent by sea, carried northwards along England’s east coast by shipping – as far, for example, as Garton-on-the-Wolds. (Likewise the Æthelredes from Humberside; it is extremely probable that they were carried there by sea.) Trade may have shifted from the Canterbury-London route, more towards the east coast maritime route. But the outliers should not influence our assessment of monetary circulation within Kent.

The dramatic change in iconography at the beginning of the secondary phase is, meanwhile, self-evident. There seems to be a gulf between the primary and secondary phases – and perhaps a break of a few years when minting was in abeyance in England. Typologically the Æthelred type looks to belong on the earlier side of that gulf. Perhaps some of the minting arrangements changed too. A similar suspicion has been voiced about the mint-places of the sceattas from East Anglia,24 where continuity between the primary and secondary phases, whether of iconography or mint-places, is by no means apparent.

To sum up: this paper has argued, on the basis of distribution-patterns of single finds, and of contrasts within and between those patterns, that the mint-place of Series Pa, A and C is to be sought in Kent, and of Series B north of the Thames. Regression analysis supports an attribution of the Kentish Series Pa, A and C to the Canterbury area, and closer consideration suggests a nearby wic. The pronounced and repeated emphasis on west Kent, in the distribution patterns of Pa, A, and C, seems to be a misleading feature of the statistics if they are handled regionally. But even using regression analysis the Rochester area has almost as high a proportion of Pa – A – C as the Canterbury area. That is on the assumption, favourable to a Canterbury attribution, that the mint was within a gathering circle centred on Canterbury.

On general historical grounds, London is the most plausible place of origin for Series B; but it remains a problem that B is not particularly plentiful among the single finds from London, taken as a whole. That may be because the mint was not yet located in the Aldwich area, where modern excavation has been concentrated, but this is not a particularly convincing excuse. As regards Series C, the balance of the East Anglian evidence is against its belonging to that province. Finally, the Æthelred porcupines show a pronouncedly east Kentish distribution, with no extension to west Kent (although this last point rests on rather slender statistical evidence). They may have been struck late in the primary phase by a moneyer of that name working as a free-lance or, more probably, for the archbishop of Canterbury. The find from Stone-next-Faversham may be a special case.

Another very restricted east Kentish distribution is seen in Series K, Types 32a, 33 and 42. These seem to have been minted not at the 'productive site near Canterbury', but somewhere further east, perhaps on the Wantsum Channel. Many more single finds will be welcome, and it is important that all sceattas, even of common types, should be reported, because conclusions about monetary circulation are dependent on the randomness of the sample.

Attributing Series A, B and C is not easy. Until we have reliable evidence of their mints of origin, any attempt to interpret them for monetary history will be insufficiently tethered to the numismatic facts. The distribution-maps strongly suggest that long-distance trade was the dominant context for the use of the primary sceattas in Kent. By the end of the primary phase, however, the currency shows clear signs of becoming more localized. Comparing one distribution-map with another can provide strong evidence, which discounts many of the defects and uncertainties of the data-base. In the rigorous senses that have been codified by the 'hard' social sciences, Anglo-Saxon monetary history needs to be based on quantified hypotheses, which are refutable, and the facts need to be made fully available in such a way that they can be revised and up-dated systematically.

Evidence from other regions does not help much. When sceattas from the south-eastern mints were carried beyond the south-eastern region, they become second-hand evidence for mint-attribution. A topographical analysis of the single finds from Kent, Essex, and London may not yet provide us with clear answers on points of detail, but, difficult as the arguments for attribution are, it has privileged status.

APPENDIX: SUMMARY LIST OF SINGLE FINDS OF PRIMARY SCEATTAS FROM THE SOUTH-EAST

(This list is extracted from the data-base which the writer hopes to publish in a planned volume on monetary circulation in the seventh and eighth centuries.)

East Kent


West Kent


Essex, estuarine


Essex, northern