

## PRESIDENTIAL ADDRESS 2004

### CURRENCY UNDER THE VIKINGS. PART 1: GUTHRUM AND THE EARLIEST DANELAW COINAGES

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THE Vikings and the Scandinavian settlers who followed them made a significant impact on the currency of the British Isles over three centuries. In this and future addresses I plan to survey the coinages and currency of those areas under Scandinavian rule from the ninth to twelfth centuries. In five half-hour lectures one cannot give a detailed account of this, so having described the essential features, I will focus on a topic or topics that I hope will give further insight to the monetary history of the period. In this Address I will talk about the very earliest phase of coinage in the new Scandinavian settlements in the Danelaw.<sup>1</sup>

#### The Divisions of the Danelaw

The Scandinavian coinages of the Danelaw, particularly in their earlier phases, seem confusingly complex. There are several substantial series of coins, which appear to overlap chronologically, and there are a number of smaller groups that are independent of the main issues. If we are to begin to make sense of these coinages, we need to know something of the geopolitical structure of the Danelaw that developed in the course of the settlement process. Historical evidence for the conquest and settlement of the Danelaw is sparse indeed, and comes mainly from English chronicles. The coins, in fact, are one of the few contemporary and direct sources of evidence coming from the Scandinavians themselves. Differences in the course of settlement of particular areas during this formative phase had long-term repercussions for the structure of the Danelaw, in which Cyril Hart has recognised five divisions (Fig. 1).<sup>2</sup>

The Viking raids on the British Isles, which had begun in the late eighth century and intensified in the 840s, entered a quite new phase in 865.<sup>3</sup> The 'great army', as it is called in the *Anglo-Saxon Chronicle*, arrived in England and did not go away. For more than ten years this force and reinforcements that joined it were on the move, but between campaigning seasons they would set up winter camps in different parts of England. Three of the four great kingdoms into which England was divided successively succumbed to this army: the Northumbrians in 866, the East Anglians in 869 and the Mercians in 874. In 875 the Danish army divided, and part of it, led by Halfdan, went north to Northumbria campaigning, and then in the following year settling to form the Kingdom of York.

Meanwhile the remainder of the army, under the leadership of three kings Guthrum, Oscetel and Anwend, went to Cambridge, where they stayed for a year. Smyth has suggested that this may represent a force ('the great summer army') that arrived from the Continent in 871 to join the great army.<sup>4</sup> In 877 part of this group peeled off and settled in the area of the East Midlands which became known as the Five Boroughs. We do not know who the leaders of this group were, but it is likely that from the outset they were ruled by five earls based at Lincoln, Stamford, Nottingham, Leicester and Derby.

<sup>1</sup> This is a revised and extended version of the paper read at the Anniversary Meeting in November 2004. I am grateful to Marion Archibald for comments after the lecture, and to Barrie Cook and Gareth Williams for providing access to the British Museum collection and providing some of the images that accompany this paper.

<sup>2</sup> C. Hart, *The Danelaw* (London and Rio Grande, 1992), pp. 6–19.

<sup>3</sup> For accounts of the Viking campaigns in England and the settlement of the Danelaw see A.P. Smyth, *Scandinavian Kings in the British Isles 850–880* (Oxford, 1977); Hart, as in n. 2.

<sup>4</sup> Smyth, as in n. 3, p. 243.

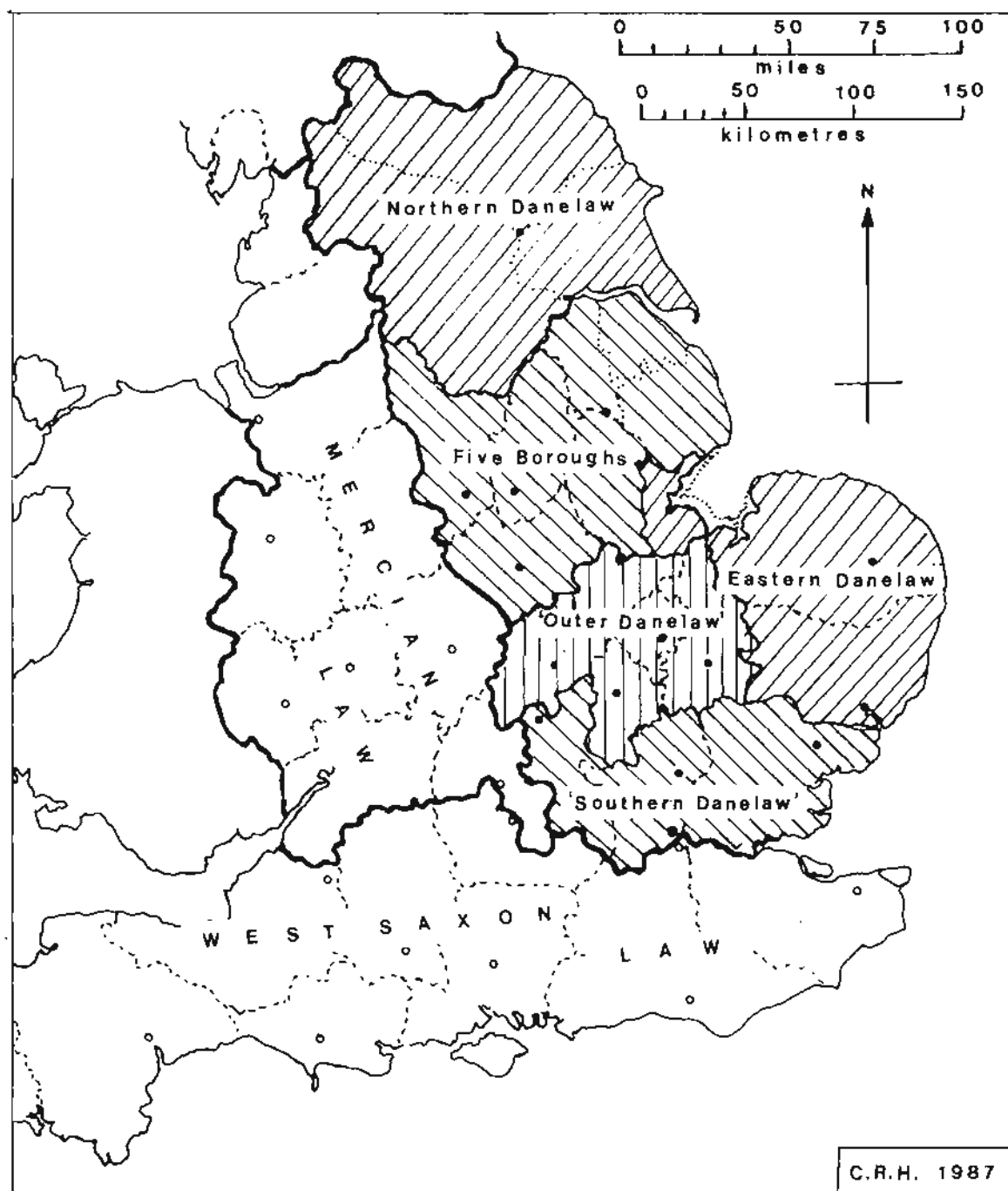


Fig. 1. The Divisions of the Danelaw (after Hart, *The Danelaw*, p. 9).

The West Saxons were next in line and there were many conflicts, but in May 878 a crucial battle at Edington (Wiltshire) went in their favour, and Alfred was able to impose a peace treaty. The Viking leader, Guthrum, and thirty of his senior men, accepted baptism, with Alfred standing as Guthrum's godfather, creating a kind of paternal relationship between the two rivals: a diplomatic tool akin to a marriage alliance.<sup>5</sup> Guthrum agreed to leave Wessex and, after lingering in Mercia for two more years, he and his followers settled in East Anglia and the south-east

<sup>5</sup> T. Charles Edwards, 'Alliances, godfathers, treaties and boundaries', *Kings, Currency and Alliances. History and Coinage of Southern England in the Ninth Century*, edited by M.A.S. Blackburn and D.N. Dumville (Woodbridge, 1998), pp. 47–62.

Midlands in 879–80. Hart divides this area into three parts which he calls the Eastern, Southern and Outer Danelaw. The Eastern Danelaw, the old kingdom of East Anglia (Norfolk and Suffolk), was he suggests the core territory ruled directly by Guthrum. The Outer Danelaw (Bedford, Cambridge, Huntingdon and Northampton) was settled by four armies led by four earls, who came under the authority of Guthrum. The Southern Danelaw (Essex, Hertfordshire, Middlesex and Buckingham) probably also came under Guthrum, and it is the least Scandinavianised in terms of culture and place-names, partly because it was under Danish occupation for only a short time before being absorbed into Alfred's kingdom.

The initial settlement process was only spread over five years, but it gave each of the five regions a very distinctive character, which influenced their later history, culture and coinages.

### The Imitative Phase of Coinage

The earliest phase of coinage in the Danelaw consisted of imitations of successful neighbouring coinages. This is typical of states trying to establish coinage for the first time. There are many examples from Ancient Greece down to more modern times. The new state wishes its coinage to benefit from the sound reputation enjoyed by the one it is emulating. Once the state has built public confidence in its coinage, it will very often change the design deliberately to differentiate its coinage, in part perhaps for political reasons, but also so that it can more easily manage the currency circulating in its territory. This 'national' phase, as one might call it, was achieved by the Vikings in the mid-890s with the issue of the St Edmund coinage and the York regal coinage of Sigefrith and Cnut. In this paper I will be examining only the imitative phase before c.895.

### *Hoard and single-finds*

There are seven hoards that contain Viking coins from this imitative phase (Table 1). Three are strictly contemporary, and from the Danelaw: the Stamford hoard probably deposited about 890, but only poorly recorded; the Ashdon hoard from North Essex deposited a few years later, containing some sixty-five coins, many of which were in fragments; and from the Ipswich excavations, a group of three identical halfpennies. Of the later hoards, Cuerdale, deposited c.905, is of course much the largest, and the most important source of coins for our period. The much later hoard from Morley St Peter, Norfolk, deposited about 925, has a curious composition, with two distinct phases, and the early element includes a number of ninth-century Viking coins. Two other hoards – Harkirk, dep. c.910, and Dean, dep. c.915 – are only partially recorded but they are each known to have contained at least one imitation.

TABLE 1. British Hoards containing Viking issues of the Imitative phase

<i>Deposit date</i>	<i>Findspot &amp; discovery date</i>	<i>No. of coins</i>	<i>Types of coinage</i>
c.885	Ipswich, Suffolk, c.1990?	3?	Viking
c.890	Stamford, Lincs., 1902	40+	Viking, Carolingian, Anglo-Saxon?
c.895	Ashdon, Essex, 1984	c.65	Viking, Carolingian, Anglo-Saxon?
c.905	Cuerdale, Lancs., 1840	8,000+	Viking, Anglo-Saxon, Carolingian, Arabic, Byzantine
c.910	Harkirk, Lancs., 1611	c.100	Viking, Anglo-Saxon, Carolingian
c.915	Dean, Cumb., pre-1790	34+	Viking, Anglo-Saxon, Arabic
c.925	Morley St Peter, Norfolk, 1958	883	Viking, Anglo-Saxon

The number of recorded single-finds has grown significantly in recent years, from six in 1991 to twenty-two today (listed in Appendix 3). This is still modest compared with the number of finds of St Edmund coins (sixty-one recorded on *EMC*),<sup>6</sup> but they are beginning to form a pattern that one can attempt to interpret (Table 2). Overall, I would estimate that there are perhaps seven hundred extant Viking imitations, the great majority of which come from the Cuerdale hoard.

<sup>6</sup> Corpus of Early Medieval Coins Finds from the British Isles, 410–1180 ('EMC'), an online database, [www.medievalcoins.org](http://www.medievalcoins.org).

### Four groups of imitations

Most of the imitations are anonymous, in that they merely copy the name of King Alfred, but a few carry the names of Viking rulers. The largest group is some forty coins of King Guthrum (879/80–890), though the legend uses his baptismal name 'Æthelstan'. There is one coin of the York king, Guthfrith (c.883–895), from the Ashton hoard;<sup>7</sup> three in the name of a king Halfdan, *not* the original leader of the great army, but a later unrecorded king;<sup>8</sup> and two of Earl Sihtric struck at Shelford,<sup>9</sup> which Hart has recently argued was Shelford near Cambridge, rather than the alternative candidate Shelford in Nottinghamshire.<sup>10</sup> The only other mint names found on the imitative coins are Lincoln and Leicester.

In 1965 Michael Dolley, in his very useful British Museum booklet *Viking Coins of the Danelaw and of Dublin*, set out his understanding of the chronology and structure of the Danelaw coinage,<sup>11</sup> and re-reading this I was struck just how much our interpretation of the earlier issues has changed in the last forty years. This has stemmed from two main factors: the re-dating of Alfred's coinage, particularly of the introduction of the London Monogram and Horizontal (Two-Line) types to c.880, rather than 886;<sup>12</sup> and the discovery of the Ashdon hoard showing what a large and homogeneous currency the Horizontal (Two-Line) imitations represented. This imitative phase of the coinage has been surveyed in some detail in my paper to the Viking Congress in 1997,<sup>13</sup> and rather than repeating the arguments presented there, I intend to focus here on the very earliest coinage and that which names Guthrum.

Some introduction is, however, necessary to the four main groups of imitations copying issues of Alfred: the London Monogram type, the Horizontal (Two-Line) type, the Oxford (*Ohsnaforda*) type and the Canterbury (*Doro*) group. The copies and derivatives of the London Monogram type appear to be among the earliest, and were probably produced quite soon after Alfred's original issue which is now dated to the early 880s. They were present in the Stamford hoard, and there are variants with a Lincoln monogram, which might suggest that they were struck primarily in the Five Boroughs, yet, as already mentioned, a group of three halfpennies were found in the excavations at Ipswich, and there are single-finds from Woolverstone (Suffolk), Thetford (Norfolk) and Ely (Cambridgeshire), showing that they also circulated in East Anglia. The combination of this evidence and other factors has led to the re-dating of the Stamford hoard to c.890.<sup>14</sup>

The Horizontal (Two-Line) type was the main issue from the mid-880s to the mid-890s, both in Alfred's kingdom and in the Danelaw. It was the only insular issue present in the Ashdon hoard, and of the sixty-five or so coins in the hoard the great majority are of the Danelaw variety rather than of Alfred's original issue.<sup>15</sup> The rather startling inference to be drawn from this is that even in this early phase of Anglo-Scandinavian coinage, the currency was quite homogeneous and foreign coins were largely excluded, either deliberately or by the operation of Gresham's Law. The fact that the coinage in this phase was imitative and of poor literacy should not cloud one's judgement as to its economic and political effectiveness. Many of the moneyers named on the Danelaw

<sup>7</sup> M. Blackburn, 'The Ashdon (Essex) hoard and the currency of the southern Danelaw in the late ninth century', *BNJ* 59 (1989), 12–38, at pp. 18–20.

<sup>8</sup> *BMC AS* 1, p. 203, no. 869; G.C. Brooke, 'Anglo-Saxon acquisitions of the British Museum. III Northumbria', *NC* 5th series 4 (1924), 86–95, at p. 89, no. 300; *SCBI* 7, *Copenhagen* 1, 447. Both BM coins are illustrated in M. Dolley, *Viking Coins of the Danelaw and of Dublin* (London, 1965), pl. 3, nos 8 and 9.

<sup>9</sup> *BMC AS* 1, p. 230, no. 1077; Dolley, as in n. 8, pl. 4, no. 15; *SCBI* 9 *Oxford* 225.

<sup>10</sup> C. Hart, 'The *Aldwerke* and Minster at Shelford, Cambridgeshire', *Anglo-Saxon Studies in Archaeology and History* 8 (1995), 43–68.

<sup>11</sup> M. Dolley, as in n. 8, pp. 16–19.

<sup>12</sup> M. Blackburn, 'The London mint in the reign of Alfred', in Blackburn and Dunville, as in n. 5, pp. 105–23; *ibid.*, 'Alfred's coinage reforms in context', *Alfred the Great. Papers from the Eleventh-Centenary Conferences*, edited by T. Rutter (Aldershot, 2003), pp. 199–217.

<sup>13</sup> M. Blackburn, 'Expansion and control: aspects of Anglo-Scandinavian minting south of the Humber', *Vikings and the Danelaw Select Papers from the Proceedings of the Thirteenth Viking Congress, Nottingham and York, 21–30 August 1997*, edited by J. Graham-Campbell *et al.* (Oxford, 2001), pp. 125–42.

<sup>14</sup> Blackburn, as in n. 13, pp. 130–1, 140 n. 12.

<sup>15</sup> Only one coin in the hoard has been identified positively as official, but there may be more which because of the fragmentary state have not been recognised as such; Blackburn, as in n. 7, pp. 17–18.

TABLE 2. Single-finds of Viking coins of the Imitative phase

	<i>London Monogram</i>	<i>Horizontal (Two-Line)</i>	<i>Doro</i>	<i>Orsnaforda</i>	<i>Total Imit.</i>	<i>York Royal</i>
Suffolk	1	1			2	
Norfolk	1	2	1		4	
Cambs	1	3	1		5	1
Beds	1?				1?	
Lincs		3			3	
Derbys						1
E/N. Yorks		3		1	4	7
S. Yorks	1				1	
Kent		1?			1?	
London						1
Hants.		1			1	
TOTAL	5	14	2	1	22	10

Horizontal coins are merely official moneyers of Alfred whose names had been copied by the die-engravers in the Danelaw, but at least thirty are names not found on official coins and appear to represent individuals working at the Danelaw mints.<sup>16</sup> Significantly they include several names of continental origin, showing that the participation of continental moneyers, so well attested in the St Edmund and later coinages, was already occurring during the imitative phase.<sup>17</sup>

Alfred's coins were struck to a weight standard of c.1.6 g, which he had adopted in his coinage reform of c.880. The imitations are lighter (c.1.35 g), and it is not that they were fraudulent or in some way inferior, as has often been assumed, but simply that the Viking mints had maintained the original weight standard current in England before c.880. Indeed this Anglian standard was used for most of the Anglo-Scandinavian coinages, including the St Edmund and the York St Peter and later regal issues.<sup>18</sup> I had previously suggested that it shows that the indigenous community was involved in the setting up of the first Viking mints in the 880s,<sup>19</sup> but as we shall see there may be another explanation.

The Canterbury imitations and the Oxford imitations are probably somewhat later, since some of the *Orsnaforda* coins<sup>20</sup> copy the Cross-on-steps design from the York coinage of King Sigefrith (c.895–900), and the Canterbury imitations copy both the normal Canterbury style Horizontal coins and the variety with the mint-name DORO, which was only struck c.895–899. The Earl Sihtric coin must also date from the later 890s, as it copies the Viking *Orsnaforda* group. These two large imitative groups therefore overlapped with the earliest 'National' coinages in the names of St Edmund and the York kings. It is tempting, then, to assign them to mints in the Five Boroughs, but we cannot rule out the possibility of a second mint in Northumbria, or a mint in the 'Outer Danelaw'. The Five Boroughs is a fascinating region, for it seems to have maintained a distinct identity throughout the period of Viking rule. The unique coin of Guthfrith of York appears to have been struck there, while in the tenth century it produced coinages in the names of St Martin and Sihtric Caoch, and in the 940s some distinctive issues for Anlaf Sihtricsson.<sup>21</sup>

### Coinage in the 870s and early 880s

Before turning to Guthrum's Horizontal (Two-Line) coinage, I would like to consider minting in the Danelaw (or what would become the Danelaw) during the 870s and early 880s, that is the

<sup>16</sup> M. Blackburn, 'The earliest Anglo-Viking coinage of the southern Danelaw (late 9th century)', *Proceedings of the 10th International Congress of Numismatics, London, September 1986*, edited by I.A. Carradice (London, 1989), pp. 341–8, at pp. 345–7.

<sup>17</sup> V. Smart, 'Scandinavians, Celts and Germans in Anglo-Saxon England: the evidence of moneyers' names', in *Anglo-Saxon Monetary History*, edited by M.A.S. Blackburn (Leicester, 1986), pp. 171–84, at pp. 174–7.

<sup>18</sup> See section on metrology below and C.E. Blunt, B.H.J.H. Stewart and C.S.S. Lyon, *Coinage in Tenth-Century England* (Oxford, 1989), ch. 15.

<sup>19</sup> Blackburn, as in n. 13, p. 130.

<sup>20</sup> The imitations consistently misspell the mint name *Orsnaforda* with an R rather than an H.

<sup>21</sup> Blunt, Stewart and Lyon, as in n. 18, chs 4 and 14.

decade or so before the start of the imitative coinages that I have been discussing so far. For York there is no evidence that coinage continued to be struck after the Vikings captured the city in 866 or the deaths of Kings Osbert and Ælla a year later, although since much of the Northumbrian coinage was by then anonymous such a possibility cannot be ruled out. It is likely the 'stycas' continued to circulate for a while among the Anglian population of Northumbria, but there are some signs of a breakdown in the control of the currency in that we find for the first time southern pennies occurring in finds from Yorkshire.<sup>22</sup> Three coins of Burgred (852–74) have been found at different sites in York and a fourth in the Malton/Scarborough area. The hoard from Lower Dunsforth, North Yorkshire, is now known to have contained some thirty coins, mostly of the Lunette type,<sup>23</sup> and a recent hoard from North Yorkshire contained several Lunette pennies and a dirham fragment and hack-silver. This latter hoard looks like the property of a Viking, but the other finds could represent local currency, the silver pennies being drawn into Northumbria by a lack of new money and weakening of control. At any rate, there seems to have been a gap of up to thirty years in minting between the last Northumbrian issues and the establishment of the first Viking mint in York in c.895.

In East Anglia it appears to have been a different matter, for there are signs of continuity. The written sources are silent about what happened between the defeat and ritual killing of King Edmund in 869 and Guthrum's settlement there ten years later. It is quite probable that the Scandinavian army installed a compliant English king to rule subject to their will, as they had done in York in 867 and would do in Mercia in 874. They had apparently made similar demands of Edmund in 869, and it was his rejection of these that led to his downfall.<sup>24</sup>

### *Coins of King Æthelred and King Oswald*

There are a few anomalous coins that have long been recognised as having something to do with East Anglia in this period, but quite how they fitted in was uncertain. Let me quote from Dolley's 1965 booklet:<sup>25</sup>

Before the late 880s it is unlikely that the Viking invaders of England struck any coin, though mention should be made of two or three pieces of Continental type with the names of kings Oswald and Ethelred. Typologically they seem to belong to East Anglia, and they have been dated to the decade following the overthrow of that kingdom and the martyrdom of King Eadmund in 869, but their association with that area is by no means proven, and the traditional dating seems too early.

Only one of these specimens (Appendix 2, Æ3) was known prior to the Cuerdale hoard of 1840, and that was then regarded as a joint issue of Beonna and Æthelred, as kings of East Anglia of the mid eighth century.<sup>26</sup> The discovery in the Cuerdale hoard of four more associated pieces (Æ2, Æ4, O1–2), in the names of a King Æthelred and King Oswald, prompted a reassessment. The Cuerdale hoard was discovered at an opportune moment, for Daniel Haigh and others had been taking a particular interest in the East Anglian coinages of the eighth and ninth centuries,<sup>27</sup> and the traditional arrangement, as reflected in Ruding's *Annals*<sup>28</sup> or Hawkins's *Silver Coins of England*,<sup>29</sup>

<sup>22</sup> M. Blackburn, 'The coinage of Scandinavian York', in R.A. Hall *et al.*, *Aspects of Anglo-Scandinavian York*, *Archaeology of York* 8/4 (York, 2004), pp. 325–49, at p. 345.

<sup>23</sup> To be republished by the present writer. See the on-line *Check-List of Coin Hoards of the British Isles*, no. 74.

<sup>24</sup> Smyth, as in n. 3, pp. 206–9.

<sup>25</sup> Dolley, as in n. 8, p. 16.

<sup>26</sup> E. Hawkins, *The Silver Coins of England*, 1st edn (London, 1841), pp. 33–4, pl. 7, 89. The supposed King Æthelred of the mid-eighth century, is more reliably named 'Alberht', i.e. Æthelbert, of whom a coin has recently been discovered; M.M. Archibald, V. Fenwick and M.R. Cowell, 'A sceat of Ethelbert I of East Anglia and recent finds of coins of Beonna', *BNJ* 65 (1995), 1–19; M.M. Archibald, 'Beonna and Alberht: coinage and historical context', *Æthelbald and Offa. Two Eighth-Century Kings of Mercia*, edited by D. Hill and M. Worthington (BAR British Series 383; Oxford, 2005), pp. 123–32, at pp. 125–8.

<sup>27</sup> D.H. Haigh, 'On the coins of East Anglia', *NC* 1st series 2 (1839/40), 47–51; J. Lindsay, 'On the appropriation of certain coins to Northumbria and East Anglia', *NC* 1st series 2 (1839/40), 132–8; D.H. Haigh, 'Remarks upon the numismatic history of East Anglia during the VII. & VIII. centuries', *NC* 1st series 4 (1841/2), 34–41; D.H. Haigh, 'Further remarks upon the numismatic history of East Anglia during the ninth century', *NC* 1st series 4 (1841/2), 195–200; J. Lindsay, *A View of the Coinage of the Heptarchy* (Cork, 1842), pp. 44–53; F.D. [T.F. Dymock], 'Coins of Ethelstan', *NC* 1st series 5 (1842–3), 124–7.

<sup>28</sup> R. Ruding, *Annals of the Coinage of Great Britain and its Dependencies*, 3rd edn (London, 1840), pp. 120–1.

<sup>29</sup> See n. 26.

had been woefully confused. One must admire the exemplary speed and efficiency with which Edward Hawkins at the British Museum administered and published the Cuerdale hoard,<sup>30</sup> and commend his openness in sharing the new material with other scholars during that process. Yet there seems to have been some rivalry between him and Haigh, for their publications reach similar conclusions about the 'King Æthelred' and 'King Oswald' coins without acknowledging the other's work. Haigh's studies culminated in his magisterial *Essay on the Numismatic History of the Ancient Kingdom of the East Angles* (Leeds, 1845), which laid out the sequence of rulers and issues essentially as we understand them today.

Of the five coins of Æthelred and Oswald then known, four copy the Carolingian Temple type, and one has a central serifed  $\mathfrak{A}$  (for Anglia) as found on the coins of Edmund of East Anglia (855–69). One of the moneyers, Beornheah, also occurs on Edmund's coinage, and Daniel Haigh concluded that King Æthelred and King Oswald were probably 'two otherwise unrecorded successors of Eadmund, during the troubles of East-Anglia (indeed of the whole island), between A.D. 870 and 878'.<sup>31</sup> Hawkins was more circumspect, and could not decide whether Æthelred was an unknown East Anglian ruler preceding or succeeding Edmund, or represented the West Saxon king Æthelred I (865–71) exercising some overlordship of East Anglia.<sup>32</sup> This latter interpretation was adopted by Grueber and Keary in *BMC*.<sup>33</sup> Brooke described them as 'Danish issues in East Anglia of 870–878?', and those of Æthelred as 'copying name of Aethelred I?'.<sup>34</sup> Dolley criticised details in Brooke's account,<sup>35</sup> and as we have seen inclined to a later dating, describing one of the Æthelred coins as a 'Silver penny in the name of an unknown "Æthelræd" struck in East Anglia (?) c.885'.<sup>36</sup> It is little wonder, then, that historians have also been loath to rely on the evidence of these coins, and at most have quietly acknowledged their existence.<sup>37</sup>

A recent find has provided important new evidence for the dating and status of this group. It is a coin in the name of Æthelred (Æ1) found by the 'Kent coast' in c.1995 and acquired by the British Museum. Like the first coin of Oswald (O1), it has a central serifed  $\mathfrak{A}$  on the obverse and a cross (with four pellets) on the reverse. The moneyer is Sigereð who also struck coins of this type for Edmund, and indeed apart from the obverse inscription reading  $\cdot\mathfrak{E}\mathfrak{D}\mathfrak{E}\mathfrak{L}\mathfrak{R}\mathfrak{E}\mathfrak{D}\mathfrak{E}\mathfrak{X}$  (with a front-barred *eth*), this coin is virtually identical to some of Edmund's, including the use of Greek *gamma* for G in the moneyer's name.<sup>38</sup> The front-barred *eth* is also found on Edmund's coins of the moneyers Æthelhelm and Beornferth.<sup>39</sup> Hugh Pagan in his 1982 article on the coinage of the East Anglian kings identified Sigereð as a late moneyer of Edmund.<sup>40</sup> This new coin, then, firmly implies continuity in the official East Anglian coinage, showing that Dolley's dating is much too late, and it makes the case for Æthelred being a genuine successor of King Edmund considerably stronger. How soon after Edmund's death and on what scale this issue was struck is uncertain. The fact that no specimens occurred in the Gravesend hoard (dep. c.871) or the Croydon hoard (dep. c.872), containing fifty and eighteen coins respectively of Edmund, could imply that it was a small coinage, or that there was some delay in its issue, but the evidence is not conclusive.<sup>41</sup>

The coin of King Oswald (O1) of related type, with an  $\mathfrak{A}$  / cross design, is not as closely associated with Edmund's coinage. The obverse is similar enough, and the small errors in the legend (reversed L, and D for R) can be paralleled under Edmund, as can the form of the *wynn* as a V with a closed top. The reverse legend is, however, very garbled, to an extent not found under the East Anglian kings. Brooke suggested it gave the name of an otherwise unknown moneyer

<sup>30</sup> E. Hawkins, 'An account of coins and treasure found in Cuerdale', *NC* 1st series 5 (1842–3), 1–104.

<sup>31</sup> D. Haigh, *An Essay on the Numismatic History of the Ancient Kingdom of the East Angles* (Leeds, 1845), pp. 19–20.

<sup>32</sup> Hawkins, as in n. 30, pp. 5–8.

<sup>33</sup> *BMC* AS II, p. 31.

<sup>34</sup> G.C. Brooke, *English Coins* (London, 1932), p. 32.

<sup>35</sup> M. Dolley, 'Some Temple-type coins found in Great Britain', *HBN* V/16 (1962), 321–4.

<sup>36</sup> Dolley, as in n. 8, pl. 1, 1 (caption).

<sup>37</sup> E.g. E.B. Fryde *et al.* (eds), *Handbook of British Chronology*, 3rd edn (London 1986), p. 9; Hart, as in n. 2, pp. 25, 41.

<sup>38</sup> H.E. Pagan, 'The coinage of the East Anglian kingdom from 825 to 870', *BNJ* 52 (1982), 41–83, at pp. 78–9.

<sup>39</sup> E.g. *SCBI* 2 Glasgow 420, 422.

<sup>40</sup> Pagan, as in n. 38, p. 49.

<sup>41</sup> Although these two hoards post-date Edmund's reign, only thirteen coins in Gravesend and eight in Croydon belong to the later phase of Edmund's coinage, represented by the moneyers Bæghelm, Beornheah, Eadberht and Sigereð; Pagan, as in n. 38, p. 49.

Eanwald, read backwards,<sup>42</sup> but it may equally echo elements of the obverse inscription, without trying to be meaningful. The reverse design, a cross without pellets in the angles, was not used under Edmund. It seems, therefore, to be one step removed from Edmund's coinage.

The four remaining coins attributed to these two rulers are quite unprecedented in the English series in using the Carolingian Temple type as their principal design (Æ2, Æ3, Æ4 and O2). The particular form the Temple takes on these coins is quite distinctive because the pediment at the top of the temple is composed of a double horizontal line. On the original coins of Charlemagne (768–814) and Louis the Pious (814–40), and all later Frankish issues of this design, there is only a single horizontal line (Fig. 2, 1).<sup>43</sup> However, on the Italian issues, starting with deniers of Emperor Louis II (855–75), there is this double-lined pediment (Fig. 2, 2),<sup>44</sup> and these must be the prototype that was followed. There were a number of Italian Temple type coins in Cuerdale, showing that they did reach England.<sup>45</sup> There are other distinctive features to these East Anglian coins. Unlike the Carolingian coins, the king's name is on the Temple side, while the reverse inscription generally has the name of a moneyer. The lettering is larger than that on the Carolingian coins, with letter forms that are typical of the East Anglian series, such as an A with the top bar extending backwards. One coin (Æ2), by an otherwise unrecorded moneyer Heahmod, has a cross-crosslet reverse, a design that is not known for Edmund, but is for his predecessors. The fragment (O2), which has plausibly been attributed to Oswald, although only the last two letters of the king's name are visible, has a somewhat different construction of the temple, which again suggests it is one degree further removed from the prototype, and that the two Oswald coins are marginally later than those of Æthelred.



Fig. 2. Temple type coins of (1) Louis the Pious (814–40) and (2) Louis II (855–75). Scale  $\times 1.5$ .

One of the Temple coins from the Cuerdale hoard (Æ4) – one that had been retained by the Assheton family, owners of the Cuerdale estate – had immediately been recognised by Hawkins and Haigh as essaying a somewhat corrupt version of the  $\pm$ E-DELRED RE inscription.<sup>46</sup> The reverse is blundered, and Dolley, regarding it as a blundered form of the mint name Quentovic, attributed it to a continental Viking series.<sup>47</sup> However, as we shall see, Quentovic coins were copied in the Danelaw, not in France, and Hawkins and Haigh were right to associate this coin with the East Anglian Temple group. It is notable that the weights of all these coins fall in the range 1.14–1.46 g (17.6–22.6 gr),<sup>48</sup> which is in line with that of the East Anglian kings but well below the Carolingian standard of c.1.75 g.<sup>49</sup>

<sup>42</sup> Brooke, as in n. 34, p. 32.

<sup>43</sup> See plates to E. Gariel, *Les monnaies royales sous la race carolingienne*, 2 vols (Strasbourg, 1883–4); K. Morrison and H. Grunthal, *Carolingian Coinage* (New York, 1967); and Grierson and Blackburn, *MEC* 1, pls 36–8.

<sup>44</sup> *MEC* 1, pl. 46. The absence of the double pediment from Frankish issues, even imitations, is reinforced by looking through C.M. Haeckel, *Karolingische Münzfunde aus dem 9. Jahrhundert*, 2 vols (Köln, 1997).

<sup>45</sup> Hawkins, as in n. 30, pp. 68–71, pl. 7; R.H.M. Dolley and K. Morrison, 'Finds of Carolingian coins from Great Britain and Ireland', *BNJ* 32 (1963), 75–87, at p. 80.

<sup>46</sup> Hawkins, as in n. 30, p. 99; Haigh, as in n. 31, p. 19, pl. 5, no. 3.

<sup>47</sup> Dolley, as in n. 35, p. 323.

<sup>48</sup> Pagan, as in n. 38, p. 52.

<sup>49</sup> *MEC* 1, p. 194. Occasionally specimens fall below 1.5 g, but those that do raise concerns over their date, status or state of preservation.



*A Temple coinage in the name of Guthrum*

A new piece in the jigsaw is represented by a find from c.1996 at Hoxne in Suffolk (GT1), only shown at the Fitzwilliam in 2000.<sup>50</sup> This is a striking in lead from dies for a coin of the Temple type, again with a double pediment. The die-cutting is clear and the highly literate inscriptions read EÐELSTAN REX and †DVNNO MONET. Note the front-barred *eth*, which is also present on the new Æthelred coin (Æ1). The moneyer Dun or Dunna is not otherwise known in the East Anglian series, but the name is a common one, and there were three ninth-century moneyers of that name. One was a moneyer at Rochester c.815–45, one was a Canterbury moneyer of the Lunette type in the late 860s and early 870s, and another, though possibly the same man, was a moneyer at or near Winchester from the later 870s to the 890s. There is no reason to believe that the lead piece was produced by any of these moneyers.

When first reported it was thought that this lead striking might represent a new coin type for King Æthelstan I of East Anglia (c.825–45), or even Æthelstan sub-king of Kent (839–c.851), of whom no coins are known, which would make it contemporary with the Temple issues of Louis the Pious or Charles the Bald (840–77). However, the double bar to the pediment shows that the coin must be dated after 855, and the concurrence with known types of the 870s in the names of Æthelred and Oswald, as well as the Suffolk find provenance, makes it clear that the piece belongs to this phase of coinage in East Anglia.

Æthelstan is evidently the Viking king Guthrum, using the name he was baptised with in 878, just as he did on his substantive Horizontal (Two-Line) coinage that we will consider in a moment. He settled with his army in East Anglia in 879 or 880, and it seems probable that East Anglian Temple type coins were still being minted. This then would have been Guthrum's first coinage. In the early 880s Alfred reformed his coinage, raising the weight standard and introducing the London Monogram and Horizontal types,<sup>51</sup> and only after these were established did Guthrum adopt Alfred's coin design.

*Guthrum and Quentovic*

Among a number of other Temple type imitations that appear to be English, two seem to essay Guthrum's baptismal name (GT2–3). Both are from the Cuerdale hoard and look as if they come from the same school of die-cutting as those previously considered, with double pediments, rather untidy spidery lettering and the design partly engraved rather than punched. Although their obverse inscriptions, on the Temple side, are badly blundered (EDENAT TE+ and ELΣ·A[ JO RE+ (retrograde)), they both begin with the letter E and seem to be derived from an EÐELSTAN REX rather than EÐELRED REX legend. Their reverses, by contrast, are of quite different workmanship, with neat serified letters, punched rather than engraved, and fully literate inscriptions reading †QVVENTOVVICI or †QVVENTOVVICI, for the mint name Quentovic. The only official mint-signed coins of the Temple type from Quentovic are a rare issue of the 840s, from the beginning of Charles the Bald's reign, and they have a different spelling of the mint-name (QVENTVVICVS) on the temple side. The reverses of these English coins conform to those of Charles the Bald's *Gratia Dei Rex* issue, struck after 864.<sup>52</sup> Indeed the style of die-cutting is so close, even down to the very distinctive form of the letter Q, that it seems very likely that these are two official Carolingian reverse dies that had been taken from the Quentovic mint. In one respect they differ from Charles the Bald's coins of Quentovic, which have a pellet in only two opposing quarters of the cross, while the two Temple imitations have pellets in all four quarters. The additional pellets were probably added to the die by the moneyer in England to make the dies conform to the standard Temple/Cross-and-four-pellets design.

The concept of Viking mints using official dies obtained from neighbouring states is well established for the late tenth and early eleventh centuries,<sup>53</sup> and its occurrence in the Danelaw

<sup>50</sup> I am grateful to Brian Fisher for reporting this first to Mike Bonser, who immediately referred it on to me at the Fitzwilliam.

<sup>51</sup> M. Blackburn, 'Alfred's coinage reforms in context', *Alfred the Great. Papers from the Eleventh-Centenary Conferences*, edited by T. Reuter (Aldershot, 2003), pp. 199–217.

<sup>52</sup> Morrison and Grunthal, as in n. 43, nos 715 (Temple type) and 716 (GDR type).

<sup>53</sup> M. Blackburn, 'English dies used in the Scandinavian Imitative coinages', *Hikun* 11 (1985), 101–24.

during the later ninth century should not surprise us, especially bearing in mind the extent to which Frankish moneyers were involved in running mints in the Danelaw. It raises the question, however, whether a gold penny found at Congham, Norfolk, in 1990 might not be a product of a Viking mint in East Anglia too. This combines a crude obverse, showing a bust copied from a Roman coin of Constantine I or II, with a reverse struck from an official, but rusty, die for a silver denier of Chartres.<sup>54</sup> The Chartres die was probably made c.870–5. Recent finds of gold ingots and hack-gold from Lincolnshire, Cambridgeshire and Norfolk have shown that gold was available to the early Scandinavian settlers in the Danelaw,<sup>55</sup> and it is not implausible that the Congham gold coin might be an issue parallel to the Quentovic Temple type imitations in Guthrum's blundered name.

There is a second group of Viking imitations of Quentovic coins copying the Cnut/Cunnetti issue of York, c.900–5 (Table 3, II). These were for long regarded as continental, but since the only recorded provenance for them is the Cuerdale hoard<sup>56</sup> and they follow the Danelaw weight standard an English origin has been proposed.<sup>57</sup> There is not a direct relationship between the two imitative groups, since the reverse legend on the 'Cnut' issue has been shortened to QVENTOVICI and the pellets omitted from the arms of the cross. The obverse and reverse dies are the work of the same die-cutter and are clearly derivative. Both groups, then, appear to be English, one from East Anglia probably from the early 880s, and the other probably from the Five Boroughs or Northumbria (but not York) in the early tenth century.

TABLE 3. The two groups of Quentovic imitations

- I. EÐELSTAN REX (blundered) Temple/QVVENTOVVICI Cross-and-pellets  
II. CNVT REX Cruciform/QVENTOVVICI Cross

*BM Sylloge* 327–8  
*BM Sylloge* 313–26

### *Other English Temple type coins*

Several other Temple type imitations with garbled inscriptions that may have an English origin are listed in Appendix 1 (nos An1–7). Two in the British Museum (An1–2), given by George V in 1920, are accompanied by tickets written when the coins were acquired indicating that they were from the Cuerdale hoard, but Dolley and Morrison in their *Sylloge* of the British Museum's Carolingian coins did not accept that.<sup>58</sup> However, as Marion Archibald has kindly pointed out to me,<sup>59</sup> there is clear evidence in the Departmental Minute Book that, among the 164 coins and medals transferred from the Royal collection in 1920, a group of eleven coins came from Cuerdale, the remnants of a parcel of 149 coins selected by Hawkins for Queen Victoria in 1841.<sup>60</sup> On An1 the obverse legend commences with an E, like the Temple type copies considered above, but rest of the inscription is too blundered to decide whether it is inspired by an EÐELRED or EÐELSTAN legend. The reverse inscription appears to end with MON, an English characteristic,

<sup>54</sup> M. Blackburn and M. Bonser, 'A Carolingian gold coin struck from a die of Chartres and found at Congham, Norfolk', *NCirc* 98 (1990), 304–6.

<sup>55</sup> M. Blackburn, 'Gold in England during the age of silver (eighth–eleventh centuries)', *The Silver Economy in the Viking Age*, edited by J. Graham-Campbell and G. Williams (London, forthcoming).

<sup>56</sup> One specimen was in the collection of V. Thomsen (Copenhagen) in 1836, i.e. before the Cuerdale hoard, but its provenance is unknown (*Blätter für Münzkunde* 1836, 206–9), cited in C.S.S. Lyon and B.H.I.H. Stewart, 'The Northumbrian Viking coins in the Cuerdale hoard', *Anglo-Saxon Coins*, edited by R.H.M. Dolley (London, 1961), pp. 96–121, at p. 118, n. 2.

<sup>57</sup> *MEC* 1, p. 322. A continental origin had been doubted in F. Dumas, *Le trésor de Fécamp* (Paris, 1971), p. 116 n. 5. A third group of 'Quentovic' coins found in several British hoards of the later tenth century represent the regular feudal coinage of Quentovic, an immobilisation of Charles the Bald's GDR type, of which some 520 specimens were present in the Fécamp hoard (dep. c.980); Dumas, pp. 108–23.

<sup>58</sup> R.H.M. Dolley and K.F. Morrison, *The Carolingian Coins in the British Museum* (London, 1966), p. 9.

<sup>59</sup> She had already signalled this in 'A Scandinavian coin of Carolingian type from the Cuerdale hoard', *Hikuin* 11 (1985), 79–82, at p. 80.

<sup>60</sup> Department of Coins and Medals, Minute Book 1920, p. 180: '6 foreign deniers & 5 English pennies from the Cuerdale treasure trove'. These eleven coins correspond to accession nos. 1920, 1–12–141 to 1–12–151 (inclusive). The English coins are one St Edmund and four York royal pennies. The 'foreign' coins are three Carolingian (*BM Sylloge* nos. 197 (Charles the Bald, GDR type, Clermont), 270 (Louis the Child, Strasburg), – (Italy, Berengar, as king)), two Temple type imitations (*BM Sylloge* nos. 335, 336), and a Scandinavian half-bracteate of Hedeby (Malmer class KG7). These coins are entirely consistent with a Cuerdale provenance.

but one cannot discern a moneyer's name. The inscriptions on An2 are entirely garbled, and although the die-cutting styles are similar, the appearance of An2 is rather different from An1 since it has a single rather than double line to the gable of the temple. A feature they both share in common with GT2 is the form of the cross over the temple, with long lateral arms and no lower limb.

Three further Temple type imitations have single lines to the temple pediments and their origin is more uncertain. One in the British Museum collection without known provenance (An5) has an obverse inscription IOELIAN D† which could perhaps be a very corrupt form of E-ÐELSTAN RX, copied without comprehension. The reverse is blundered, though the last three letters suggest it was copied from a legend ending MONE. The weight (1.19 g) is in line with the Danelaw issues. A fragmentary coin (An6) in the Assheton collection, from the Cuerdale hoard, has an indeterminate obverse inscription (D[ JNE), but the reverse has [ JVICI[ ] which could suggest it comes from QVVVENTOVVICI, copied from G2–3, but there is no sign of pellets in the quarters of the cross. The third blundered coin with a single pediment (An7) is also from the Cuerdale hoard, but it is very different in style and elements of its obverse inscription seem to derive from the XPISTI N RELIGIO and DORESTATVS MON legends.<sup>61</sup> Its weight (1.65 g) suggests it is more likely to be from the continent. Another Cuerdale coin in the British Museum's collection (L1) should be noted. It has garbled inscriptions, but these clearly copy Italian coins of the emperor Lambert (894–8). There were nine regular coins of Lambert in the hoard of full weight (c.1.75 g), while this imitation weighing 1.33 g could be a light-weight continental copy or a Danelaw issue to the local standard. If it were English, it would indicate that Temple type imitations continued to be produced as late as c.900.

This leaves two controversial imitations (An3–4), but with conflicting opinions as to their date and origin. One was found during excavations on the island of Lindisfarne and when it entered the British Museum, in 1929, George Brooke identified it as belonging to the same period as the Æthelred and Oswald coins.<sup>62</sup> The obverse legend is meaningless – essentially a decorative pattern of the letters V and E – but the reverse he read as reflecting the name of a moneyer Wulfhere. The coin has a double pediment, like the Danelaw imitations of the ninth century, and a similar style of engraved design and lettering. Where it differs is on the reverse, having a pellet in three angles of the cross but a crescent in the fourth. In 1962 Michael Dolley took issue with Brooke's attribution, pointing to a second specimen, struck from the same obverse die but a blundered reverse (still with three pellets and a crescent), which came from the Inch Kenneth hoard (deposited c.1000).<sup>63</sup> This provenance suggests that the coins were struck in the later tenth century, and Dolley saw them as likely to be continental, struck in Frisia or elsewhere in north-west Germany. However, this type has not been recorded among the German coins in the vast number of hoards from Northern Europe, and it would be very unusual for a moneyer's name to occur on German coins, which almost always name only the ruler, mint or local saint. With two die-linked specimens from Britain and a plausible moneyer's name, there must be a strong presumption that these are insular imitations. It is tempting to attribute them to the 870s or 880s, contemporary with the other Temple type coins we have been considering here. However, this would make the Inch Kenneth coin by far the oldest in the hoard. That is not impossible, but we should keep an open mind whether there might have been a revival of the type during the tenth century.

### *An East Anglian coinage of the 870s and early 880s*

There appears, then, to be a coinage associated with East Anglia in the name of three rulers, together with a number of coins with very blundered inscriptions. Some have on the reverse the names of moneyers, two of whom had struck for King Edmund. Æthelred and Oswald seem to share one of

<sup>61</sup> The latter is found on common Temple coins of Lothar I (840–55) from Dorestad, which usually have errors in their inscriptions though they are not as blundered as this coin; S. Coupland, 'The coinage of Lothar I (840–855)', *NC* 161 (2001), 157–98, at pp. 173–5.

<sup>62</sup> Brooke, as in n.34, p. 31.

<sup>63</sup> Dolley, as in n. 35, pp. 321, 323–4.

the moneyers (Beornheah), suggesting they used the same mint. Within the series there are two distinct groups (Table 4), one that continues the Alpha and cross designs used on Edmund's coinage, and another that uses the Carolingian Temple design, but of the Italian variety with a double-barred pediment. It is tempting to see these as two sequential phases with the two kings' coins being issued in parallel. If this is correct there are early signs of trouble, for the corrupt reverse inscription on the Oswald  $\mathfrak{A}$  coin (O1) suggests either a lack of control or deliberate evasion by a moneyer unsure as to whether he wanted to have his name associated with the coinage. On the introduction of the Temple type literacy improves, though it declines again later. This coinage survives in such a small sample that it is difficult to determine the correct sequence, but I am inclined to think that the blundered coin in the name of Æthelred (Æ4) may belong towards the end of the series, after the very competent lead striking of Guthrum (G1). In its latest phase the coinage is in a sense imitative, with no control over the inscriptions, which copy other coins without intention, and using dies obtained from the Quentovic mint. The weights in both the  $\mathfrak{A}$  / Cross phase and the Temple phase follow the East Anglian standard, not the much higher Carolingian one.<sup>64</sup>

TABLE 4. East Anglian issues of the 870s and early 880s

<i>Type</i>	<i>Rev. legend</i>	<i>Provenance</i>
IN THE NAME OF ÆTHELRED		
$\mathfrak{A}$ / Cross-and-pellets	Sigereð	Kent coast
Temple / Cross-crosslet	Heahmod	Cuerdale hoard
Temple / Cross-and-pellets	Beornhae	'Seafield'
IN THE NAME OF OSWALD		
$\mathfrak{A}$ / Cross	Blundered	Cuerdale hoard
Temple / Cross-and-pellets	Beor ... (?Beornheah)	Cuerdale hoard
IN THE NAME OF GUTHRUM (ÆTHELSTAN) (after 879/80)		
Temple / Cross-and-pellets	Dunno	Hoxne
Temple / Cross-and-pellets	Quentovic	Cuerdale hoard
ANONYMOUS / BLUNDERED		
Temple / Cross-and-pellets	Blundered	Cuerdale hoard and elsewhere

In terms of dating, at one end there seems to be fairly close continuity with Edmund's coinage after his death in 869, while at the other end Guthrum's issues must come after his baptism in 878 and probably after his settlement of 879/880. The coinage, then, may have been spread over some ten to fifteen years. What does it tell us about the status of Æthelred and Oswald? Clearly these are English names, but were they independent successors of Edmund, were they 'puppet' kings set up by the Vikings, or was this 'Æthelred' in fact King Æthelred I of Wessex, as suggested by Hawkins? The fact that there is continuity at the mint, with at least two moneyers remaining in office, striking coins such as Æ1 that are indistinguishable from Edmund's own, suggests that there was a transfer of power to Æthelred and Oswald after Edmund's death. It is unlikely that Æthelred of Wessex took *de facto* control of East Anglia as the Vikings remained in the kingdom for almost a year, before moving into Wessex as aggressors in late 870, and Æthelred had died by April 871. If Æthelred was a local person chosen because he commanded respect, he may well have been a member of the East Anglian royal family since Edmund's two predecessors, Æthelstan and Æthelweard, shared the same first element in their names.<sup>65</sup> As I have indicated, the corrupt inscription on the first Oswald coin hints at instability.

The coinage, in its Temple phase, has all the hallmarks of a Viking coinage. Blundered inscriptions are not found in official Anglo-Saxon coinages, but they are a common feature of Scandinavian coinages, seen in the Danelaw, at Dublin and in Scandinavia, where almost every coinage shows problems with literacy.<sup>66</sup> Even in the official Carolingian coinage at Dorestad,

<sup>64</sup> See section on Metrology below.

<sup>65</sup> Indeed, looking back to the eighth century there were also two Æthelberhts. However, we do not know how any of these eighth- or ninth-century kings were related.

<sup>66</sup> Blackburn, as in n. 22, p. 338.

when under the control of Scandinavian chieftains Harald and Rorik who had been granted the town in benefice by Lothar I, the literacy of the coinage declined dramatically.<sup>67</sup> Anglo-Saxon coins occasionally have errors, but these are minor compared to those here. The choice of the Temple design also suggests Scandinavian influence. This type was no longer current in Francia, as Charles the Bald's recoinage on 864 had replaced previous coin types with the uniform *Gratia Dei Rex* issue, and this he had extended to Lotharingia in 869. However, this is the type the 'great army' might have been familiar with from its campaigns on the Continent before 865 and have brought over to England with them. Furthermore, in Scandinavia the great majority of Carolingian coins found are *Temple* type coins of Louis the Pious.<sup>68</sup> Interestingly, the seven Carolingian coins in the Croydon hoard, a Viking deposit of c.872, were all of the *Temple* type.<sup>69</sup> These relatively fine Carolingian coins were no doubt trusted more than the base Lunette pennies of Burgred and Alfred, and for this reason would have been attractive as a prototype in the early 870s.

It is not entirely surprising that this series of coins is only known from the Cuerdale hoard, a few single-finds and possibly the much later hoard from Inch Kenneth. There is only one contemporary hoard deposited in East Anglia during the 870s or early 880s, that from Laxfield, Suffolk found c.1818, with a *t.p.q.* of 876.<sup>70</sup> From the note of it published by Dolley and Morrison in 1963 it contained an unknown number of Anglo-Saxon, mainly Lunette coins, and at least eight Carolingian coins of which three were said to be 'illegible' Temple coins. None can now be traced, but the description suggests that these could have been blundered imitations, and if so they may have been English versions.

### Guthrum's Horizontal (Two-Line) Coinage

I will now turn to the Horizontal coinage of Guthrum with his baptismal name 'Æthelstan'. Before the discovery of the Cuerdale hoard there was only one extant specimen (GH16b), which was not identified as such. Instead the coinage that was attributed to Guthrum in, for example, Ruding's *Annals* was the non-portrait issues that we now recognise as belonging to Æthelstan I of East Anglia (c.825–45). Again, it was Daniel Haigh who realised that these were struck some fifty years earlier, and that the coins of a new Horizontal type found in the Cuerdale hoard are indeed the coinage of Guthrum.<sup>71</sup>

The coins closely copy Alfred's type, dividing the obverse into four sections, but instead of +EL FR ED RE on Alfred's coins, these have +ED EL TΛN (or TΛ or IΛ) RE. One coin (GH17) is unique in having a circular and complete obverse legend XEDELSTAN REX, yet its reverse inscription is largely meaningless. Appendix 2 lists the forty or forty-one known specimens, all but one or two of which are now in museums (Table 5). They virtually all come from the three main hoards that I mentioned earlier: thirty or thirty-one from the Cuerdale hoard, five from the Ashdon hoard and three from the Morley St Peter hoard. One (GH16b), as I have mentioned, was from a pre-1840 find, then in the collection of Mr Lewin-Sheppard and later in that of Christopher Blunt, while another unprovenanced coin (GH35) is first recorded in Carlyon-Britton's collection, which may suggest that it came from the Stamford hoard. There have been no modern metal-detector finds that I am aware of.

<sup>67</sup> S. Coupland, 'From poachers to gamekeepers: Scandinavian warlords and Carolingian kings', *Early Medieval Europe* 7:1 (1998), 90–7, at pp. 92 and 95–6; Coupland, as in n. 61, p. 174.

<sup>68</sup> D.M. Metcalf, 'Viking-age numismatics. 2. Coinage in the Northern Lands in Merovingian and Carolingian times', *NC* 156 (1996), 399–428, at p. 423.

<sup>69</sup> N.P. Brooks and J.A. Graham-Campbell, 'Reflections on the Viking-age silver hoard from Croydon, Surrey', *Anglo-Saxon Monetary History*, edited by M.A.S. Blackburn (Leicester, 1986), pp. 91–110 (revised version in N. Brooks, *Communities and Warfare 700–1400* (London, 2000), pp. 69–92).

<sup>70</sup> Dolley and Morrison, as in n. 45, p. 79, citing a list of the coins among the Banks MSS in the British Museum. This list could not be found when I first looked for it in 1988, and presently the Banks MSS are away for conservation. The deposit date must be later than the c.875 suggested by Dolley and Morrison, for it contained an 'IMPERATOR AGVST' coin of Saint-Gery (Cambrai) which dates after 876 if of Charles the Bald or after 882 if of Charles the Fat.

<sup>71</sup> Haigh, as in n. 31, pp. 8–11, 20–21. Hawkins, as in n. 30, pp. 8–10, had identified the new Horizontal coins in the Cuerdale hoard as ones of Guthrum, but he continued to regard the earlier Æthelstan series also as Guthrum's, despite commenting that it was very remarkable that not one should have occurred in the Cuerdale hoard.

TABLE 5. Sources of Horizontal coins of Guthrum

<i>Finds</i>	
Cuerdale Hoard	30 or 31
Ashdon Hoard	5
Morley St Peter Hoard	3
Pre-1840 find	1
Unprovenanced pre-1913	1
	<hr/> 40 or 41
<i>Present Locations</i>	
British Museum	22
Cambridge	7
Norwich	3
Assheton collection	3
Oxford	1
Liverpool	1
Copenhagen	1
Gotha	1
Unknown	2
	<hr/> 41

There are some seventeen different moneyer's names or reverse inscriptions on Guthrum's Horizontal coinage (Table 6). At least eight of these were probably genuine Danelaw moneyers striking in their own names, and of these five are also known to have struck 'Alfred' imitations in their own names, while one (Abenel) went on to strike St Edmund coins as well. Of these eight moneyers, three have Old English names, two Continental Germanic and one Old Norse, while the last one has a name which could be of either Old English or Continental Germanic.<sup>72</sup> So Old English names slightly outnumber Continental names, which is a very different situation to that found in the St Edmund coinage, where there are many more moneyers with Continental Germanic names than Old English ones.<sup>73</sup> Nonetheless this does show that even in the 880s the

TABLE 6. Moneyers of Guthrum's Horizontal type

	<i>No. of coins</i>	<i>No. of dies obv./rev.</i>	<i>Notes, also struck</i>
Abenel	4	4/4	'Alfred', St Edmund
Aelven	2	1/1	
'Bericbe'	1	1/1	
Berter	5 (+1)	4/4 (+?)	'Alfred'
Ciolwulf	2	2/2	
'Cusere'	1	1/1	
'Ecwulf'	1	1/1	Copying West Saxon moneyer
'Edeltare'	2	1/1	
'Eivdūilgl'	1	1/1	
Elda	8	5/6	'Alfred'
'Enodas'	1	1/1	
Guntere	1	1/1	
Guthhere	1	1/1	'Alfred'
'Tilewine'?	1	1/1	Copying London moneyer
Iudelberd	4	4/4	'Alfred'
'Iudoel'	2	2/2	
[ ]ed	1	1/1	
'Edel-sr Gelda'	1	1/1	
Unrecorded	-(+1)	-/- (+?)	
TOTAL	39 (+2)	33/34	

<sup>72</sup> Comments on the origin of the names are included in Appendix 2.

<sup>73</sup> V. Smart, 'The moneyers of St Edmund', *Hikui* 11 (1985), 83-90.

Scandinavians were recruiting personnel from Francia to run their mints. Two other names on Guthrum's coinage ('Ecwulf' and 'Tilewine'?) are mere copies of names that occur in Alfred's official coinage, and this is a phenomenon that also occurs on the 'Alfred' Horizontal imitations from the Danelaw.<sup>74</sup> Finally there are several inscriptions that are blundered to a greater or lesser degree and it is difficult to determine the origin of the names.

The thirty-nine specimens available for die-study purposes are struck from thirty-three obverse and thirty-four reverse dies.<sup>75</sup> Applying a version of Stewart Lyon's formula, as developed by Warren Esty,<sup>76</sup> to these figures suggests that there may have been about 180 obverse and reverse dies, but the margin of error is wide, as shown by the range of results within a 95 per cent confidence limit (Table 7). Clearly this was a very substantial coinage and the surviving sample gives a poor account of it. The estimates suggest that we know only around twenty per cent or less of the dies that were used. Any future finds are bound to throw up new dies and new moneyers. If the survival rate of Guthrum's coinage is so low, the same is presumably true of other imitative 'Alfred' issues of the 880s. These statistics suggest that the dies may have been issued in pairs rather than sets having more reverse than obverse dies. If this is so, it is of interest that Hugh Pagan has observed a similar pattern in the coinages of the East Anglian kings.<sup>77</sup>

TABLE 7. Estimates of the number of dies used in Guthrum's Horizontal coinage.

	<i>Obv.</i>	<i>Rev.</i>
No. of coins with identified dies:	39	39
No. of dies in sample:	33	34
No. of singletons:	28	29
Estimated original dies:	c.170	c.190
95% confidence range:	85-400	95-470

In terms of die-links there are five pairs of die-duplicates, and one case of an obverse being used with two reverses of the same moneyer. There are also two die-links between Guthrum's coinage and that in the name of 'Alfred', sharing a common reverse die. One of these, involving the moneyer Elda, was published by Christopher Blunt, both coins being in his own collection (GH20 and 'Alfred' 1).<sup>78</sup> Blunt was rightly cautious in his interpretation of this, but Dolley in 1965 more boldly proposed that Guthrum's coinage may have been struck at London by some of Alfred's moneyers, as part of the alliance that followed the so-called Treaty between Alfred and Guthrum, then dated to c.886.<sup>79</sup> In fact the 'Alfred' coins of the moneyer Elda are all struck on the lighter Danelaw standard, and they are just part of the large body of imitations bearing Alfred's name. Many of the moneyers named on these, like Elda, were genuine people working in the Danelaw, but some of them were actually West Saxon or Mercian moneyers, whose names had been slavishly copied by die-cutters in the Danelaw. The second Guthrum-Alfred die-link (GH27 and 'Alfred' 2) falls into that category, as the reverse is probably a blundered rendering of the well-known London moneyer Tilewine. The fact that only two die-links have been found between Guthrum's coinage and the 'Alfred' imitations should not be taken as evidence that the two series were separated in time or were from different workshops. With such a low survival rate from this period, these two die-links are indeed quite positive evidence in favour of mixed production from the same moneyers. There is a question, however, whether some of the Guthrum coins should themselves be regarded as imitations, if the inscriptions were merely copied from other coins without caring what they read.

<sup>74</sup> Blackburn, as in n. 16, pp. 343-4.

<sup>75</sup> These figures are based on Appendix 2, nos GH1-10, 12-34 and 36.

<sup>76</sup> W. Esty, 'Estimation of the size of a coinage: a survey and comparison of methods', *NC* 146 (1986), 185-215 (nos J1, H5 and C2). I am grateful to Prof. Esty for discussing these formulae and providing a simplified version of them.

<sup>77</sup> Pagan, as in n. 38, p. 53.

<sup>78</sup> C.E. Blunt, 'A die-identity between a coin of Alfred and one of Aethelstan II of East Anglia', *BNJ* 3rd ser. 7 (1952), 56-7.

<sup>79</sup> Dolley, as in n. 8, p. 17 and pl. 1, no. 2.

There is also the issue of how many mints might have been involved in producing this coinage. In some respects there is consistency among Guthrum's coins suggesting a degree of central organisation and perhaps concentration at one mint. For example, none of them use MO for *moneta* after the moneyer's name, as one often finds on Alfred's coins. On all coins apart from those of Elda, the name is simply spread over two lines. I had wondered whether Elda's consistent use of the formula ME FEC (*me fecit*, 'made me') indicated that his coins came from a different mint, but this supposition is unnecessary. The four-letter name was simply too short to spread over two lines so he needed something to complement it. *Me fecit* does not occur in Alfred's official coinage, but it is found on some other Danelaw issues, such as the 'Alfred' imitations by the moneyer Simun/Sigemund and some St Edmund coins. Some of Elda's Guthrum dies are very similar in epigraphy to ones of Berter and other moneyers, suggesting they shared a common die-cutter. There is, however, also a certain diversity of style among Guthrum's coins, and the fact that some moneyers used several pairs of dies – and even more based on the projected estimates of dies – indicates that the coinage was issued over a period. Yet it is very difficult to estimate the duration of a coinage from this kind of evidence.

### Metrology

As already noted, Alfred in his monetary reform of c.880 introduced a new weight standard for the Anglo-Saxon penny, increasing it from c.1.35 g (or a little higher) to c.1.60 g.<sup>80</sup> The earlier weight standard had been established by Offa in his coinage reform of c.792, and, although the weights of individual issues had fluctuated to some extent over the intervening century, this had broadly represented a common weight standard throughout all the Anglo-Saxon kingdoms. Thus the East Anglian coinage of King Edmund was struck to the c.1.35 g standard, a sample of 83 coins catalogued by Pagan having a mean weight of 1.32 g (Table 8). It is not surprising that the two known coins of Æthelred and Oswald using the  $\mathfrak{A}$ /cross design should be struck to this weight, but with the adoption of the Temple design one could think that the authorities might have followed the Carolingian standard of c.1.75 g, so that their new coins could circulate on a par with imported Temple type coins. However, the English Temple types continue to follow the standard of Edmund, the seven undamaged Temple coins plus two  $\mathfrak{A}$ /cross pieces having a mean weight of 1.33 g (Table 8).

When Guthrum adopted Alfred's new Horizontal (Two-Line) design in the early to mid-880s, he might similarly have been expected to use Alfred's c.1.60 g standard that was now firmly established in Wessex and Mercia. Yet he did not. He preferred to continue with the c.1.35 g standard. The weight distribution of thirty-four undamaged Horizontal coins of Guthrum mirrors closely the Edmund distribution, with a very similar mean, 1.33 g (Table 8). The weights of individual coins seem to have been as carefully controlled under Guthrum as they were under Edmund. The same standard can be traced in later East Anglian coinages, in the St Edmund issue of c.895–918, and even in the succeeding East Anglian Portrait issue (c.918–24), which although in Edward the Elder's name looks distinctively like a Scandinavian imitative issue. Again the mean weights of these issues fall remarkably close to the earlier ones, at 1.33 g and 1.35 g. The same standard was also used for the Scandinavian coinages of the Five Boroughs and the Kingdom of York. To demonstrate the contrast with the current Anglo-Saxon standard, Table 8 includes the weight distribution of official coins of Alfred's Horizontal type in the London style, which barely overlaps with the East Anglian distributions and has a mean weight of 1.53 g. The same data is displayed graphically as histograms in Fig. 3.

We can now see that the reason why the older English standard survived throughout the Danelaw into the tenth century is because there had been continuity of minting in East Anglia

<sup>80</sup> It is difficult to determine precise standards based on the weights of a sample of coins drawn from different sources. Even having excluded coins that are obviously damaged, worn or corroded, many are likely to have suffered some degree of weight reduction through wear or corrosion. In assessing the probable theoretical standard one should have regard to the mean weight and the profile of the distribution. The pre-880 standard seems to have lain between 1.35 g and 1.40 g, while the post-880 standard was probably slightly less than 1.60 g. In order not to give a misleading impression of the accuracy of the predicted standard, I prefer to use round figures, c.1.35 g and c.1.60 g.



TABLE 8. Weight distributions of Early East Anglian issues and Guthrum's Horizontal coinage, compared with those of related coinages

	<i>Edmund of East Anglia</i>	<i>Æthelred, Oswald &amp; Temple</i>	<i>Guthrum Horizontal</i>	<i>Alfred London</i>	<i>St Edmund Cuerdale phase</i>	<i>East Anglian Portrait</i>
0.90–0.94					2	
0.95–0.99					2	3
1.00–1.04					5	4
1.05–1.09	1				7	10
1.10–1.14	2		1		22	10
1.15–1.19	5		3		41	15
1.20–1.24	8	2	5		41	43
1.25–1.29	12	2	3		70	76
1.30–1.34	17	1	5		82	136
1.35–1.39	24	1	10	1	118	172
1.40–1.44	9	2	5	1	83	113
1.45–1.49	3	1	1	7	39	44
1.50–1.54	2			12	23	13
1.55–1.59				6	2	4
1.60–1.64			1	4	1	5
1.65–1.69				2	1	5
No. of coins	83	9	34	33	539	658
Mean wt	1.32g	1.33g	1.33g	1.53g	1.33g	1.35g

*Notes:* The weights in this table are drawn from the following: Edmund of East Anglia – Pagan, 'The coinage of the East Anglian kingdom', pp. 71–80; Æthelred, Oswald & Temple coinage – Appendix 1 (Æ1–4, O1–2, GT1–3, An1–4); Guthrum Horizontal type – Appendix 2; Alfred, Horizontal type, London style – my own unpublished notes; St Edmund, Cuerdale phase – *British Museum Catalogue*; Edward the Elder, East Anglian Portrait type – *SCBI East Anglian Collections*, p. 42 (five coins outside the range not plotted). Chipped and damaged coins have been excluded.

through the 870s and 880s. The Vikings, having inherited Edmund's mint as a going concern through the offices of Æthelred and Oswald, developed a monetary system that built on Edmund's. Although only a small number of specimens have survived, it must have been sufficiently well-established by the time of Alfred's coinage reform for it not to be influenced by the new standard. We do not know why Alfred changed the weight of his penny, but it may have been part of a wider reform of weights and measures, and if so the sheer scope of this may have deterred the Scandinavian rulers in the Danelaw from adopting it. As minting spread out from East Anglia to other parts of the Danelaw in the 880s and 890s, so the East Anglian monetary system extended its influence. To the Anglian communities in these areas it would have been familiar as the system they enjoyed before the Viking conquest, but it would have made trading across the borders with Mercia and Wessex difficult.

## Conclusion

In this paper I have put forward the proposition that there was in East Anglia some continuity of minting through the 870s and early 880s under an authority that appears at first to have been nominally Anglo-Saxon, but which soon shows signs typical of Scandinavian control. In effect this means that there had been more or less continual minting in the region since at least the 720s (with an earlier phase in the mid-seventh century), and this continued down to the later twelfth century and beyond. Time and again in the Anglo-Saxon period we see how local economic forces can drive or stimulate mints to continue in operation despite major changes in political fortune. This can be seen at the mints in South-East England, when control of Kent, East Anglia and even Mercia itself oscillated between Mercian, West Saxon or local authority during the late eighth and earlier ninth century, or at York when minting switched between Viking and Anglo-Saxon control on several occasions between 927 and 954. The absolute hiatus in mint activity that previously we thought the Viking conquest had caused seems not to have occurred. That is not to say that there

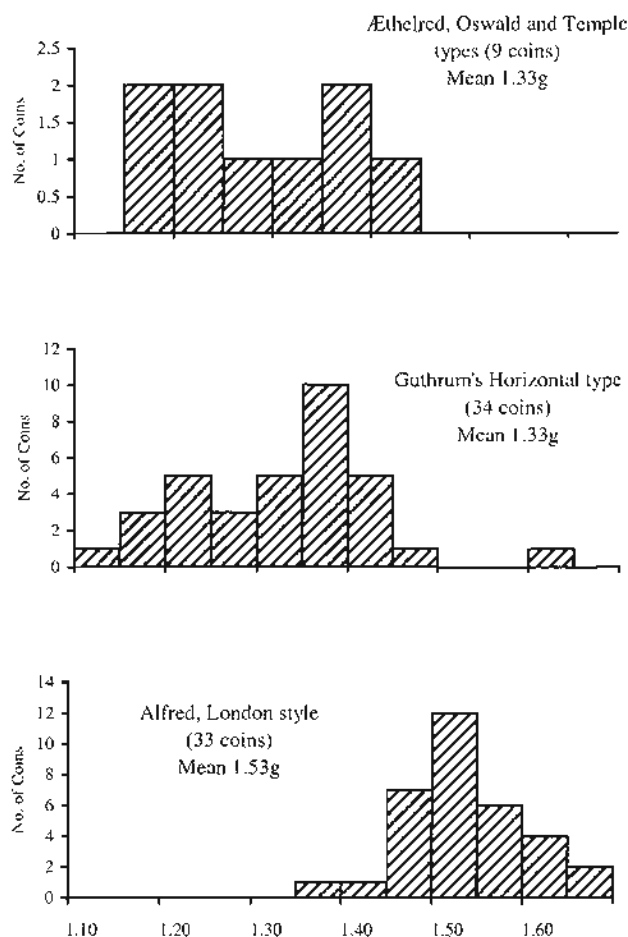


Fig. 3. Histograms of the East Anglian issues of the 870s and early 880s and of Guthrum's Horizontal type, compared with Alfred's Horizontal issue at London.

was no disruption and there was not a fundamental change in the nature of the coinage being produced. In design and to some extent in legend they became imitative, technically the quality of die-cutting declined, and most obviously the standard of literacy became abysmal. Yet this pattern is typical of Scandinavian coinages, which are often economically strong, though visually weak. The composition of the currency circulating in the Danelaw also changed. The appearance of foreign (Carolingian or West Saxon/Mercian) coins and cut bullion or ingots in gold and silver, together with the practice of peck-marking coins and metalwork, point to the existence of a dual coin/bullion economy in the late ninth and early tenth centuries.<sup>81</sup>

I have argued here that soon after Edmund's death in November 869 Æthelred, and probably Oswald, assumed control of the royal East Anglian mint, and presumably other institutions of government too. The survival of this coinage has been so poor that we cannot reconstruct its chronology or development in detail, and we cannot say whether Æthelred or Oswald are likely to have remained in office until the settlement by Guthrum and his army in 879/80. The fact that the Temple coinage, with its Scandinavian traits, commences in their names suggests that they were ruling under Viking authority, with perhaps a continuing Scandinavian presence, and were not as independent as Ceolwulf II of Mercia, who, although said to be a Viking nominee, issued charters in his own name and produced a thoroughly Anglo-Saxon coinage in alliance with Alfred.<sup>82</sup>

<sup>81</sup> Blackburn, as in n. 13, pp. 134–5; J. Graham-Campbell, 'The dual economy of the Danelaw', *BNJ* 71 (2001), 49–59.

<sup>82</sup> S. Keynes, 'King Alfred and the Mercians', *Kings, Currency and Alliances*, edited by M.A.S. Blackburn and D.N. Dumville (Woodbridge, 1998), pp. 1–45, at pp. 12–19.

On Guthrum's return to East Anglia, there was again continuity of minting. Having initially adopted the Temple type, he introduced a new coinage emulating the recent Horizontal (Two-Line) type of his former rival, now godfather and supposed ally, Alfred. It is significant that he never uses his Scandinavian name, Guthrum, on the coinage, but Æthelstan is the name he puts even on his earliest Temple coins, which must date from soon after his return to East Anglia. This must be a mark of the respect he held for the truce and baptismal ceremony with Alfred, and it may also be a sign of his aspirations to be regarded as a leader who could stand alongside the Christian kings of Europe. I have suggested elsewhere that the strong Christian symbolism on the coinage of the Viking kings of York at the turn of the ninth century was deliberate propaganda to persuade other kingdoms, as well as their own people, that the York kingdom had the credentials to be a respected member of the Western Christian states.<sup>83</sup> Similar motives may have been in Guthrum's mind some fifteen years earlier.

Guthrum's coinage was large – c.180 dies (perhaps less, possibly many more), used over some five to eight years is a lot. This would be comparable to the number used by the mint of Lincoln during the reign of Æthelred II (978–1016).<sup>84</sup> If we add the even larger number of Danelaw coins copying Alfred's name it becomes clear that the Scandinavian coinage of the 880s was very substantial. This should give us pause for thought when assessing the nature and efficiency of the newly established kingdoms in the Danelaw. Documentary evidence we lack and literary evidence written by Anglo-Saxons is either silent or biased against them, but the coinage, as one of the few sources of primary evidence coming from the Scandinavians themselves, tells of economically vibrant states, that had assimilated the previous monetary system and were developing it in their own distinctive way. The Ashdon hoard shows how effectively this may have served the local community, and by c.895 they were ready to launch new national coinages heralding a further stage in the process of state building.

## APPENDIX I

CORPUS OF ENGLISH TEMPLE TYPE COINS  
AND RELATED ISSUES

Note on Arrangement: Appendices 1 and 2 present die studies. The numbers in the first column represent different die combinations. The second column designates the dies with an upper case letter for the obverse die and a lower case letter for the reverse. The legends and descriptions of the obverse and reverse are set out in columns, and below them each specimen from that die combination is cited as (a), (b), (c), etc. Virtually all the coins are illustrated on Plates 1–3. A list of references cited in the Appendices is given at the end.

## IN THE NAME OF KING ÆTHELRED

## Æ / Cross-and-Pellets type

Æ1.	Aa	†E-ÐELRED REX († front-barred) Central Æ; inner and outer circle beaded (a) British Museum; bt Spink sale 21.11.1995, lot 57; found 'Kent coast'. Blackburn 2001, p. 127 and pl. 7, 2. 1.14 g (17.6 gr) chipped, 180°.	†SIFERED MOTÆ: († is Greek <i>gamma</i> for G) Cross and pellet in each angle; inner and outer circle beaded
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## Temple / Cross-crosslet type

Æ2.	Bb	XE-Ð-E-L-RE-D RE Temple with double pediment (a) British Museum ( <i>BMC</i> II, p. 31, no. 46); ex Cuerdale hoard (Hardy MS 817a). Hawkins 1842, pp. 5–8, no. 1 and pl. 1, 1; Haigh 1845, p. 19, no. 3 and pl. 5, 5; Dolley 1962, p. 322 and pl. 16, 1; North 1994, no. 487. 1.39 g (21.5 gr) cracked, sealed between watch glasses, 0°.	XHEA-HMOD MT Cross-crosslet with pellet in each angle; inner circle
-----	----	---	--

<sup>83</sup> Blackburn, as in n. 22, pp. 329–32.

<sup>84</sup> D.M. Metcalf, 'Continuity and change in English monetary history c.973–1086. Part 2', *BNJ* 51 (1981), 52–90, at p. 82. These die-estimates have to be used with caution, but those for the Lincoln mint are based directly on the die-analysis in H.R. Mossop, *The Lincoln Mint* (Newcastle, 1970).

*Temple / Cross and four pellets type*

- Æ3. Cc +EDEL·R·E·D· RE +BEORHAE  
 Temple with double pediment Cross with pellet in each angle; beaded inner circle  
 (a) British Museum, pre-1834 acquisition (*BMC* II, p. 31, no. 47); found at 'Seafeld Churchyard'.  
 Hawkins 1841, pp. 34, pl. 7, 89; Haigh 1845, 19, 2; Dolley 1962, p. 322 and pl. 16, 2; Dolley  
 1965, pl. 1, 1. 1.40 g (21.6 gr) 160°.
- Æ4. Dd XEDEIREIRE (first R incomplete) +AAIIIEVOVIII  
 Temple with double pediment Cross with pellet in each angle; beaded inner circle  
 (a) Assheton collection (deposited at the British Museum: Blunt MS list 72); ex Cuerdale hoard (Hardy  
 MS -). Hawkins 1842, p. 99; Haigh 1845, pp. viii and 19, and pl. 5, no. 3. 1.28 g (19.8 gr) 340°.

## IN THE NAME OF KING OSWALD

*Æ / Cross type*

- O1. Aa +OZ·F·X·L·D RE (L reversed) +EMNDAL IO (?retrograde, some letters reversed)  
 Central Æ; beaded inner circle Cross; beaded inner circle  
 (a) British Museum (*BMC* 87); ex Cuerdale hoard (Hardy MS p. 112, no. 5). Hawkins 1842,  
 p. 36, no. 61 and pl. 4, 47 (as a St Edmund variant); Haigh 1845, p. 19, no. 1 and pl. 5, 2; *BMC* I,  
 p. 94, no. 87 and pl. 16, 10; Dolley 1962, p. 322 and pl. 16, 3; North 1994, no. 480. 1.46 g  
 (22.6 gr) 0°.

*Temple / Cross and four pellets type*

- O2. Bb [ ]LA RE- +BEO[R?] IO  
 Temple with double pediment Cross with pellet in each angle; beaded inner circle  
 (a) British Museum (*BMC* 88); ex Cuerdale hoard (Hardy MS ?, probably p. 34, no. 817b (as  
 Æthelred)). Haigh 1845, p. 19, no. 2 and pl. 5, 2; *BMC* I, p. 94.88 and pl. 16, 11; Dolley 1962,  
 p. 322 and pl. 16, 4; North 1994, no. 480/1. 0.67 g (10.3 gr) fragment, 20°. This fragment is not  
 described in these terms in Hardy's list or Hawkins 1842, however both describe a temple type  
 fragment ('about half a coin') as having an obverse legend E[ ]REX, and a reverse +[ ]MONET  
 (Hardy MS p. 34, no. 817b; Hawkins 1842, p. 5, no. 2). Dolley (1962, pp. 322-3) assumed that  
 they had misread the Oswald fragment, which may well be the case, yet looking at the coin it is  
 hard to understand how they could ever have read it in such a way, and reproducing the legend on  
 the lead striking (no. GT1 below) found 160 years later. Unless another temple fragment turns up  
 in some forgotten cabinet at the British Museum, we must assume that Dolley is correct, and that  
 Haigh (1845, p. 19) silently corrected Hawkins's error published four years earlier.

## IN THE NAME OF KING GUTHRUM ('ÆTHELSTAN')

*Temple / Cross and four pellets type with moneyer's name*

- GT1. Aa E·DELSTAN REX (·D front-barred) +DVNNO MONET  
 Temple with double pediment Cross with pellet in each angle; solid inner circle  
 (a) Lead striking, 4.1 g. Location unknown; ex Glendining 25.4.2001, lot 71 (not illus.); ex  
 Glendining 3.11.2000, lot 97 (unsold); found 'by river bank' at Hoxne, Suffolk, c.1996. Reported  
 to the Fitzwilliam Museum by Brian Fisher, 2000.

*Temple / Cross and four pellets type with 'Quemovic' mint name*

- GT2. Bb EDEN·AT ΠE·+· (unserifed) +QVVENTOVVICI (serifed)  
 Temple with double pediment, Cross with pellet in each angle;  
 outer circle beaded inner and outer circle beaded  
 (a) British Museum (Dolley and Morrison 1966, 327); ex Cuerdale hoard (Hardy MS p. 112, no. 9).  
 Hawkins 1841, pp. 69-70, no. 67 and pl. 7, 95. 1.23 g (19.0 gr) 220°.
- GT3. Cc EL·S·A[ ]ORE·+ (retrograde, serifed) +QVVENTOVVICI (serifed)  
 Temple with double pediment, Cross and four pellets; inner  
 outer circle beaded and outer circle beaded  
 (a) British Museum (Dolley and Morrison 1966, 328); ex Cuerdale hoard (Hardy MS p. 112, no. 8).  
 Hawkins 1841, p. 70. 1.40 g (21.6 gr) 0°.

## ANONYMOUS OR BLUNDERED

*Temple (double pediment) / Cross and four pellets type: probably of Danelaw origin*

- |      |    |   |  |
|------|----|---|--|
| An1. | Aa | ESRIVRF- <b>END</b><br>Temple with double pediment<br>(a) British Museum (Dolley and Morrison 1966, 335); given by George V (1920); ex Cuerdale hoard (Hardy MS p. 112, no. 11). 0.96 g (14.8 gr) chipped, 210°.  | † <b>HTRLI</b> Λ <b>IIION</b><br>Cross with pellet in each angle   |
| An2. | Bb | † <b>Γ</b> <b>]</b> Λ <b>Γ</b> - <b>IIIX</b><br>Temple with double pediment, but single gable<br>(a) British Museum (Dolley and Morrison 1966, 336, wrong weight); given by George V (1920); ex Cuerdale hoard (Hardy MS p. 112, no. 12). 1.21 g (18.7 gr) 20°.                               | † <b>OI</b> <b>N</b> IIII <b>IOFE</b><br>Cross with pellet in each angle   |
| An3. | Cc | <b>V</b> EVVV <b>T</b> II <b>V</b> EV <b>X</b><br>Temple with double pediment<br>(a) British Museum (Dolley and Morrison 1966, 333); given by First Commissioner of Works (1929); found on Lindisfarne, Northumberland. Dolley 1962, pl. 16, 6. 1.27 g (19.6 gr) 90° (by rev. initial cross). | † <b>VVLI</b> HEEIE <b>POHI</b> (?for <i>Wulfhere mone</i> )<br>Cross with pellet in three angles and a crescent in the fourth |
| An4. | Cd | Same obv. die as An3<br>(a) British Museum (Dolley and Morrison 1966, 332); given by Macdonald (1851); probably ex Inch Kenneth hoard. Dolley 1962, pl. 16, 7. 1.30 g (20.1 gr) 0° (by rev. initial cross).   | † <b>IV</b> EV <b>IIII</b> Λ <b>II</b><br>Cross with pellet in three angles and a crescent in the fourth                       |

*Temple (single pediment) / Cross and four pellets type: of uncertain origin*

- |      |    |   |  |
|------|----|---|--|
| An5. | De | <b>IOELII</b> Λ <b>ND</b> †<br>(? for E-DELSTAN RX)<br>Temple with single pediment<br>(a) British Museum (Dolley and Morrison 1966, 337); without provenance. 1.17 g (18.1 gr) 180°.                | † <b>TTTE</b> IV <b>IONE</b><br>Cross potent with pellet in each angle                                 |
| An6. | Ef | <b>D</b> [ <b>]</b> NE<br>Temple with single pediment<br>(a) Assheton collection (deposited in the British Museum; Blunt MS list –); ex Cuerdale hoard (Hardy MS –). 0.58 g (9.0 gr) fragment.      | [ <b>]</b> VICI[ <b>]</b> (?for <i>QVVENTOVVICI</i> )<br>Cross, probably no pellets in angles          |
| An7. | Fg | † <b>XPMS</b> II <b>VN</b> [ <b>]</b> MON<br>Temple with single pediment<br>(a) British Museum (Dolley and Morrison 1966, 329); ex Cuerdale hoard (Hardy MS p. 112, no. 10). 1.65 g (25.5 gr) 270°. | † <b>PIIS</b> V <b>OTTA</b> II <b>ON</b> † <b>II</b> (N† ligatured)<br>Cross with pellet in each angle |
- Note:* Probably a Continental imitation.

## IMITATING LAMBERT OF ITALY (894–98)

*Temple / Cross and four pellets type: uncertain origin*

- |     |    |  |  |
|-----|----|--|--|
| L1. | Aa | † <b>IA</b> IIDERTV2 IHPE<br>(for † <b>L</b> AMBERTVS IHPE)<br>Temple with double pediment<br>(a) British Museum (1838, 7-10-1216); ex Cuerdale hoard (Hardy MS p. 110, no. 1). Hawkins 1841, p. 69, no. 64 and pl. 7, 92. 1.33 g (20.5 gr). | †† <b>PIT</b> IIA REIG <b>II</b> O<br>(for † <b>XPI</b> ITIANA RELIGIO)<br>Cross with pellet in each angle |
|-----|----|--|--|
- Note:* Probably a Continental imitation.

## APPENDIX 2

## CORPUS OF HORIZONTAL (TWO-LINE) COINS OF GUTHRUM

Abenel (CG *Abonelf*)

This moneyer is also known from one coin of 'Alfred' (*BMC* Alfred 190). This has a blundered obverse legend †**ED** ER EL RE, which Blunt interpreted as an attempt at †**ED** EL IΛ RE for Guthrum (Blunt 1972, pp. 21–2). Hawkins and Hardy regarded it (I think correctly) as a blundered †**EL** FR ED RE inscription in which D and L had become transposed and F turned into an E.

- |      |    |   |                              |
|------|----|---|------------------------------|
| GH1. | Aa | <b>XED</b> EL IΛ RE<br>(a) British Museum ( <i>BMC</i> 90); ex Cuerdale hoard (Hardy MS 869). 1.28 g (19.8 gr) 60°. | Λ <b>BE</b> / · / <b>NEI</b> |
|------|----|---|------------------------------|

- GH2. Bb +ED EL I RC  $\overline{\Lambda}$ BE/ · · /NEL  
(a) Oxford (*SCBI* Oxford 1 63); ex Bodleian collection; ex Duchy of Lancaster 1841; ex Cuerdale hoard (Hardy MS 870). 1.24 g (19.1 gr), broken and repaired, 90°.
- GH3. Cc +ED EL I  $\overline{\Lambda}$  RE  $\overline{\Lambda}$ BE/ · /MEL  
(a) Cambridge (*SCBI* Cambridge 456; *MEC* 1:1387); no provenance (?ex Cuerdale hoard; Hardy MS 871). 1.35 g (20.9 gr) 300°.
- GH4. Dd XED EL I  $\overline{\Lambda}$  RE  $\overline{\Lambda}$ BE/ · /NEL  
(a) Gotha (Coin Cabinet, Schloss Friedenstein); given by Prince Albert to his father Ernst, Duke of Saxe-Coburg and Gotha 1841; from the group of 149 coins selected for Queen Victoria; ex Cuerdale hoard (Hardy MS 872). Steguweit 1989, no. 6; Blackburn 1990, no. 3. 1.35 g (20.9 gr) 0°.

**Aelven (OE *Ælfwine*?)**

- GH5. Aa XED EL I  $\overline{\Lambda}$  RE  $\overline{\Lambda}$ EL· / · /VEN  
(a) British Museum (*BMC* 91); ex Cuerdale hoard (Hardy MS 888). 1.19 g (18.4 gr) 270°.  
(b) Cambridge; ex Ashdon hoard (Blackburn 1989, no. 2). 1.12 g (17.3 gr) 260°.

**'Bericba'**

Probably a derivative to judge from the blundered obverse and spidery style of lettering. The moneyer's name may be a blundered form of Berter.

- GH6. Aa XED I  $\overline{\Lambda}$  EL NNI BER/ · /ICBE  
(a) British Museum (*BMC* 92); ex Cuerdale hoard (Hardy MS –; but probably one of the untraced coins of Berter, see GH11 below). 1.39 g (21.5 gr) 240°.

**Berter (OE *Beorhtere* or CG *Berter*)**

Probably the same moneyer as Berhtere who struck light-weight imitations of Alfred.

- GH7. Aa [X]ED EL I  $\overline{\Lambda}$  RE BER/ · /TER  
(a) British Museum (*BMC* 93); ex Cuerdale hoard (Hardy MS 873). 1.35 g (20.8 gr) 170°.
- GH8. Bb XE[ ] EL [ ] RE [ ]ER/[ ]TER  
(a) Cambridge; ex Ashton hoard (Blackburn 1989, no. 3). 0.82 g (12.7 gr), two fragments joined, incomplete, 0°.
- GH9. Cc +ED EL I  $\overline{\Lambda}$  RE BER/ · /TER (rounded T)  
(a) British Museum (*BMC* 94); ex Cuerdale hoard (Hardy MS 874). 1.40 g (21.6 gr) 280°.
- GH10. Dd +ED EL I  $\overline{\Lambda}$  RE BER/ · /TER (rounded T)  
(a) Assheton coll. (on deposit at British Museum; Blunt MS list 73); ex Cuerdale hoard (Hardy MS –). 1.18 g (18.2 gr) 90°.  
(b) Cambridge; ex Ashdon hoard (Blackburn 1989, no. 4). 0.78 g (12.0 gr), four fragments, c.90°.
- GH11. Two more untraced coins of Berter similar to GH9 are recorded by Hardy (after no. 874, not numbered) as coming from the Cuerdale hoard. It is likely that one of these is GH6 with the reading mistaken.

**Ciolwulf (OE *Ceolwulf*)**

- GH12. Aa ED EL T  $\overline{\Lambda}$  RE CIO $\overline{\Lambda}$ · / · / · VVLF (lozenge O)  
(a) British Museum (*BMC* 95); ex Cuerdale hoard (Hardy MS 875). 1.36 g (21.0 gr) 60°.
- GH13. Bb ED EL ZN RE · CIO $\overline{\Lambda}$ · / · / · VVLF (lozenge O)  
(a) Norwich (*SCBI* East Anglia 2); ex Morley St Peter hoard. 1.42 g (21.9 gr) 270°.

**'Cusere'**

- GH14. Aa XED EL T  $\overline{\Lambda}$  RE CVS· / · · · /ERE::  
Two pellets in each quarter  
(a) Norwich (*SCBI* East Anglia 3); ex Morley St Peter hoard. 1.30 g (20.0 gr) 225°.

**'Ecwulf' (OE *Ecgwulf*)**

The reverse is an imitation of the well-attested West Saxon moneyer Ecwulf.

- GH15. Aa XED EL I  $\overline{\Lambda}$  RE ECD· / · /ULF  
(a) British Museum (*BMC* 96); ex Cuerdale hoard (Hardy MS 889). 1.24 g (19.1 gr) 270°.

## 'Edeltare' (repetition of the obverse inscription?)

The reverse inscription has usually been interpreted as a repetition of the king's name and title as in the obverse legend, though with the more original  $\mathcal{C}\mathcal{A}$  for  $\mathcal{I}\mathcal{A}$ . Such repetition of inscription is found in the subsequent St Edmund coinage. However, Dolley in his arrangement of the BM trays preferred to see it as the name of a moneyer Ethelgar, although here the  $\mathcal{C}$  (T in the same rounded form as on no. 10) and final E present problems.

- GH16. Aa XED EL  $\mathcal{I}\mathcal{A}$  RE EDEL/ ·  $\mathcal{C}\mathcal{A}$ RE (rounded T)  
 (a) British Museum (*BMC* 89); ex Cuerdale hoard (Hardy MS 877). 1.34 g (20.7 gr) 170°.  
 (b) Cambridge; ex Blunt; ex Bute 56a; ex Lewin-Sheppard (1861), lot 106a (bt Wheelan); pre-Cuerdale find. 1.18 g (18.2 gr) pierced, 260°. Haigh (1845, p. 21) notes that Mr Sheppard of Frome said this was in his brother's collection long before the discovery of the Cuerdale Find. This may be the coin with similar legends in the Christmas sale (1864), lot 42 (bt Church), though it is described as 'poor but extremely rare' and one might have expected the piercing to have been expressly mentioned.

Note. Lewin-Sheppard lot 81 (bt Bateman), attributed to Guthrum with 'Edelstan rex both sides' is Bateman 268, where it is correctly identified as a coin of Æthelstan I of East Anglia. I am grateful to Mr Blunt for this information.

## 'Eivdūligl'/'Lgiltidaie'

This coin combines the most literate obverse inscription known with a quite blundered reverse that defies interpretation.

- GH17. Aa XEDELSTAN REX EIVDI/ [ ] ILJGL (letters reversed or inverted)  
 (a) British Museum; ex Ashdon hoard (Blackburn 1989, no. 6). 1.28 g (19.8 gr) incomplete, in five fragments, mended, 0°.

Elda (OE *Elda*)

Also struck in the name of Alfred. Hardy records seven 'Alfred' coins of this moneyer in the Cuerdale hoard and there was one in the Ashdon hoard.

- GH18. Aa XED EL TAN RE ELDAN/ · /MEFEC  
 (a) British Museum (*BMC* 99); ex Cuerdale hoard (Hardy MS 881). 1.30 g (20.1 gr) 170°.  
 (b) Assheton collection (deposited in the British Museum; Blunt MS list 74); ex Cuerdale hoard (Hardy MS -). 1.29 g (19.9 gr) 170°.
- GH19. Ab Same obv. die as GH18 [ ] /MEEE[ ]  
 (a) Cambridge; ex Ashdon hoard (Blackburn 1989, no. 5). 0.49 g (7.6 gr) fragment, 300°.
- GH20. Bc ED EL TAN RE ELDA/ · /MEFEC  
 (a) Cambridge; ex Blunt; ex Ryan 663; ex Drabble 363; ex Cuerdale hoard (Hardy MS 882). Blunt 1952. 1.41 g (21.8 gr) 0°.  
 Note. Struck from the same reverse die as a coin in Alfred's name (Cambridge; ex Blunt; ex Lawrence 230; wt 1.27 g chipped, 270°. Pl. 3, 'Alfred' 1).
- GH21. Cd +ED EL  $\mathcal{I}\mathcal{A}$  RE ELDAN/ · /MEFE  
 (a) British Museum (*BMC* 97); ex Cuerdale hoard (Hardy MS 878). 1.35 g (20.8 gr) 160°. The reverse shows signs of over-striking on a Guthrum obverse; the coin probably turned in the dies during striking.
- GH22. De XED EL  $\mathcal{I}\mathcal{A}$  RE · /ELDA/ · /MEFE/ ·  
 (a) British Museum (*BMC* 98); ex Cuerdale hoard (Hardy MS 879). 1.25 g (19.3 gr) 20°.
- GH23. Ef XED EL  $\mathcal{I}\mathcal{A}$  RE ELDAN/ · /NEFEC/ (inverted L, N reversed)  
 (a) British Museum (*BMC* 100); ex Cuerdale hoard (Hardy MS 880). Dolley 1965, pl. 1, 2. 1.23 g (19.0 gr) 210°.  
 (b) Copenhagen (*SCBI* Copenhagen i 105); ex Brunn 257; ex Montagu 364; ex Shepherd 80; ex Murchison 228; ex Cuerdale hoard (Hardy MS 432, as 'Alfred'). 1.38 g (21.3 gr) c.315°.

## 'Enodas'

- GH24. Aa [ ] JED EL  $\mathcal{I}\mathcal{A}$  RE · /ENO/ · · · /DAS/ ·  
 (a) British Museum (*BMC* 100); ex Cuerdale hoard (Hardy MS 880). 1.23 g (19.0 gr) 210°.

Guntere (CG *Gundere*)

- GH25. Aa XED EL SAN RE CVNT/ · /ERE  
 (a) British Museum (*BMC* 102); ex Cuerdale hoard (Hardy MS 876). 1.40 g (21.6 gr) 150°.

**Guthhere (ON *Guthhere*)**

This moneyer is also known from a light-weight 'Alfred' imitation (*BMC* 328, ex Cuerdale hoard).

- GH26. Aa ED EL ZH RE · GVD / · / · HEIE (last line retrograde)  
(a) British Museum (*BMC* Alfred 329); ex Cuerdale hoard (Hardy MS 626, as 'Alfred'). 1.64 g (25.3 gr).

**'Ilelie' (?Tilewine)**

Most likely a blundered copy of the prolific London moneyer Tilewine, whose coins often have similar ornamentation on the reverse.

- GH27. Aa XED EI IA RE IIE: / · / IIE:  
(a) British Museum (*BMC* Alfred 347); ex Cuerdale hoard (Hardy MS –). 1.47 g (22.7 gr) 200°.  
*Note.* Struck from the same reverse die as a coin in the British Museum with a blundered 'Alfred' inscription (*BMC* Alfred 346; ex Cuerdale hoard; wt 1.33 g. Pl. 3, 'Alfred' 2).

**Iudelberd (CG *Iudelberd*)**

Hardy lists one coin of Iudelberd in the name of 'Alfred' from the Cuerdale hoard (*BMC* 348).

- GH28. Aa XED EL IA R IVDEL / · / BERD  
(a) Norwich (*SCBI* East Anglia 4); ex Morley St Peter hoard. 1.21 g (18.7 gr) 330°.
- GH29. Bb [ JED EL IΛ NV IVDEL / · / BFRD  
(a) British Museum (*BMC* 103); ex Cuerdale hoard (Hardy MS 884). 1.36 g (21.0 gr) 310°.
- GH30. Cc XED EL IA NV IVDEL / · / BERD  
(a) British Museum (*BMC* 104); ex Cuerdale hoard (Hardy MS 886). 1.33 g (20.5 gr) 270°.
- GH31. Dd XED EL IΛ RE IVDEL / · / BERD  
(a) Liverpool (*SCBI* Merseyside Museums 146); ex Nelson (1953); ex Ryan 664; ex Grantley 920; ?ex Cuerdale hoard (Hardy MS 885). 1.34 g (20.7 gr) c.225°.

**'Iudoel'? (=Iudelberd?)**

Although the two reverse dies have similar inscriptions, it is not entirely clear how they are to be read. 'Iudoel' is one possibility, and the identification of this with Iudelberd is strengthened by the similarity of the unusual obverse legend of GH33 with that of GH30. Hawkins (1842, p. 100) preferred to see it as a corruption of Elda.

- GH32. Aa XED EL IA RE IVQ / · · · / ƿO (D, L, and E reversed or inverted; lozenge O)  
(a) Assheton collection (deposited at the British Museum; Blunt MS list 75); ex Cuerdale hoard (Hardy MS –; Hawkins, *NC* 1st ser. 5 (1842–3), pp. 99–100). 1.41 g (21.8 gr) 0°.
- GH33. Bb XED EL IA NV IVQ / · · · / ƿO (D, L, and E reversed or inverted)  
(a) British Museum (*BMC* 105); ex Cuerdale hoard (Hardy MS 887). 1.37 g (21.1 gr) 210°.

**Uncertain moneyer**

- GH34. Aa +ED[ ]E [ ]/[ ]JED  
(a) British Museum (E4306); ex Armitage (1956); ex Cuerdale hoard (Hardy MS –). 0.59 g (9.10 gr) fragment, 180°. All that survives of the letter before the ED on the reverse is a lower wedge suggesting an R for ... RED, which would provide a new moneyer for the coinage. It is just possible, however, that it is a coin of Berter (with a round T) on which the limb of the final R is missing.
- GH35. Inscriptions not recorded.  
(a) ?; Carlyon-Britton 1628b ('Æthelstan II, fragment'). Weight not recorded. Cannot be the specimen above (GH34), which is part of a larger group of Cuerdale fragments.

**With the name of 'Alfred' and possibly Guthrum**

Christopher Blunt drew attention to this unusual coin,<sup>85</sup> which on grounds of style and weight appears to belong to the Viking Danelaw series. The obverse legend carries Alfred's usual name and title, while the reverse seems to essay that of Guthrum (*E elstan rex*, or similar, though with the contraction mark preceding rather than following the S) and the word *Gelda*.

<sup>85</sup> C.E. Blunt, 'Two curious coins of Alfred', *Coinage in Ninth-Century Northumbria*, edited by D.M. Metcalf (BAR British Series 180; Oxford, 1987), pp. 355–9, at pp. 355–7.



Blunt's suggestion that this refers to a payment made by Guthrum seems improbable – why should he mint special coins for this and if he did why not with his own name on the obverse? It is more likely that Gelda is a moneyer's name, as Whitelock suggested,<sup>86</sup> and that the inclusion of Guthrum's name on the reverse was one die-cutter's solution to the problem of whether to refer to Guthrum or Alfred on the coinage. This coin would have benefited from the cachet of Alfred's name, while acknowledging Guthrum's authority.

It should be remembered, however, that this was essentially an imitative coinage in which the degree of literacy was variable, so that we should be cautious about interpretations that rely on the accuracy of every letter found on a single die. If, for example, the final letter in the top line were an l rather than an R the legend would no doubt be read as the name of a moneyer Ethelsige followed by three irrelevant letters (cf. a coin of the moneyer Bald/Baldo in the Ashton hoard reading BALD OALIE; Blackburn 1989, p. 28, no. 8).

GH36. Aa +EL FR ED RE EDEL SR / GELDA  
(a) British Museum (BMC Alfred 309); ex Cuerdale hoard (Hardy MS 420). 1.39 g (21.4 gr) 0°.

### APPENDIX 3

#### SINGLE-FINDS OF VIKING COINS OF THE IMITATIVE PHASE

1. Imitation of Alfred's *London Monogram* type, 1.14 g, chipped. Doncaster, S. Yorks, 1987. Archibald 1988.
2. Imitation of Alfred's *London Monogram* type, halfpenny, 0.6 g. Woolverstone, Suffolk, *Coin Register* 1991, no. 128.
3. Imitation of Alfred's *London Monogram* type, halfpenny, 0.64 g. Thetford, Norfolk. Bonser notes (EMC 2001.0650).
4. Imitation of Alfred's *London Monogram* type, Dunstable Downs, Beds., 1932. SCBI *South-Eastern Museums* 759 (not illus.).
5. Imitation of Alfred's *London Monogram* type, 1.42 g. Ely, Cambs, 2005. *Coin Register* 2005, no. 159. (EMC 2004.0089).
6. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer 'Ælfwald', 1.22 g. Pickenham, Norfolk, 1998. *Coin Register* 1998, no. 115.
7. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer 'Ældei', 0.88 g. Sutton, Suffolk, 1999. EMC 1999.0060.
8. Imitation? of Alfred's *Horizontal (Two-Line)* type, moneyer 'Birivaldi'. Romney Marsh, Kent. EMC 2001.0964 (Bonser notes), not illus.
9. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer 'Earaoldi', 1.23 g. Chippenham, Cambs., c.1999. EMC 1999.0123.
10. Imitation of Alfred's *Horizontal (Two-Line)* type, uncertain moneyer ('Feiefred'), 1.4 g. Near York, by 2003. *Coin Register* 2003, no. 155.
11. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer 'Ida', 1.30g. Near Lincoln, pre-1842. BMC Alfred 345.
12. Imitation of Alfred's *Horizontal (Two-Line)* type, halfpenny, uncertain moneyer ('Iiivrdai'), 0.5 g. North Waltham, Hants., by 1999. EMC 1999.0149.
13. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer 'Ludig', 1.26 g. Near York, 1998. *Coin Register* 1999, no. 89.
14. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer 'Ludig', 1.15 g. Stamford Castle, Lincs., 1976. SCBI *Lincolnshire Museums* 1625a.
15. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer 'Ludig', 0.93 g. Lincoln (Flaxengate), 1976. SCBI *Lincolnshire Museums* 1947.
16. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer Simun, 1.34 g. Cambridge, pre-1915. MEC 1.1367.
17. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer Simun, 1.25 g. Wansford, Peterborough, Cambs. *Coin Register* 2003, no. 156.
18. Imitation of Alfred's *Horizontal (Two-Line)* type, moneyer Simun, wt not recorded. Grimston, Norfolk, 1995. *Coin Register* 1995, no. 144.
19. Imitation of Alfred's *Horizontal (Two-Line)* type, uncertain moneyer (...d..vn), chipped and traces of piercing, 0.51 g. Near York, 2003. *Coin Register* 2005, no. 162.
20. Imitation of Alfred's *Canterbury (DORO)* type, moneyer 'Elfstan', 1.34 g. Chatteris, Cambs., 2001. *Coin Register* 2003, no. 157.
21. Imitation of Alfred's *Canterbury (DORO)* type, halfpenny, moneyer 'Byrnvald', 0.70 g. Fornsett St Peter, Norfolk, 1987. *NCirc* 1987, no. 7076.
22. Imitation of Alfred's *Oxford (Ohsnaforda)* type, 1.32 g. York (River Ouse), c.1740. SCBI *Oxford* 284.

<sup>86</sup> Her view cited in Blunt, as in n. 85, p. 355.

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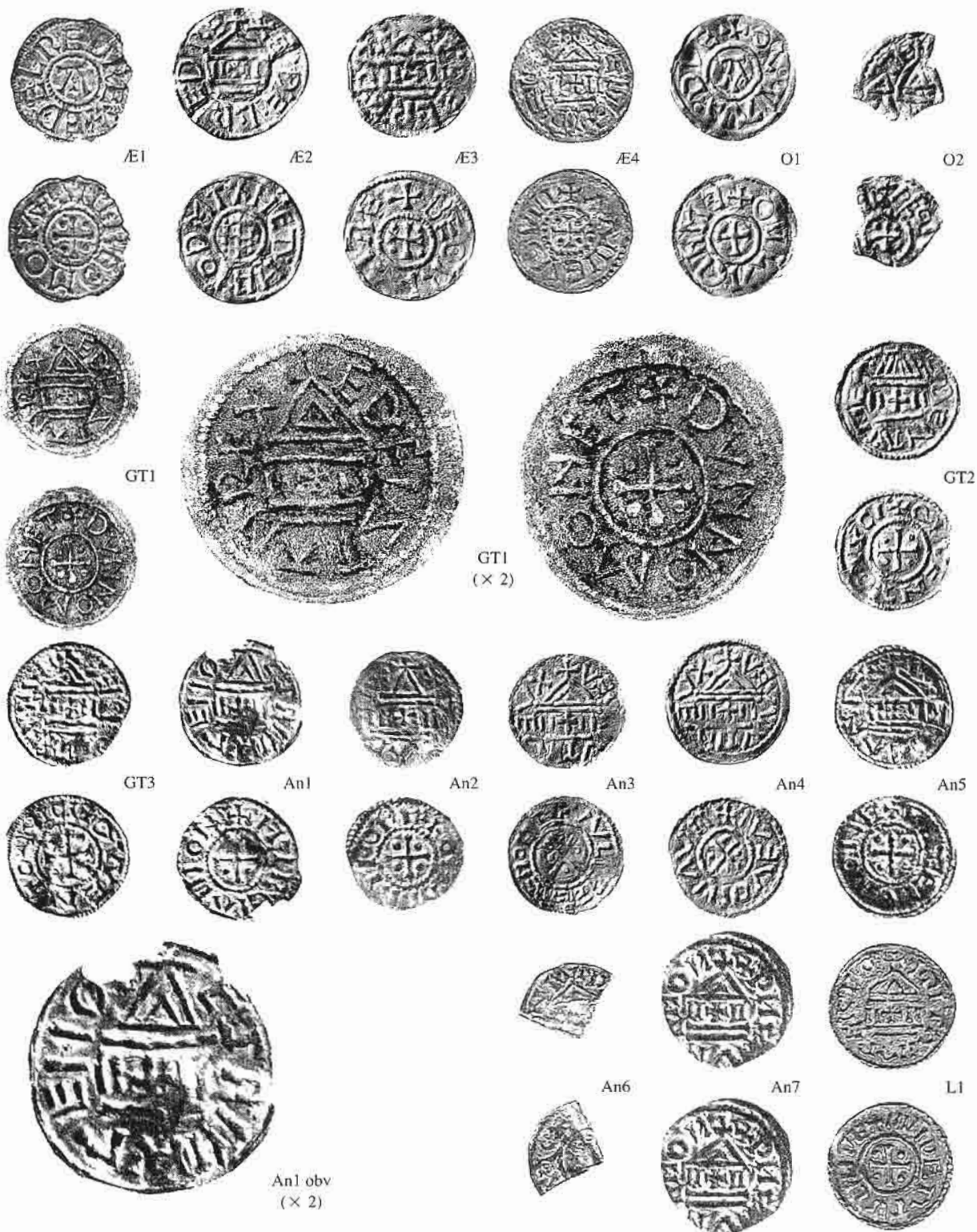


PLATE 2

