

DIE-CUTTING STYLES IN THE *LAST SMALL CROSS* ISSUE OF c. 1009–1017 AND SOME PROBLEMATIC EAST ANGLIAN DIES AND DIE-LINKS

STEWART LYON

1. *Last Small Cross* die-cutting styles

IN a pioneering study of regional die-cutting, published in Sweden in 1958, the late Michael Dolley described in outline the principal styles of portraiture he had identified among the *Last Small Cross* coins in the Systematic Collection in the Royal Coin Cabinet in Stockholm and discussed their geographical significance.¹ As his paper made clear, he recognized that the pattern would be refined when epigraphy was also taken into account and he expressed the hope that he and I would publish later a full discussion. With that in mind I participated in a working visit with Dolley and Gay van der Meer in 1962 and took photographs and weighings to show how the styles could be subdivided and their relative chronology determined. Although various publications have described the results in outline² a more detailed classification has not so far been published, except for Lincoln and York by Mark Blackburn, who has also recorded a right-facing variety in East Anglia.³ However, because the subdivided styles are important for an understanding of the arguments later in this paper, the opportunity is being taken of describing and illustrating them here. There is still a need for a full study along the lines of that published a few years ago on Cnut's *Quatrefoil* type;⁴ it will require *inter alia* a fresh examination of the *Last Small Cross* coins in the Systematic Collection in Stockholm and the later Swedish hoards.

In outline, at the inception of the issue coins were minted at heavy weight standards in the range 1.60–1.75g. (24.7–27.0 Troy grains), the higher part of the range being typical of moneyers in Wessex and West Mercia but those in Kent, London and the Danelaw tending to make more use of the lower part. Three schools of engravers seem to have been primarily responsible for the initial supply of dies to moneyers outside Northumbria. One, which can confidently be identified with Winchester, sent dies ('Winchester A') to Worcester, Warwick and Oxford in the west midlands, towns in Sussex and Kent in the south-east, Bedford, Northampton, Norwich, Thetford, Huntingdon, Stamford, Lincoln and Derby in the Danelaw, as well as to towns in Dorset, Somerset, Hampshire and Wiltshire. A second, responsible for Devon and presumably located in Exeter, also shared in the initial distribution to moneyers in Somerset (other than Bath), Dorset and Wiltshire, as well as Wallingford, Warwick and several towns in the Danelaw, including Cambridge, Huntingdon, Leicester, Thetford and Ipswich

¹ R.H.M. Dolley, 'Some Reflections on Hildebrand Type A of Æthelræd II', *Antikvariskt arkiv* 9 (1958), 1–41.

² See for example Pauline Stafford, 'Historical Implications of the Regional Production of Dies under Æthelred II', *BNJ* 48 (1978), 35–51, and Mark Blackburn and Stewart Lyon, 'Regional die-production in Cnut's *Quatrefoil* issue', *Anglo-Saxon Monetary History*, edited by M.A.S. Blackburn (Leicester 1986), 223–72 at pp. 224–5.

³ Mark Blackburn, 'Do Cnut the Great's first coins as king

of Denmark date from before 1018?', *Commentationes de Nummis Saeculorum IX–XI in Suecia Repertis, Nova Series 6: Sigtuna Papers*, edited by Kenneth Jonsson and Brita Malmer (Stockholm and London 1990), 55–68, at pp. 61–65; and 'An East Anglian Variety of Æthelred II's *Last Small Cross* Type', *Studia Numismatica: Festschrift: Arkadi Mulvağin 65*, edited by J. Leimus (Tallinn 1995), 23–26.

⁴ Blackburn and Lyon, 'Regional die-production' as in n. 2.

(‘Exeter A’, with a second portrait engraver at work, ‘B’ – the cruder – mostly limited to Devon and Dorset.) The third (‘Gloucester’) school, primarily responsible for the West Mercian towns from Bristol to Chester (including Shrewsbury, Stafford and Tamworth but apparently excluding Worcester and Warwick), shared in the distribution to moneymers in Bath, Cricklade, Oxford and Wallingford and suprisingly supplied some in London, and perhaps also Colchester, with their first dies. York cut its own dies, and at this stage seems not to have supplied other towns nor received dies from elsewhere, except that one pair of dies by the engraver for Winchester was cut for an otherwise unknown moneyer Edwine.⁵

Very soon there were engravers at work in London and Lincoln, and presently also in Canterbury and at a centre in Norfolk (Norwich or Thetford). They cut dies for moneymers in other accessible towns as required, as now also did the engraver in York; but of the original three southern schools only Winchester seems to have continued to send dies outside its own region, and then only rarely.⁶ An engraver at Ipswich who also supplied some dies to Colchester distinguished himself by having difficulty with the spelling of the inscriptions. To complicate the pattern still further, there are instances of moneymers using dies of unexpected styles where the explanation appears to be the presence of the moneyer in the engraver’s district, not the latter sending dies to the named but distant town with which the moneyer was usually associated.⁷

The weight standard fell by about twenty per cent quite early in the issue and then in stages until, as we shall see, by the time the type was replaced pence were being minted in towns such as London and Lincoln at sixty per cent of the original standard or even less.

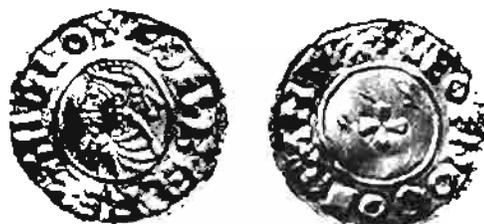
Descriptions of the main styles and sub-styles and their correspondence with Dolley’s original terminology are as follows:

Proposed name Identifying features
(and relevant Dolley styles)

(Enlarged by 1½)

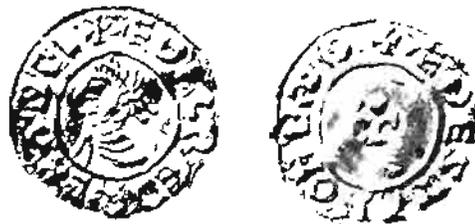
Winchester A
(Southern B)
(Pl. 2, 1–2)

Hair short, straight and beaded; eye pellet not enclosed; ethnic usually ANGL or ANGL-; king’s first and sixth letters Æ; capped or uncapped A; untidy lettering; 3 or 4 curved lines of drapery behind single inverted V, often unjoined at apex. Copulative ON.



Winchester B
(Southern B)
(Pl. 2, 3–4)

A small group, similar to (but later than) Winchester A except that the hair is rounded and the ethnic is ANGL, ANG or AN. Copulative ON.



Winchester C
(Southern A)
(Pl. 2, 5–7)

Hair very short and on both sides of curved diadem with enclosed eye at its front,

⁵ *SCBI* Copenhagen II, 240, Winchester A style.

⁶ For example, dies of Winchester B style were supplied to the Leicester moneyer Æthelwig (*SCBI* Copenhagen II, 508).

⁷ Stewart Lyon, Presidential Address: ‘Historical Problems of Anglo-Saxon Coinage – (4) The Viking Age’, *BNJ* 39 (1970), 193–204, at pp. 202–3.

giving fishbone effect; ethnic usually ANGLO or ANGL; king's first and sixth letters Æ; capped A; 3 or 4 curved lines of drapery behind double inverted V. Copulative ON.



Exeter A e
(*Southwestern*)
(Pl. 2, 8–9)

Tall bust, cropped rounded hair; eye pellet sometimes with curve below; ethnic variable; king's first and sixth letters Æ; mostly uncapped A; 3 or 4 curved lines of drapery behind single inverted V. Copulative ON.



Exeter A l
(*Southwestern*)
(Pl. 2, 10)

Larger head, bust fills field; otherwise similar to Exeter Ae. Copulative ON.



Exeter B e l
(*Southwestern*)
(Pl. 2, 11–13)

Cropped hair, long nose, low mouth, hunchback shoulder; diadem often follows the curve of the head; lettering and drapery similar to Exeter. Copulative ON.



e



l

Gloucester e l
(*Western*)
(Pl. 2, 14–16)

Hair short and straight, sometimes curly, usually with a curl on the forehead as in the corresponding *Quatrefoil* style; eye pellet enclosed; some dies have a large inner circle, large bust and ethnic ANGLO; others have a smaller inner circle and bust with ethnic A, AN or ANG, the latest on a smaller flan; large letters,



e

	king's first letter Æ, sixth E; capped and usually barred A; up to 5 straight lines of drapery behind single inverted V. Copulative ON, rarely MON.		
London A (<i>Southeastern</i>) (Pl. 2, 17)	Curly hair; eye pellet enclosed by curve; ethnic usually ANGLOR; king's first and sixth letters usually Æ; large lettering, tail before R, capped A; 3 or 4 curved lines of drapery behind inverted V, usually double. Copulative usually includes both M and N.		
London B (<i>Eastern, or local variant</i>) (Pl. 2, 18–19)	Straight or slightly rounded hair, often light beading; eye pellet enclosed; ethnic ANGLOR, ANGL or ANG; king's first and sixth letters variable; lettering as London A; 2, 3 or 4 curved lines of drapery behind inverted V, usually single. Copulative usually includes both M and N.		
London C (<i>London</i>) (Pl. 2, 20)	Large pointed nose, rounded beaded hair; eye enclosed; ethnic usually ANGLOR; king's first and sixth letters Æ; lettering more compact than London A and B, capped A but no tail before R; 3 or 4 lines of curved drapery behind inverted V, occasionally double. Copulative usually includes M, sometimes with N.		
London D e m l (<i>London</i>) (Pl. 2, 21–23)	Rounded beaded hair; eye enclosed; ethnic reduces as flan size and weight diminish (longest ANGLOR); king's first and sixth letters variable; lettering as London A and B with capped A and tail before R until flan becomes small with compact lettering; 3 or 4 curved lines of drapery behind inverted V, double on early dies. Copulative usually includes both M and N.		
			

Canterbury A, Aa
(*Southeastern*)
(Pl. 2, 24–25)

Curly hair, head smaller than London A; eye enclosed; no tail before R; A sometimes uncapped; 4 lines of curved drapery behind inverted V, usually double. Early dies have larger right-facing bust (Hildebrand type Aa). Copulative usually includes both M and N.



Rochester
(*Southeastern*)
(Pl. 2, 26)

One pair of dies appears to have been locally engraved. The portrait is almost artistic and the lettering larger than at Canterbury. Copulative M·ON.



York e 1
(*Northern A*)
(Pl. 3, 1–5)

Straight unbeaded hair, moulded cheek, widely spaced lips producing vacuous expression, eye pellet not enclosed; early dies have head leaning slightly forward, later ones have head upright; ethnic seldom less than ANGLOR; king's first and sixth letters E; usually uncapped A; usually 4 lines of curved drapery behind single inverted V. Copulative includes M but no N.



Lincoln A
(*Southern B*)
(Pl. 3, 6)

High bust, fine hair; eye pellet enclosed; ethnic ANGLOR X to ANGL; first letter of king's name Æ, sixth E; capped A; 4 or 5 curved lines of drapery behind inverted V (sometimes double). The copulative on true reverses is ON, so the dies may have been engraved at Winchester in parallel with the engraving of Winchester A (compare Elmore Jones 931).



Lincoln B
(*Northern B*)
(Pl. 3, 7)

Low rather crude bust, straight beaded hair; eye pellet enclosed; ethnic ANGLOR to ANG; king's first letter Æ, sixth E or Æ; uncapped A; 3 lines of



curved drapery behind
single inverted v.
Copulative includes M, but
usually no N.

Lincoln C e m l
(Northern A)
(Pl. 3, 8–14)

Larger higher bust, copying
York; straight unbeaded
hair; cheek often strongly
delineated; early dies have
eye pellet lightly enclosed,
middle and late unenclosed;
diadem on middle dies not
attached to forehead; ethnic
ANGLOR to ANGL on early dies,
ANGLO to ANG later; king's
first letter usually Æ,
but E on some late dies;
lettering as Lincoln B; 3 or
4 lines of drapery, straight or
gently curved, behind single
inverted v (early dies
have two parallel lines
instead of v).
Copulative includes M but
no N.



e



m



l

Norfolk A, Aa
(Eastern)
(Pl. 3, 15–18)

Straight unbeaded hair, tall
bust, thinner than Lincoln C
style; curved diadem; eye
pellet unenclosed;
king's name usually EDELRED;
small stubby lettering,
NG often ligated, sometimes
a tail before R, uncapped A.
Usually 4 curved lines of
drapery behind single
inverted v; sometimes double
line at the back.
Main varieties – Aa: early
dies with right-facing bust
(Hildebrand Type Aa).
Ai: the head is upright or
leans slightly forward.
Aii: the head is tilted
backwards.
Aiii: small flan, small
inner circle both sides,
small bust, lettering larger
than *i* and *ii*.
Copulative M^o on most Aa;
otherwise ON.



i



ii



iii

Norfolk B e l
(London, or
local variant)
(Pl. 3, 19–21)

Rounded head, often forward
in field; eye pellet not
enclosed; king's name and
late lettering as Norfolk
Ai and ii but earlier
lettering larger; usually
4 lines of curved drapery
behind single inverted V
(5 lines on early dies).
Copulative ON.



e



l

Ipswich A, B, D
(A, B = Eastern,
D = London)
(Pl. 3, 25–27)

Copies London A, B, D but
legends partly blundered
and obverse legend seldom
starts at 12 o'clock.
Letter X depicted as +.
Copulative ON, NO.



A



D

PUBLISHED SOURCES OF COINS ILLUSTRATED ON PLATES 2 AND 3

Plate 2

1. SCBI West Country 577. Bath, Ægelric. 1.71 g.
2. Elmore Jones (1971) 158. Canterbury, Leofnoth. 1.68 g.
3. SCBI West Country 579. Bath, Æthestan. 1.35 g.
4. Elmore Jones 934. Winchester, Siboda. 1.33 g.
5. SCBI Glasgow 887. Winchester, Ælfeah. 1.46 g.
6. Doubleday (1987) 566. Winchester, Cynna. 1.23 g.
7. SCBI Glasgow 884. Salisbury, Sæman. 1.41 g.
8. Brettell (1970) 121. Exeter, Wulfsige. 1.71 g.
9. Doubleday 536. Wallingford, Leofstan. 1.61 g.
10. Elmore Jones 552. Lydford, Goda. 1.25 g.
11. Brettell (1970) 10. Exeter, Ælfnoth. 1.69 g.
12. Brettell (1990) 492. Totnes, Goda. 1.74 g.
13. Brettell (1970) 78. Exeter, Isegod. 1.02 g.
14. Lockett (1958) 2763a. Oxford, Alfwold. wnr. (Another SCBI Oxford 627, weighs 1.66 g.)
15. Lockett (1958) 2762c. Gloucester, Godwine. wnr. (Another, SCBI Oxford 620 from the same obv. die, weighs 1.56 g.)
16. Elmore Jones 597. Northampton, Leofwold. 1.12 g.
17. (BEH 2602 bis). London, Godwine. 1.66 g.

18. *BEH* 2569. London, Godric. 1.74 g.
19. *BEH* 2739. London, Leofwine. 1.09 g.
20. Elmore Jones 496. London, Wulfwine. 1.31 g.
21. *BEH* 2157. London, Æthelwerd. 1.64 g.
22. Doubleday 452. Southwark, Ælfwine. 1.22 g.
23. Doubleday 247. London, Elenod. 1.04 g.
24. Norweb (1987) 1228 (= *SCBI American* 486). Canterbury, Leofstan. 1.15 g.
25. Elmore Jones 157. Canterbury, Leofnoth. 1.45 g.
26. Lockett (1955) 652c. Rochester. Ælfheh. wnr. (*Two duplicates, SCBI Glasgow 883 and SCBI Copenhagen II 1052, weigh 1.31 and 1.28 g. respectively.*)

Plate 3

1. *SCBI Copenhagen II*, 324. York, Wulfsige. 1.51 g.
2. *SCBI Copenhagen II*, 310. York, Thorstan. 1.61 g.
3. Doubleday 590. York, Hildolf. 1.18 g.
4. *SCBI Copenhagen II*, 564. Lincoln, Osferth. 1.40 g.
5. Doubleday 384. Norwich, Hwateman. 1.26 g.
6. *SCBI Glasgow* 880. Lincoln, Wulfric. 1.60 g.
7. *SCBI Oxford* 622. Lincoln, Wulfgrim. 1.59 g.
8. *SCBI Lincolnshire* 1227. Stamford, Swertgar. 1.14 g.
9. *SCBI Glasgow* 885. Shrewsbury, Ælfstan. 1.30 g.
10. *SCBI Copenhagen II*, 554. Lincoln, Godwine. 1.50 g.
11. *BEH* 1777. Lincoln, Godwine. Rev. as last. 1.37 g.
12. Elmore Jones 596. Northampton, Leofwold. 1.22 g.
13. *SCBI Lincolnshire* 294. Lincoln, Sumerleth. 1.34 g.
14. *SCBI Lincolnshire* 263. Lincoln, Leofwine. 1.16 g.
15. *SCBI Copenhagen II*, 1214. Thetford, Fastuf. 1.40 g.
16. Doubleday 382. Norwich, Eadwacer. 1.26 g.
17. Doubleday 490. Thetford, Sumerled. 1.24 g.
18. *SCBI Copenhagen II*, 382. Cambridge, Leofsig. 1.11 g.
19. Doubleday 389. Norwich, Wufmr (= Wulfmær). 1.31 g.
20. Doubleday 491. Thetford, Walgist. 1.37 g.
21. Elmore Jones 823. Thetford, Elfwine. 1.33 g.
22. Doubleday 197. Ipswich, Siwold. 1.11 g.
23. *SCBI Glasgow* 878. Ipswich, Leofsig. 1.32 g.
24. (Lyon). Ipswich, Lyfinc. 1.75 g.
25. Elmore Jones 401. Ipswich, Leofsig. 1.24 g.
26. Elmore Jones 208. Colchester, Edwine. 1.36 g.
27. Norweb (1985) 69 (= *SCBI American* 485). Thetford, Wufnod (= Wulfnoth). 1.27 g.

2. Hildebrand type Ae of Æthelred II's London mint revisited

In the early 1960s I published the only four specimens known to me of Hildebrand Type Ae of Æthelred II – a variety of the *Last Small Cross* type in which the bust, which is normally contained within an inner circle, breaks the circle and extends to the edge of the coin.⁸ A few years later a fifth specimen was reported by Elmore Jones.⁹ All five were by different London moneyers, named as Eadwold, Godric, Leofwine, Liofstan and Sæwine,¹⁰ and the style is a variant of late London D:

- | | | |
|----|-------------|-------------------------------------|
| 1. | <i>Obv.</i> | +ÆDELRE/D REX A1 |
| | <i>Rev.</i> | +EADPOLD MO LVNDE |
| | | <i>BEH</i> 2421. 1.06 g. (Pl. 4, 3) |

⁸ C. S. S. Lyon, 'Two Notes on the 'Last Small Cross' type of Æthelred II – I. A Late Variety from the London Mint', *BNJ* 31 (1962), 49–51.

⁹ Exhibited by F. Elmore Jones at the November 1966

meeting of the British Numismatic Society (*BNJ* 36 (1967), 211–2 and Pl. 1, 20).

¹⁰ For numismatic clarity, moneyers' names in the text are spelt as on the relevant coins (unless blundered) and are not normalized.

2. *Obv.* +ÆDELRAE/D REX A
Rev. +GODRIC MO LVNDE
 BEH 2577. 1.06 g. (Pl. 4, 5)
3. *Obv.* +ÆDELRAED/REX AN
Rev. +LEOFINE ON LVNDE
 BEH 2743. 1.08 g. (Pl. 4, 6)
4. *Obv.* +ÆDELRE/DREX A
Rev. +LIOFSTAN MO LVNDE
 L. R. Stack (1999) 532 ex Elmore Jones (1971) 497 ex Grantley (1944) 1120b.
 0.86 g. (Pl. 4, 7)
5. *Obv.* +ÆDELR/D REX A
Rev. +SÆPINE MON LVND
 Lyon bt Baldwin 1958 ex Ryan (1952) 827 ex Drabble (1939) 453. 0.90 g. (Pl. 4, 8)

Two further specimens have recently been illustrated, though without specific identification, in the Appendix to Professor Brita Malmer's Anglo-Scandinavian corpus.¹¹ One is by a sixth London moneyer, named as Brihtwold but misspelt, while the other, a large fragment on which the moneyer's name is missing, is a die-duplicate of the Godric coin, no. 2 above:-

6. *Obv.* +EDELRE/ED REX
Rev. +BRNITPOLD NO LV
 Gärestad, Edestad, Blekinge (SHM Inv 8503). 1.03 g. Malmer 2526. (Pl. 4, 2)
7. *Obv.* + /D REX A
 Dies as 2.
Rev. + MO LVNDE'
 Slethei, Rogaland, Norway (Skaare (1976) no 82). 0.61 g. (large fragment). Malmer 2531.

An eighth has recently come to light, quite possibly from an English find. It has a dark brown patina and is unpecked:-

8. *Obv.* +ÆDELRED REX A (double inverted V at front of drapery)
Rev. +ÆDELRIC ON LVND
 Lyon. bt Baldwin 1998. 1.13 g. (Pl. 4, 1)

and Professor Jonsson has recorded a ninth, a duplicate of no. 1, in the Djuped hoard (SHM Inv. 16295), 1.12g. (Pl. 4,4).

There is no doubt that the coins of this variety are English, not Scandinavian. Six of the seven moneyers are also recorded for London using ordinary obverse dies of the *Last Small Cross* type. Sæwine, however, is not otherwise known at London except for the *Pointed Helmet* type of Cnut.¹² He may perhaps be the same person as the Sæwine who is recorded

¹¹ Professor Malmer's magisterial corpus, *The Anglo-Scandinavian Coinage c. 995–1020 (Commentationes de Nummis Saeculorum IX–XI in Suecia Repertis: Nova Series 9)*, Stockholm (1997), hereinafter referred to as Malmer, is primarily concerned with literate and barbarous Scandinavian imitations of English coin types of that period, and coins struck in Scandinavia from dies one or both of which were exported from England. Her book is now an essential work of reference for all serious students of the Anglo-Saxon coinage of Æthelred II and Cnut.

It is not always easy to tell whether a literate coin of good style and appropriate weight was struck in England or Scandinavia. Over the last forty years papers written from an Anglo-Saxon perspective, and notes in *SCBI* fascicules, have attributed to Scandinavia a substantial number of coins

ostensibly minted in English towns. Some of the dies had evidently been exported from England, while others were imitations close enough to their prototypes to have deceived scholars of the calibre of Hildebrand and Galster at a time when research into die-cutting styles had yet to be undertaken. Even quite recently a group of die-duplicates of Cnut's *Short Cross* type from a Danish hoard, which seem to the present writer to be very good local copies, were published as official products of the London mint (see a review in *BNJ* 66 (1996), 181–3). But deception can work in both directions, and it is no criticism of Professor Malmer that in the course of this paper a few of the *Last Small Cross* coins which she has included in her corpus will be claimed back for England.

¹² *SCBI* Copenhagen IIIB. 2899.

with a Huntingdon signature in *Æthelred Helmet* and *Last Small Cross* and also *Quatrefoil* of Cnut, and who in *Last Small Cross* is involved in an obverse die-link with moneyers of Sudbury and London.¹³

The light weight of the extant specimens of Type Ae points to a date close to the end of the *Last Small Cross* issue, and it was suggested in the original publication that it might have been an experimental design for a new obverse type. Certainly there was experimentation with the arrangement of the obverse inscription, no. 8 (the heaviest) being the only one on which it is not interrupted by the bust. However, a stronger case for a search for a new type can be made for the unique but badly broken penny in Bergen by the London moneyer Ealdred on which the diademed hair is replaced by a pointed helmet, foreshadowing, as it happened, not Cnut's first issue but his second.¹⁴ (Pl. 4, 9)

3. Pointers to late die-cutting at Lincoln

Type Ae is just one instance of light minting at London towards the end of *Last Small Cross*. Of 844 London pence whose weights were recorded by Bertil Petersson as many as 234, or 28%, were lighter than 1.15 g. At Norwich the proportion was 24%, at Stamford 32%, at Lincoln 16% and even at Winchester it was 8½%, but at York only 1½%.^{15, 16}

There are three possible explanations for the small proportions of coins of light weight at Winchester and York. The Winchester and York moneyers may have been virtually inactive during the final phase of the issue or, if active, were striking significantly heavier on average than those in the other towns. Alternatively, they may have been minting to a closer tolerance than those of London, Norwich, Stamford and Lincoln, so giving rise to a longer tail at those towns in the distribution of the coins by weight. For Lincoln we can test the last proposition by examining the weights in Mossop of coins struck from a group of reverse dies with a common characteristic (reverses rather than obverses because they wore out more quickly and therefore generally occupied a shorter time span).¹⁷

The York and Lincoln workshops cut dies of very similar styles that used to be grouped together as 'Northern A'. It has been recognised for some time that the York engraver always began the king's name with E, whereas his Lincoln counterpart usually preferred Æ. Other differences of obverse detail are summarised and illustrated above.¹⁸ Reverses have not hitherto been studied. However, one occasional feature, namely the insertion of one or more letters in the reverse field at Lincoln, is quite illuminating.

Field letters (as distinct from symbols such as crosses or pellets) are found on eighteen Mossop reverse dies, from which twenty-one specimens are listed with weights as follows:

Æthelmær a, b	E	1.11, 1.03, 1.14 g. (edge chipped: Pl. 4, 10)
Æthelnoth u	E and C	0.90 g.
Eadmund a	E, o	1.12 g. (pierced)
Iustan b, e	E	0.96, 0.97 g.

¹³ See below, p. 39.

¹⁴ C.S.S. Lyon, G. van der Meer, and R.H.M. Dolley, 'Some Scandinavian Coins in the Names of Æthelræd, Cnut and Harthacnut attributed by Hildebrand to English Mints', *BNJ* 30 (2) (1961), 235–51 (hereinafter referred to as LvdMD) at p. 237; also Lyon, 'Historical Problems', *BNJ* 39 (1970) at p. 201 and Pl. IX, 9.

¹⁵ H. Bertil A. Petersson, 'Coins and Weights: Late Anglo-Saxon Pennies and Mints, c. 973–1066', *Studies in late Anglo-Saxon Coinage in memory of Bror Emil Hildebrand*, edited by K. Jönsson (*Numismatiska Meddelanden* XXXV, Stockholm 1990; referred to hereinafter as *SLAC*), 207–433,

in Tables 55, 56, 69, 87, 105 and 107.

¹⁶ In H.R. Mossop, *The Lincoln Mint c. 890–1279* (Newcastle upon Tyne 1970), Table 5, 100 of 528 Lincoln weights tabulated (19%) are below 1.15 g. I have preferred to use Table 55 of Petersson, partly for consistency and partly because Mossop did not always indicate in the text when a coin was defective so that it could be excluded from the relevant distribution.

¹⁷ Mossop, as in n. 16 (referred to hereinafter as Mossop). In what follows, care has been taken to identify damaged specimens.

¹⁸ p. 25–6.

Iustan f	V	0.73 g. (fragment)
Leofric a	V	1.06 g.
Leofwine c	E	1.15, 1.06, 0.99 g.
Osferth k	V	1.00 g.
Othbern c, l	C	0.60 (cut ½d), 1.00 g. (twice holed)
Ræienold g	C	1.21 g. (Pl. 4, 12)
Sumerleth g, q, r, s	V	1.15, 1.02, 1.07, 1.00 g. (Pl. 4, II)
Wulfgrim g	E	1.00 g.

Without exception, these dies use a copulative in the form M-O, the letters separated by a pellet above a dash. This appears to be a late development, for it is found on few Lincoln coins weighing more than 1.25 g. The alternative M^oO overlaps with it to some extent but has a principal range from 1.20 to 1.49 g.; sometimes there is a pellet *below* the dash or an annulet above it, thus M^oO. (The copulatives ON and MO (without a dash) are usually associated with higher weights, though some dies continued in use into the middle range.) At York, on the other hand, the engraver seems to have used the forms M^oO and M-O indiscriminately.

Mossop records sixty-five Lincoln reverse dies with the copulative M-O. Five of these are of the moneyer Lefinc and can be disregarded, because for some reason this moneyer obtained five of his six known obverse dies from York; all his reverse dies with copulative M-O are found combined with those obverses and presumably also came from York, where it has no obvious chronological significance.

The weight distribution of the coins listed by Mossop for the remaining sixty Lincoln reverses is shown in Table 1. Almost all the associated obverses are of late Lincoln C style, though several use E instead of Æ for the first letter of the king's name. One obverse (Osfram A) is of York style and accounts for two of the heaviest coins without field letters. Another (Leofric C) is of late London D style; the only coin recorded by Mossop has a Lincoln-style reverse and is the lightest in the table at 0.88 g. Damaged coins have been identified where possible and indicated or shown separately.

TABLE 1. Lincoln coins with copulative M-O

<i>Weight (g.)</i>	<i>No letter in field</i>	<i>Letter(s) in field</i>
1.25–1.29	5	–
1.20–1.24	6	1
1.15–1.19	13	2
1.10–1.14	14	3*
1.05–1.09	6	3
1.00–1.04	3	5
0.95–0.99	2	3
0.90–0.94	2	1
0.85–0.89	1	–
	52	18
Damaged	7	3
Total	59	21

* includes one chipped and one pierced

Although the numbers are small, not least because die survival from the end of the issue is relatively low, it does appear that letters were inserted in the field of reverse dies at a very late stage and that while these dies were in use the weight standard was deliberately allowed to fall

below the minimum of c. 1.15 g. suggested by Blackburn¹⁹ to something closer to 1.00–1.05 g., comparable with Type Ae at London.²⁰ It is therefore unlikely that the explanation for lighter minting at Lincoln than at York lies in weaker control over tolerance.

More probably, York and Lincoln may have been using different weight standards at the same time. That such a thing was happening elsewhere in *Last Small Cross* is suggested by the weights of coins struck respectively at Lincoln and Stamford from early obverses of Lincoln C style, which have a tall thin bust, an enclosed eye, and nearly parallel lines at the front of the drapery. At Lincoln, twenty of twenty-two undamaged coins of that style recorded by Blackburn weigh 1.30 g. or more,²¹ but only three of twelve such coins of Stamford in two important *SCBI* fascicules do so and five others are lighter than 1.20 g.²² In the face of evidence of this kind, which has a strong parallel in other issues,²³ it would be unsafe to conclude that the York mint must have been inactive at the end of the *Last Small Cross* issue. We will return to this question in part 5.

4. East Anglian die-cutting styles

At the outset of *Last Small Cross*, moneyers in East Anglia were supplied with dies from major centres outside the region. Dies of Winchester A style reached Norwich and Thetford while Thetford also received Exeter A, as did Cambridge. Huntingdon had dies of both styles. On the other hand the earliest used at Ipswich seem to have been London A. Later, as we shall see, some moneyers obtained dies from Lincoln, but dies of styles associated with London were also sent to East Anglia, particularly London C which is found at Cambridge, Sudbury and Thetford.

Early in the issue a heavy right-facing variety (Hildebrand Type Aa) was struck at Thetford and Cambridge from dies probably made at Thetford.²⁴ (It has been called Norfolk Aa in the stylistic descriptions above.) In the middle and late periods two styles designated Norfolk A and B respectively copy the London B (or Lincoln C) and London D styles and could have been engraved at either Thetford or Norwich. Most of the dies of these styles were used by moneyers of Norwich, Thetford, Sudbury, Ipswich, Cambridge and Huntingdon. Except on early dies of Norfolk B the lettering is distinctively stubby and NG is frequently ligated. At Norwich, in most cases the second letter of ON and the first letter of the mint are telescoped into a single N.

Ipswich cut its own copies of London A, B and D. These local styles are distinguished from those in Norfolk by larger lettering, a tendency to mis-spell, and the substitution of an upright cross for the X in REX.²⁵

¹⁹ Blackburn, 'Cnut the Great', as in n. 3, pp. 65–66.

²⁰ The Lincoln engraver also cut a pair of dies for a moneyer Leofnoth of London, with the copulative M·O and an E in the reverse field (*BEH* 2668, 1.30 g., and a die-duplicate in my own collection, 1.28 g.). In this case the obverse die found its way to Scandinavia, where it was coupled with a blundered *Small Cross* reverse and with a *Long Cross* reverse, ostensibly of Canterbury, that was also combined with an imitative *Long Cross* obverse (Lyon, van der Meer, and Dolley, as in n. 14, Pl. XIII, Chain M, and now Malmer Chain 124). We therefore cannot be certain that the coins of the true combination were struck in England, and it would not be safe to argue from their heavier weights that the dies are any earlier than those issued to Lincoln moneyers.

²¹ Blackburn, 'Cnut the Great', as in n. 3, p. 64, Table 1.

²² *SCBI* Copenhagen II, 1115, 1128, 1140, 1146–7; *SCBI* Lincolnshire, 1205–6, 1215–6, 1225–7.

²³ For Quatrefoil of Cnut see C.S.S. Lyon, 'Variations in Currency in Late Anglo-Saxon England', *Mints, Dies and Currency: Essays in Memory of Albert Baldwin*, edited by R. A.G. Carson (London 1971), 101–20, at p. 110 and Table 3. For an earlier type, see Kenneth Jonsson, 'An Example of Regional Weight Variation in the Coinage of Æthelred II: The Intermediate Small Cross/Crux Mules and the Transitional Crux Variety', *NC* (1977), 177–80.

²⁴ Blackburn, 'East Anglian Variety' as in note 3.

²⁵ Malmer includes two Ipswich die combinations based on a single reverse die of the moneyer Ode (nos. 623.1725, two examples, and 953.1725, one example). The weights of the three listed coins, which include *BEH* 1089 and 1090, range from 1.32 to 1.22 g., and another specimen of the first combination in my own collection weighs 1.26 g., a consistency which would not be expected if the coins had been struck in Scandinavia. These coins can confidently be regarded as English.

5. A Lincoln origin for a ‘Cnut rex Anglor’ die apparently used at Norwich

Nearly forty years ago Gay van der Meer, Michael Dolley and I discussed and illustrated a number of coins naming Cnut as king of the English but modelled on Æthelred II’s *Long Cross* and *Last Small Cross* types.²⁶ We rejected the seemingly English minting indicated by literate reverse inscriptions, and drew attention to chains of die-links which were inconceivable in an English context. Brita Malmer’s Anglo-Scandinavian corpus reinforces our reattribution of those coins to Scandinavia by showing how most of them fit into more extensive chains which include obvious imitations of crude style and with totally blundered inscriptions.

Included in our paper was a *Last Small Cross* penny in Cnut’s name, the stubby lettering on the reverse being of East Anglian (i.e. Norfolk) style and naming a moneyer Oswald of Norwich.²⁷ We illustrated with it a coin in Æthelred’s name from an almost identical reverse die²⁸ where the obverse, unlike that of the Cnut coin, was also of East Anglian style (i.e. Norfolk Ai). We said that the Cnut obverse was of a style not unlike Dolley’s ‘Northern A’ of *Last Small Cross* and was certainly to be distinguished from that found on other *Small Cross* coins naming Cnut. We concluded that, although there was no direct evidence that the coin was not struck at Norwich, the circumstantial evidence of the other coins of the type suggested that it was not, in which case the dies would have been removed to Scandinavia.²⁹

Further evidence has since come to light and it will now be argued that its interpretation strengthens the case for English rather than Scandinavian minting. First, the Norwich reverse die used with the Cnut obverse has since been found coupled with the Æthelred obverse.³⁰ Secondly, we now know that both Norwich reverse dies were also used with a different obverse of Norfolk Aii style (with the head tilted backwards) which was additionally coupled with a reverse of Dolley’s ‘Northern A’ style naming the moneyer as Hildulf of York. We therefore have a chain comprising six combinations, the specimens so far recorded being as follows:³¹

- 5Aa** *Obv.* +EDELRED REX ANG (NG ligated) (Norfolk Ai style) (Malmer 614)
Rev. +OZPOLD MONONRD (lower limbs of central cross point at second O, at M, and between fourth O and second N (Norfolk style) (Malmer 1726)
- (i) *BEH* 3183. 1.24 g. (ill. *BNJ* 30 (1961) Pl. XII A)
(ii) Uppsala, Holm 301. 1.22 g.
(iii) Doubleday (1987) 387 ex Duke of Argyll. 1.11 g. (Pl. 4, 13)
(iv) Lyon ex Arnot (1995) 178. 1.23 g.
- 5Ab** *Obv.* As last
Rev. +OZPOLD MONONRD (lower limbs of central cross point at second O, between M and O, and at second N) (Norfolk style) (Malmer 1727)
- (i) Elmore Jones (1971) 622. 1.22 g. (Pl. 4, 14)
- 5Ba** *Obv.* +EDELRED REX ANG (NG ligated) (Norfolk Aii style)
Rev. As **Aa**
- (i) *SCBI* Copenhagen II, 1031. 1.20 g. (Pl. 4, 16)

²⁶ LvdMD, as in n. 14.

²⁷ *BEH* Cnut 2971.

²⁸ *BEH* Æthelred 3183.

²⁹ LvdMD, as in n. 14, pp. 239–40.

³⁰ Stewart Lyon, ‘Some problems in interpreting Anglo-

Saxon coinage’, *ASE* 5 (1976), 173–224 at p. 224, notes *e* and *f* to Plate XII.

³¹ I gladly acknowledge help from Bill Lean in assembling this chain.

5Bb	<i>Obv.</i>	As last
	<i>Rev.</i>	As Ab
		(i) SCBI Finland 544. 1.20 g. (pierced) (ii) Lyon (bt. Seaby 1957?). 1.24 g. (Pl. 4, 17)
5Bc	<i>Obv.</i>	As last
	<i>Rev.</i>	+HILDVLF M-O EOFRP (possibly Lincoln C style)
		(i) SCBI Glasgow 889. 1.06 g. (Pl. 4, 18) (ii) Stockholm ex Stumle Hoard (1989). 1.09 g.
5Cb	<i>Obv.</i>	+CNVT REX ANGLOR; (Lincoln C late style) (Malmer 633)
	<i>Rev.</i>	As Ab
		(i) BEH 2971. 1.22 g. (ill. <i>BNJ</i> 30 (1961) Pl.XII A)
		(ii) Visby, GF (VLS). 1.16 g. (broken in half)
		(iii) SCBI Copenhagen IIC, 3212, ex Bruun ex Carlyon-Britton (1913) 530 ex Evans. 1.30 g.
		(iv) SCBI East Anglia, 1249; Norwich Castle, ex Reynolds (1935). 1.13 g. (v) BM ex Lockett (1955) 715 ex Bruun (1925) 160; ?ex Bech (1906) 223. 1.20 g. (Pl. 4, 15)

Obverses **A** and **C** and reverses **a** and **b** are illustrated in the Anglo-Scandinavian corpus, in which Professor Malmer has recorded combinations **Aa** and **Cb**.³² She was evidently unaware of the other four known combinations. If combination **Cc** existed it is as yet unknown.

Considering first the weights, seven of the eight recorded striking in Æthelred's name from combinations **Aa**, **Ab**, **Ba** and **Bb** weigh between 1.20 and 1.24 g., which is the modal range in Petersson's tabulation of the weights of *Last Small Cross* pence of the Norwich mint.³³ Given that all four dies are of Norfolk style there is no reason to suspect their combinations of being Scandinavian. They do not appear to date from the very end of the *Last Small Cross* issue; as has already been mentioned, 24 per cent of the recorded weights of Norwich pence of this type are below 1.15 g. If English, the five recorded specimens in Cnut's name from combination **Cb** could have been minted at much the same time: the heaviest is 1.30 g. and the lightest is only marginally below 1.15 g., though it should be noted that die **b** had seen appreciable wear before striking them. The weights of other *Small Cross* coins in Cnut's name which are undeniably Scandinavian are much more variable.³⁴

Studying the Cnut die **C** in detail, we see that there is a vertical line joining the front of the diadem to the forehead; three lines of hair extend below the diadem; the bust is narrow with the lines of the drapery straight and sloping downwards; the letters are cleanly cut; the uprights of the uncapped and unbarred **A** are close together; the **R** has a clear semicircular loop and an upright with a serif at the foot. These features in combination are not characteristic of York obverses though they are typical of dies of late Lincoln C style; these are usually coupled with reverses having the copulative **M-O**, sometimes with an additional letter engraved in the field (**Pl. 4, 10–12**). On such dies the cheek tends to be slightly moulded, as on the Cnut die, though less so than at York,³⁵ and their Lincoln origin is frequently but not invariably confirmed by the use of **Æ** for the first letter of the king's name.

Reverse die **c** was cut in the name of the York moneyer Hildulf, but the two specimens known from it, in combination **Bc**, weigh only 1.09 and 1.06 g. These are two of the only five coins with the York signature for which, in preparing his corpus of that mint, Bill Lean has recorded weights below 1.15 g.³⁶ It is improbable, given the weights and the die-linking, that

³² pp. 235 and 246.

³³ Petersson, 'Coins and Weights', as in n. 15, Table 69.

³⁴ See Malmer, as in n. 11, pp. 241–50.

³⁵ The line drawings on p. 62 of Blackburn, 'Cnut the Great', and the description on the same page of the Lincoln C

style, make it appear that the king's jaw is always delineated on Lincoln C dies by a continuation of the line of the eyebrow, in contrast to a moulded jaw on York dies. However, on late dies of Lincoln C the jaw is often at least partly moulded.

^{36, 36a} W. Lean, pers. comm.

die **c** was used at York with obverse **B**, which raises the question of whether it was actually cut there.

The moneyer's name is usually engraved as *Hildulf* in this type; the spelling *Hildulf* is otherwise found on only one coin, *BEH 729*, which weighs 1.19 g. and is therefore in the lowest significant weight range (1.15–1.19 g.) recorded for York. Since the obverse of *BEH 729* is of York style and is also found with reverses reading *Hildolf*,^{36a} the spelling *Hildulf* on one reverse may be no more than a quirk of a York workman, and the same could be true of die **c**. However, another name, invariably spelt *Osgot* at York, is rendered at Lincoln as *Osgut* on seven of eight dies of this type recorded for him by Mossop, prompting the question of whether the *Hildulf* reverse dies might have been cut instead at Lincoln.

Distinguishing stylistically between reverses of York and Lincoln workmanship is more subjective than for obverses since it must rely almost entirely on epigraphy. It is tempting to argue that if die **c** could be attributed to the Lincoln engraver it might have been issued for use with the Cnut obverse die **C**. However, there are two difficulties. First, given the style of die **C** a reverse cut in Lincoln at the same time might have been expected to bear the copulative M=O rather than M-O; and, secondly, the surviving coins struck from die **C**'s only known combination **Cb** are significantly heavier than the two coins recorded from die **c**.³⁷ The only safe conclusion is that, in the absence of evidence of its having been used in combination with obverse **C**, the origin of die **c** must remain an open question. Whether cut at York or Lincoln it is unlikely to have been used at either location, at least in the known combination **Bc**. *Hildulf* may have been a moneyer with a travelling brief, for in the *Long Cross* issue one of the obverse dies he used was cut by the engraver of Hiberno-Norse copies, presumably in Dublin.³⁸

This leaves two questions still to be answered: why was die **C** cut in Cnut's name, and why were dies **C** and **c** apparently sent to Norwich and mixed with two normal local pairs of dies? At the moment there is no evidence that any of the three pairs of dies under consideration found their way instead to Scandinavia. If, therefore, the Cnut obverse was actually used by the Norwich moneyer Oswold, it was not the only Lincoln-cut die that Oswold employed in *Last Small Cross*. He went on to strike a coin in Æthelred's name from dies of late Lincoln **C** style, the obverse of which was shared with another moneyer, Wulmær, whom we will encounter again later:

5Dd	<i>Obv.</i>	+ÆDELRAED REX ANG (late Lincoln C style)
	<i>Rev.</i>	+OSPOLD M=O NORDP (late Lincoln style)
	(i)	SCBI Copenhagen II, 1030. 1.00 g. (Pl. 4, 20)
5De	<i>Obv.</i>	As last
	<i>Rev.</i>	+PVLMAER M=O NORD (late Lincoln style)
	(i)	SCBI Copenhagen II, 1035. 1.06 g. (Pl. 4, 21)

The existence of these dies, though not providing an explanation, does strengthen the case for the English origin of all the known combinations of **A**, **B** and **C** with **a**, **b** and **c**.

Whatever the reason, it does now seem that one die cut in Cnut's name as *rex Anglor[um]*, almost certainly at Lincoln, was used in England, apparently at Norwich, before the issue's

³⁷ If the coins surviving from die-combination **Cb** were struck in Lincoln, their weights would suggest that die **C** should be placed early in the late Lincoln **C** phase of die-cutting. If, as seems more likely, they were struck in Norwich, such a conclusion would not be valid if at that time Norwich was minting to a heavier weight standard than Lincoln. It is uncertain whether or not that was the case.

³⁸ M.A.S. Blackburn, 'Thoughts on imitations of the Anglo-Saxon coinage', *SCMB* 1977, 344–50, updated by him in 'An Imitative Workshop Active during Æthelræd II's *Long Cross* Issue', *Studies in Northern Coinages of the Eleventh Century*, edited by C.J. Becker (Copenhagen 1981), 29–88, at p. 57 n. 52.

final phase. Although the coins recorded from it are relatively light they are by no means the lightest to have been minted at Norwich and so, presumably, not the latest either. The question therefore arises of when, during the currency of *Last Small Cross*, Cnut was in a position to have dies cut in Lincoln naming him as king of the English. Blackburn has demonstrated that three dies used in Scandinavia which described Cnut as *rex Dænor[um]* were cut at Lincoln in the middle ('unattached diadem') substyle of Lincoln C. He argues that this substyle could have been in vogue as early as 1014–15 because few of its English coins weigh under 1.20 g. (its main thrust being between 1.20 and 1.44 g.).³⁹ The *Anglo-Saxon Chronicle* records that on Swein's death in February 1014 Cnut was elected king by the [Danish] fleet and remained in Lindsey until Easter, after which Æthelred, who had been in exile in Normandy since soon after Christmas, was recalled and expelled him. Perhaps it was during his sojourn in Lindsey that Cnut had those dies cut for use in Denmark although, in the event, it was his brother Harald who was recognized as king there.

Because the style of the *Cnut rex Anglor[um]* die is later, it is unlikely to be connected with the events of 1014. In the campaign of 1015–16 Cnut and his army were highly mobile and we do not know whether he established himself again in Lincoln during Æthelred's lifetime. Perhaps the Lincoln engraver was authorised to cut dies in Cnut's name as king of the English immediately after Æthelred's death and before resistance crystallized under Edmund Ironside; alternatively his first opportunity may not have occurred until after Edmund died in November 1016. (Florence of Worcester says that after the kingdom was formally divided between Edmund and Cnut the crown of the kingdom remained with Edmund.) If the latter is the case, then since the *Cnut rex Anglor[um]* die seems to have been coupled with a Norwich reverse before the final phase of the issue, it would appear that *Last Small Cross* continued to be struck in Æthelred's name until well into 1017. Why the continuation was not in Cnut's name can only be conjectured, and we are fortunate to be aware of one die that went into production, albeit in unexplained circumstances.⁴⁰

Nine other obverse dies of *Last Small Cross* type with Cnut's English title are illustrated in the Anglo-Scandinavian corpus⁴¹ but none is unquestionably from an English *atelier*. A later Lincoln origin for one die is conceivable, not least because it is found coupled with a reverse die apparently of northern English style (though the moneyer, named as +HEARDECNVT MO EOF, is otherwise unknown) (Pl. 4, 19),⁴² but since it was also used on a square flan with a *Quatrefoil* reverse naming Torksey it must have been exported if it was not an unusually good Scandinavian copy. None of the other obverses is combined with a reverse die that one would nowadays think of associating with a moneyer working in England, and four of them participate in Scandinavian die-chains. Hoard evidence suggests that the *Small Cross* dies were in use before English *Quatrefoil* coins were circulating in Scandinavia, which would point to a *terminus ante quem* of 1018. It has generally been thought that, politically, they could not have been cut before Harald's death, which is usually dated c. 1018–19 but could have occurred as early as 1017.⁴³ However, since they bear the English and not the Danish title

³⁹ Blackburn, 'Cnut the Great', as in n. 3.

⁴⁰ For a discussion of the problematic relationship between the timing of the introduction of the *Quatrefoil* type and the composition of the tribute of 1018, see Blackburn and Lyon, 'Regional die-production', as in n. 2, pp. 256–9. If Cnut had not wanted the tribute to be paid in coins bearing his name it could explain his apparent continuation of the *Last Small Cross* issue in the name of Æthelred. But since the tribute, promised in 1016, took over two years to collect it is hard to believe that the introduction of the new type could have been delayed for so long. The hoard evidence does not suggest that Scandinavia was flooded with late *Last Small Cross* coins of Æthelred, but nor was there an influx of early coins of the new

type, such as had occurred in the last decade of the previous century when *Long Cross* replaced *Cruz*. Blackburn and Lyon suggest that either 'the tribute of 1018 was paid in a broad mixture of coin, or coin and bullion, or that a substantial proportion of it remained in England in the coffers of Cnut and other high-ranking Danes.'

⁴¹ Dies 626–32 and 634–5.

⁴² Die combination 629,1719, which forms part of Chain 136. The treatment of the drapery is unusual in that there are only three lines instead of four between the inverted V and the back line. The specimen illustrated here is Lockett (1960) 3748 (wnr), not listed by Malmer.

⁴³ Blackburn, 'Cnut the Great', as in n. 3, p. 55.

it does not seem necessary to regard them as dependent on Cnut's succession in Denmark even though most if not all of the dies were cut in Scandinavia; the possibility that they were required for a special purpose not much later than die **C**, during Harald's lifetime and before the introduction in England of *Quatrefoil*, should not be ruled out.

6. Other dies of Norfolk style with unexpected associations

6.1 An obverse die of Norfolk Aii style, closely resembling die **5B** above, is found in combination with reverses naming Sumerlid of Thetford and Reignald of Lincoln,⁴⁴ as is noted in *SCBI* Copenhagen II:-

- 6.1Aa** *Obv.* +EDELRED REX ANG (Norfolk Aii style)
Rev. +ZVMERLID ON DEOD (Norfolk style)
 (i) *BEH* 3809. 1.30 g. (**Pl. 4, 22**)
 (ii) *SCBI* Copenhagen II, 1241. 1.27 g.
 (iii) *SCBI* Reading 104. 1.28 g.
 (iv) Lyon ex Doubleday (1987) 490 ex Argyll. 1.26 g.
- 6.1Ab** *Obv.* As last (Mossop J)
Rev. +REIGNALD ON LINO (Norfolk style) (Mossop h)
 (i) *SCBI* Copenhagen II, 585. 1.05 g. (**Pl. 4, 23**)
 (ii) *SCBI* St Petersburg I, 1128. 1.09 g.
 (iii) Stockholm Inv. 12079. 1.06 g.
 (iv) Stockholm Inv. 14925. 0.75 g. (fragment).

The obverse die had developed flaws in both letters R by the time it was used with the Reignald reverse. That it was used first by Sumerlid is also implied by the decline in weight.

6.2 An obverse die of Norfolk B style and one of Lincoln C participate in a short chain with reverses which name Wulfric of Lincoln, Ælfwold of Thetford and Wensige of Wilton:-

- 6.2Aa** *Obv.* +ÆDELRED REX ANG (Lincoln C style)
Rev. +ÆLFWOLD M^o DEOD (Lincoln C style)
 (i) *SCBI* Copenhagen II, 1198. 1.27 g. (**Pl. 5, 1**)
- 6.2Ab** *Obv.* As last
Rev. +PENZIGE MON PILTV. (Norfolk style)
 (i) *SCBI* Copenhagen II, 1320. 1.04 g.
 (ii) Stockholm Inv. 8503. 0.98 g.
 (iii) BM ex Norweb (1987) 1226 (*SCBI* American 481) ex Elmore Jones (1971) 917 ex Blunt. 1.08 g. (**Pl. 5, 2**)
- 6.2Bb** *Obv.* +EDELRED REX ANGL (Norfolk B style)
Rev. As last
 (i) *BEH* 4020. 0.94 g. (**Pl. 5, 3**)
- 6.2Bc** *Obv.* As last (Mossop —)
Rev. +PVLFRIC ON LINCO (Norfolk style) (Mossop —)
 (i) Lyon bt Baldwin 1998 ex E. J. Harris. 0.95 g. (**Pl. 5, 4**)

Die flaws at the ends of the diadem ties support the weights in pointing to **Aa** having been struck earlier than **Ab**. Rust marks in the field in front of the face suggest that **Bb** is later than **Bc**. Who then was Wensige, how did he obtain a used Thetford obverse die and why was a

⁴⁴ When the Lincoln engraver cut this moneyer's name he consistently spelt it Reicnold.

reverse die cut for him in Norfolk? In a paper written in 1985 and published in 1990 the late Christopher Blunt and I reviewed reasons for previous suggestions, based on the die-link **Aa-Ab-Bb**, that Wensige was operating at an emergency mint at what is now Hockwold-cum-Wilton, near Thetford.⁴⁵ We recognized that Wilton in Wiltshire was an improbable place for **Bb** to have been struck, not least because no other minting appears to have occurred there during *Last Small Cross*, and we wondered whether Wensige might have been a royal official from that town who was with the king at Thetford and was required to mint some silver there. However, on balance we thought the significance of his Wilton signature had better be left as an open question.

The recent acquisition which suggests that Wensige's obverse die **B** of Norfolk B style had previously been used by the Lincoln moneyer Wulfric is interesting but does little to resolve the problem, for Wulfric's reverse die is also of Norfolk style. As Mossop Plates XXX and XXXI show, Wulfric was a regular moneyer at Lincoln, striking in all three principal Lincoln styles, but late in the issue he also acquired a pair of dies of London D style (Mossop Li) so he, too, may have had a special function. Another of his products (Mossop Kh, *BEH* 2001) is from an obverse die of irregular style and erroneous inscription that was also used by the London moneyer Brihtwold (*BEH* 2251) in a die chain which merits a separate note at a later date.

6.3 Another set of Norfolk dies was produced for a moneyer named as Onlaf of Lewes:-

- 6.3Aa *Obv.* +EDELRED REX ANGL· (Norfolk B style)
Rev. +ONLAF MON LEPE (Norfolk style)
 (i) *BEH* 1469. 1.09 g.
 (ii) *SCBI* Copenhagen II, 467. 1.01 g.
 (iii) *BMC* 126. wnr (chipped, base metal)
 (iv) Lyon ex Arnot (1995) 174. 1.13 g.
 (v) Ex H. H. King and Montagu (1897) 8h. wnr (edge cracked between +O and N). (Pl. 5, 5)
- 6.3Ab *Obv.* As last
Rev. +ONLAF MON LEPE (Norfolk style)
 (i) *BEH* 1468. 1.06 g.

So far no die-link with a Norfolk moneyer has been found, but the circumstances which caused a reverse die to be engraved for Wensige of Wilton may also have occasioned the production of these dies for Onlaf – an Old Norse name (*viz* *Olafr*) which is not otherwise found among late Anglo-Saxon moneyers anywhere.

6.4 At much the same time Norfolk dies were engraved for the London moneyer Ælfget:-

- 6.4Aa *Obv.* +EDELRED REX ANG (Norfolk B style)
Rev. +ELFGT OM LVNDN (Norfolk style)
 (i) Lyon. 1.02 g. (Pl. 5, 6)

This is likely to be the Ælfget who on one occasion used a Huntingdon signature: the dies for the only known specimen were made in London. The style of that Huntingdon obverse is London B and the die was also used by another London moneyer, Godwine:-

- 6.4Bb *Obv.* +EDELRÆD REX ANGL (London B style)
Rev. +ÆLFGET MON HVNTA (London style)
 (i) Lyon ex Lockett 4605a. 1.14 g. (Pl. 5, 7)

⁴⁵ C.E. Blunt(†) and C.S.S. Lyon, 'Some notes on the mints of Wilton and Salisbury', *SLAC* 25–34 at pp. 29–31.

6.4Bc	<i>Obv.</i>	As last
	<i>Rev.</i>	+GODPINE M·O·N·L·VNDEI (London style)
		(i) <i>BEH</i> 2606. 1.28 g.
		(ii) <i>BEH</i> 2606 bis. 1.27 g.
		(iii) <i>SCBI</i> Copenhagen II, 842. 1.10 g. (chipped)
		(iv) <i>SCBI</i> Berlin 544. 1.15 g.
		(v) Lyon bt Baldwin 1957. 1.17 g. (Pl. 5, 8)

Ælfget may therefore have had responsibilities which caused him to coin silver from time to time in eastern England. Godwine appears to have had second use of the obverse die, to judge from the greater degree of rusting within some of the letters.

6.5 One of the regular Huntingdon moneyers, Sæwine, used an obverse die which is also found combined with reverses naming the moneyers Brantinc of Sudbury and Ælfwi of London. From the evidence of rust marks it seems probable that the order of striking was as set out below:-

6.5Aa	<i>Obv.</i>	+EDELRED REX ANGLo (Norfolk B style)
	<i>Rev.</i>	+BRANTINC ON SVÐI (Norfolk style)
		(i) <i>BEH</i> 3644. 1.28 g. (Pl. 5, 9)
6.5Ab	<i>Obv.</i>	As last
	<i>Rev.</i>	+SEPINE O . . . VNTE: (Norfolk style)
		(i) <i>BEH</i> 1398. 1.10 g. (piece missing from edge) (Pl. 5, 10)
6.5Ac	<i>Obv.</i>	As last
	<i>Rev.</i>	+ÆL·FPI M·O LV·NDEN (London style)
		(i) <i>BEH</i> 2105. 1.28 g. (Pl. 5, 11)
		(ii) Lyon bt Spink 1983. 1.24 g.
		(iii) Fitzwilliam Mus. ex Blunt. wnr.

6.6 The Norwich moneyer Wulmær, to whom reference has already been made,⁴⁶ used an obverse die which was later coupled with a reverse naming the London moneyer Ælfric:-

6.6Aa	<i>Obv.</i>	+EDELRED REX ANGLo (Norfolk B style)
	<i>Rev.</i>	+PVLMÆR ONORÐP (Norfolk style)
		(i) <i>BEH</i> 3204 bis. 1.28 g. (Pl. 5, 12)
6.6Ab	<i>Obv.</i>	As last
	<i>Rev.</i>	+ELFRIC MON LVNDEI (London style: N's reversed)
		(i) <i>BEH</i> 2075. 0.93 g. (broken in two) (Pl. 5, 13)

7. A remarkable multi-mint die chain with East Anglian involvement

The die-cutting style given the label London C may be by a different hand than the other main London styles. The portrait is rather crude with a prominent pointed nose; the rounded beaded hair often projects behind the head; the inverted V in front of the drapery is sometimes double; the ethnic is usually ANGLo; the lettering is more compact than on London A and B and in particular the R does not have a preceding tail. Dies of this style reached both East Anglia and the Sussex coast, so its attribution to London is reasonably secure. It was in use at a time when the weight standard was between 1.3 and 1.4 grams, and may therefore have overlapped a similar phase of London D.

⁴⁶ supra, p. 35.

One obverse die has attracted unusual attention because of its distinctive bust and especially the presence of a faint line of drapery sloping slightly upwards between the first and second solid lines. This die has so far been observed in combination with reverses naming eight moneyers at five locations, namely Dioreman and Oswold of London, Elfwig, Wulfsig and Clern of Cambridge, Cinsige of Dover, Godleof of Stamford, and Eadric of 'Derw' (or possibly 'Derp'):

- 7Aa *Obv.* +ÆDELRED REX ANGLO (London C style). Virtually unworn die.
Rev. +ELFPIG ON GARNTE (Norfolk style)
 (i) Lyon bt Spink 1993 ex *SCBI* Mack 1012. 1.17 g. (Pl. 5, 14)
- 7Ab *Obv.* As Aa. Virtually unworn die.
Rev. +EADRIC MON DERP (Norfolk style)
 (i) *BEH* 689. 1.10 g. (Pl. 5, 15)
- 7Ac *Obv.* As Aa. Virtually unworn die.
Rev. +—EMAN M^QON LV (London style)
 (i) *BEH* 2302. 0.90 g. (fragment) (Pl. 5, 16)
- 7Bc *Obv.* +EDELRÆD REX AGNO (N reversed) (middle London D style)
Rev. +DIOREMAN M^QON LV (same die as last)
 (i) *BEH* 2301. 1.14 g. (Pl. 5, 17)
 (The obverse is shared with *BEH* 2558, +GODMAN MON LVNI (2nd and 3rd N's reversed), 1.10 g.)
- 7Ad *Obv.* As Aa. Letters worn from first R to E of REX.
Rev. +OZPOLD ON LVND (London style)
 (i) *BEH* 2896. 1.24 g. (Pl. 5, 18)
 (ii) *SCBI* South-Eastern 1012 ex St Martins-le-Grand (London) hoard. 0.76 g. (incomplete fragments)
- 7Ae *Obv.* As Aa. Die in similar state to Ad.
Rev. +PVLFSIG MON GRAN (Norfolk style)
 (i) *BEH* 1203. 1.34 g.
 (ii) *SCBI* Cambridge 733. 1.21 g. (Pl. 5, 19)
- 7Af *Obv.* As Aa. Die in similar state to Ad.
Rev. +CLERN MON GARNTET (Anomalous style)
 (i) *BEH* 1149. 1.30 g. (Pl. 5, 20)
- 7Cf *Obv.* +EDELRED REX ANGO (Norfolk A style)
Rev. As Af
 (i) *BEH* 1150. 1.22 g. (Pl. 5, 21)
 (ii) *SCBI* Finland 440. 1.31 g.
- 7Ag *Obv.* As Aa. Die in similar state to Ad.
Rev. +GODLEOE ON ZTA (London style?)
 (i) Stockholm CNS 1.1.19. 1512. 1.16 g. (Pl. 5, 22)
- 7Ah *Obv.* As Aa. Die shows further deterioration.
Rev. +CINSIGE MON DOFE (London D style)
 (i) Stockholm Inv. 12079–255A. 1.08 g. (Pl. 5, 23)
 (ii) Lyon bt B.J. Dawson 1998 ex R.S. Kinsey ex Duke of Argyll. 1.02 g. (Ill. *BNJ* 29 Pl. II, 31)

The presence of a specimen of combination **Ad** in a hoard from London makes it almost certain that the coins in this chain were struck in England, but it is unlikely that the obverse die was used in five different places. The reverse dies, with the exception of **f**, are of regular workmanship, but some or all of them may have been brought together (perhaps in London)

and been reused in unauthorised minting. The weights would suggest that the Cambridge combinations were struck before the others, but die wear – if correctly reflected in the order given above – seems to be at variance with this.

The key to the chain might be the moneyer named on the die of anomalous style as Clern of Cambridge, if he should happen to be the same person as another moneyer who used anomalous reverse dies (albeit of a different style) in the name of Cytlern of Lincoln. None of Cytlern's nine known obverse dies is of Lincoln style. Several are anomalous, with misspelt inscriptions, but he had the use of two obverse dies of London a style and two of early London D, and is die-linked through these to moneyers of London and Southwark.⁴⁷ He is likely to have been operating clandestinely, probably not at Lincoln, and it is conceivable that later in the issue he had a die cut as Clern of Cambridge. One wonders, though, how obverse or reverse dies that had belonged to moneyers of various different towns were obtained by such a person.

The chain is of particular interest for the enigmatic signature 'Derw' or 'Derp'. The die which bears it is of a style associated with Norfolk and the moneyer, Eadric, is known at Ipswich in this type and also at Cambridge in *Quatrefoil*, but in the light of the Wensige and Onlaf coins already discussed it would be wrong to limit the quest for him to East Anglia. It is tempting to equate the signature with the unlocated 'Dir' of the *Small Flan* type of Edward the Confessor, which is die-linked to Ipswich and therefore likely to be in East Anglia.⁴⁸ However, if that place can be shown to be the same as the 'Derne' or 'Dernt' of the later *Pointed Helmet* and *Hammer Cross* issues⁴⁹ a connection with 'Derw' or 'Derp' would be hard to sustain.⁵⁰

8. Conclusion

The *Last Small Cross* issue is of importance because it spans the period of the Danish conquest of England. Studying it in detail and eliciting its irregularities can help to throw light on the problems of managing a national currency in a time of major political and military turmoil. This paper has sought to highlight some interesting features of the later part of the issue in eastern England, when events were coming to a head.

Many of the die-links recorded here were discovered by Michael Dolley, Gay van der Meer or myself during visits to Sweden in the early 1960s but have remained unpublished until now; others have been found in recent times. Bill Lean in particular has noted additions to previously discovered die-chains, especially no. 5, and I am grateful to him for allowing me to include them here. Undoubtedly other relevant material has yet to be recognized, and this means that the specimens detailed for the various listed die combinations should be taken as illustrative rather than exhaustive.

My thanks are also due to Mark Blackburn, Kenneth Jonsson and Brita Malmer for valuable comments when the paper was in draft, and to the Royal Coin Cabinet in Stockholm for many of the illustrations. For failure to put much of this material in the public domain many years ago I can only apologise, as I do for any errors that may now have crept in. However, I take full responsibility for the opinions expressed, not least on the significance of the pence naming Oswold of Norwich and minted in the name of *Cnut rex Anglor[um]*.

⁴⁷ See Mossop, die-linking chart for Plate XXII.

⁴⁸ R.H.M. Dolley, 'A New Late Saxon Mint in Suffolk', *NCirc* LXVIII, 11 (November 1960), 236.

⁴⁹ F. Elmore Jones, 'Four Anglo-Saxon, Norman, and Plantagenet Notes: [1] The Mysterious Mint of "Dernt"', *BNJ* 31 (1962), 66–73 at pp. 66–68; and now Michael Sharp, 'A

New Coin of Dir/Dernt', *NCirc* CVII, 1 (February 1999), 6.

⁵⁰ The mint signature on *BEH* 689 has been read as 'Derw' or 'Derp'. However, the first letter is damaged and could be a G. The upright has a small wedge beside its foot, and its top is joined to the wedge by an irregular curve which may have developed with use.

PLATE 2

WINCHESTER A



1



2



3



4



5



6



7



WINCHESTER B

WINCHESTER C

EXETER A



8



9



10



EXETER B



11



12



13



GLOUCESTER



14



15



16



LONDON A

LONDON B



17



18



19



LONDON C

LONDON D

CANTERBURY

ROCHESTER



20



21



22



23



24



25



26



YORK (EARLY)

YORK (LATER)

LINCOLN A

LINCOLN B



LINCOLN C (EARLY)

LINCOLN C (MIDDLE)

LINCOLN C (LATE)



NORFOLK Aa

NORFOLK A i-iii

NORFOLK B



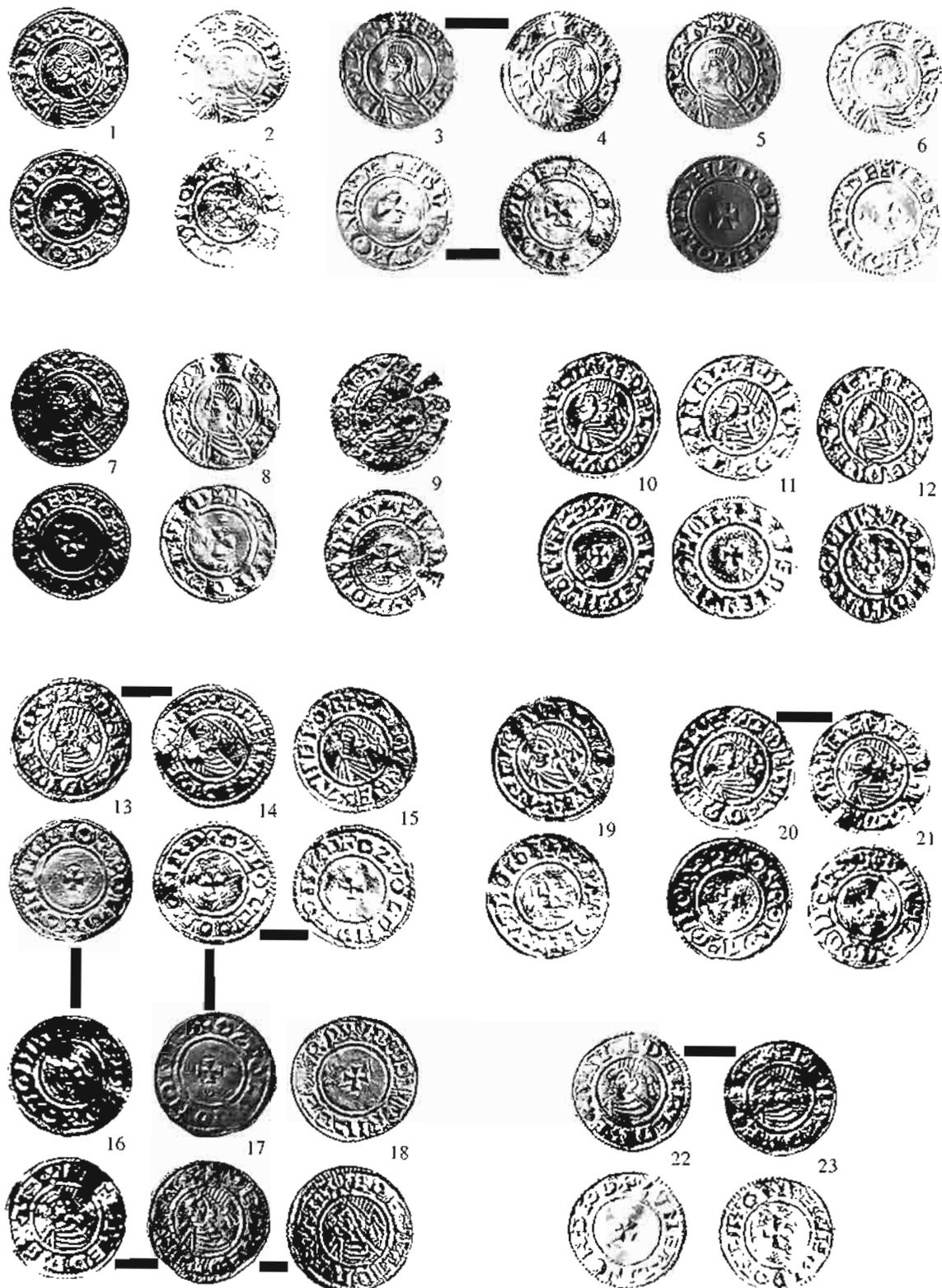
IPSWICH A

IPSWICH B

IPSWICH C



PLATE 4



LYON: LAST SMALL CROSS: 1-9 LATE LONDON VARIETIES, 10-12 LATE LINCOLN, 13-23 EAST ANGLIAN DIE-LINKING, ETC.



LYON: LAST SMALL CROSS: EAST ANGLIAN DIES AND DIE-LINKING