

Dorestad and the North

Frankish Connections to Scandinavia

ABSTRACT

It is well known that Dorestad, the most important port in northern Europe under Charlemagne, disappeared in the later 9th century. New insights from numismatics, thanks especially to single finds from detectorists, now reveal how changing patterns of trade with Scandinavia not only played a key part in the emporium's growth but also very likely led to its terminal decline. Coin finds at Wijk bij Duurstede and finds of Dorestad's coinage show a balance of payments surplus at the emporium under Charlemagne and continuing prosperity under Louis the Pious. The division of the empire in 840 resulted in a breakdown in economic relations with the rest of Francia, however, even if this was mitigated over the following decade by continuing trade between Scandinavians and Frisians. This, too, came to an end in the mid-9th century, when the arrival of Arabic dirham imports in Denmark caused both Frisian and Danish traders to abandon the port in favour of a more lucrative source of silver in the North.

KEYWORDS

Frisia / Carolingian economy / numismatics / Charlemagne / Vikings

As the northern gateway to the Frankish empire Dorestad was the most important emporium in northwestern Europe. Its links with Scandinavia have long been known, both from contemporary texts and archaeological finds. Among written sources, the 9th century *Life of Anskar* described travellers making the journey from Dorestad to Denmark and Sweden and Scandinavians travelling in the opposite direction (Vita Anskarii c. 7. 20. 24. 27: Waitz 1884, 29. 45. 52–53. 58), while other texts report that for much of the 9th century the port was under the control of Scandinavian warlords who recognised the authority of a Carolingian overlord (Coupland 1998)¹. As for archaeology, already in 1929 Holwerda drew attention to parallels between

finds from Wijk bij Duurstede and Birka in Sweden (Holwerda 1929), and several objects of Scandinavian type are known from the site (Willemssen 2009, 161–169, but see IJssennagger-van der Pluijm 2021). Now new insights from numismatics not only shed light on Dorestad's rise and fall, but also suggest the crucial role which trade with the North played in its shifting fortunes. These are a result of the remarkable growth in the number of coin finds in recent years, thanks partly to local excavations and partly to metal detection (Coupland 2022a). Other factors certainly played their part as well, notably the unification of the empire under Charlemagne (768–814) and its division after the death of Louis the Pious (814–840), but it appears that changing levels of

¹ See also my contribution »Carolingian Frisia and the Vikings. Confrontation and Cohabitation« in this volume.

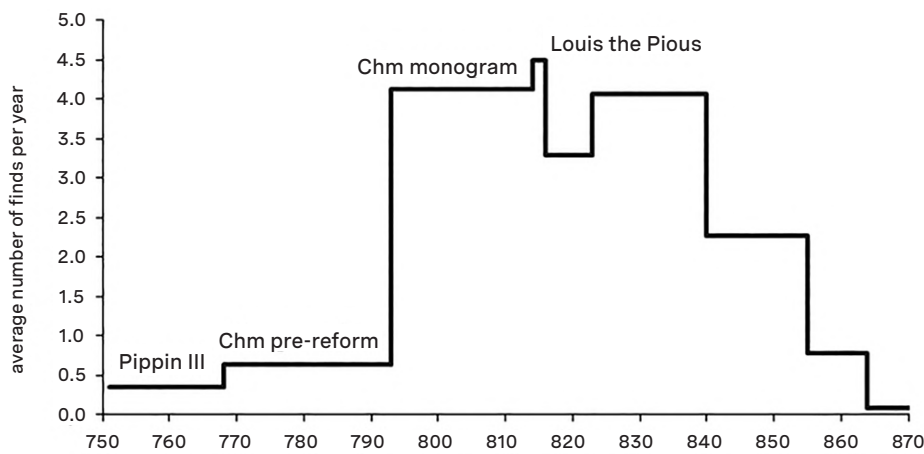


Fig. 1 Modern single finds from Wijk bij Duurstede per year 751–870. – (Illustration S. Coupland).

trade with Scandinavia were equally decisive in determining Dorestad's fate. This chapter will set out the evidence that it was neither Viking raids nor the silting of the river Rhine which brought about the

port's demise, but a collapse of long-distance trade within the former Carolingian empire and a consequent shift in trade by Scandinavians and Frisians from Dorestad to the north.

The Nature of the Evidence

At Wijk bij Duurstede just one Carolingian coin hoard was known in the 1960s (Morrison/Grunthal 1967, 345–346), three by 1980 (van Gelder 1980: two hoards), but now six, as well as a seventh hoard consisting of three Northumbrian pennies (Coupland 2011a, nos 2. 26. 49–50; 2020, 259 and no. S27; van Gelder 2009, 257)². The comparable figures for single finds from Wijk bij Duurstede, are 194 Carolingian coins recorded in 1965, 287 in 2002 and 466 in 2023 (Coupland 2002, 228–230; 2022b, 116)³. As for single finds bearing the mint-name of Dorestad but found elsewhere in the empire, 49 were known in the 1960s (Völckers 1965), 120 in 2002 and 225 in 2023⁴.

It is these single finds which provide the most useful evidence to chart Dorestad's changing economy and the circulation of the coins flowing into and out of the port. They are more indicative than

coin hoards, since the deposition and particularly non-recovery of hoards are more likely to have been influenced by catastrophes such as war and unrest. This is particularly apparent in Frisia, where the pattern of hoarding clearly reflects the turmoil caused by Viking raids in the 840s and 850s and is very different from the pattern of single finds, which represent casual losses over time (Coupland 2022b, 118–121). The large number of single finds also makes it possible to discern chronological and regional differences which would have been undetectable even two decades ago. The chapter will thus examine finds from Wijk bij Duurstede and finds elsewhere of Dorestad issues between 751, when the Carolingians first minted coins, and the late 9th century, by which time the port had effectively ceased to exist.

The First Phase: 751–793

Figure 1 plots just the modern single finds from Wijk bij Duurstede, because 19th-century records ignored many common types, distorting the overall number of finds (Coupland 1988, 8–12). It also plots not the absolute number of finds, but the number of finds

per year, because some types were withdrawn from circulation only a few years after their introduction while others remained in use for several decades (Coupland 2010b, 288–289. 300–302). The chart suggests a limited use of coinage at the site for most of

² The sixth hoard, of four fused coins of Pippin III, was excavated in 1973 and published in 2009 but overlooked until now.

³ The figure of 472 finds in Coupland 2022b has been reduced because six coins recorded as Wijk bij Duurstede single finds were in fact from hoards: two from Amerongen and four as the previous note.

⁴ Figures for 2002 and 2023 are my own, including many unpublished finds.

the 8th century, under Pippin III (751–768) and in the first half of Charlemagne's reign. However, the figures are only low in comparison to later finds from the site. More single finds of Pippin's Dorestad coinage are known than from any of his other mints⁵, and there are also three local hoards containing Dorestad coins of Pippin (Wijk bij Duurstede II 1972, V 2015 and VI 1973: Coupland 2011a, no. 2; 2020, no. S 27; note 2 above). Dorestad was thus an important and productive mint under Pippin; it is just that it would become even more important and productive in subsequent years.

Turning to the distribution of the finds of Pippin's Dorestad coins, there is a concentration along the old Rhine and the Lek towards England, matched by a group of finds in England itself. This suggests a commercial link between the two regions, continuing the connection between Anglo-Saxon England and this part of the Continent which existed in the age of the sceattas. Just one definite and one uncertain find are known from Scandinavia. From the first half

of Charlemagne's reign, before the coinage reform of 793, there is by contrast only one single find in England⁶. However, it was at this time that Offa of Mercia (757–796) reformed his coinage and removed non-local coinage from circulation, meaning that although there is less evidence of the importation of Frankish coinage, this does not necessarily mean that the influx of coins had ceased. Absence of evidence is not evidence of absence, for recent analysis of coins of Offa reveal that they contained Carolingian silver, showing that this continued to flow across the Channel in the late 8th century⁷. A new development is the presence of three finds in Scandinavia and two in Oostergo in Friesland. Contemporary Scandinavian imitations are also known, sometimes difficult to distinguish from genuine issues, which are believed to have been minted within Carolingian territory, towards the Danish border (Malmer 2007, 15–16). Some have turned up in Wijk bij Duurstede itself (Wijk bij Duurstede III 1972: Coupland 2011a, no. 26). All this indicates a growing connection with Scandinavia.

The Second Phase: 793–840

A dramatic change is then visible on **figure 1**, with an astonishingly steep rise in the number of finds following the introduction of Charlemagne's monogram type in 793. This was not the case across the rest of the empire – when 3,000 finds from all regions are plotted there is a consistent and gradual increase in the amount of coin in circulation up to the reign of Louis the Pious, but no dramatic surge in the 790s as at Dorestad (Coupland 2022a, 394 fig. 4). This means that the increase in coin use at the port must reflect local circumstances, implying a significant upturn in economic activity at this time. This impression is strengthened by analysis of where the coins in question originated (**fig. 2**). Monogram coins from across

the Frankish kingdom ended up at Dorestad in sizeable numbers: from Germany, Italy, southern France, Aquitaine and a remarkable 43 from Melle⁸. The average distance travelled by these coins is 656 km, though this is a considerable underestimate. These coins would have passed down many roads and rivers, probably through numerous hands, and possibly been used in several different forms of transaction (trade, tolls, gifts, etc.: Coupland 2022a, 402–406).

Equally significant is where the monogram coins minted at Dorestad have turned up, with more finds in Scandinavia and along the Dutch rivers leading northwards⁹. This implies a marked increase in trade, and it is noticeable that there is a large rise in the over-

⁵ Aosta (Valle d'Aosta/IT); Aube (FR); Sankt Goar (Rheinland-Pfalz/DE); Cothen (Utrecht/NL); Domburg (Zeeland/NL: 20); Friesland (NL); Groß Strömkendorf (Mecklenburg-Vorpommern/DE); Ingen (Gelderland/NL); Katwijk (Zuid-Holland/NL); Leiden (Zuid-Holland/NL); Leiderdorp (Zuid-Holland/NL); Meldreth (Cambs/GB); Princes Risborough (Bucks/GB); N. of Ribe (Jutland/DK); Richborough (Kent/GB); Rotterdam (Zuid-Holland/NL); Rozenburg (Zuid-Holland/NL); Schouwen (Zeeland/NL); Sedgeford (Norfolk/GB); Tiel (Gelderland/NL); Vejrmöllebanken? (Jutland/DK); West Hythe (Kent/GB); Wijk bij Duurstede (Utrecht/NL: 6); Zoelen (Gelderland/NL).

⁶ Aube (FR); Bad Deutsch-Altenburg (Carnuntum – Lower Austria/AT); Burgum (Friesland/NL); Domburg (Zeeland/NL: 16); Groß Strömkendorf (Mecklenburg-Vorpommern/DE: 2); Leeuwarden (Friesland/NL); Lejre (Sjælland/DK); Lerholmgård (Sjælland/DK); Mainz (Rheinland-Pfalz/DE); Porta Westfalica (Nordrhein-Westfalen/DE); Ravlunda (Skåne/SE); St Albans (Herts/GB); Schouwen (Zeeland/NL: 3); Villiers-sur-Seine (Seine-et-Marne/FR); Wijk bij Duurstede (Utrecht/NL: 4); Worms (Rheinland-Pfalz/DE).

⁷ Rory Naismith, »Sources of silver in Northern Europe during the Long Eighth Century (c. 660–820)«, paper given at the conference »Silver in

Early Medieval Europe: Sources and Movement« at the Fryske Akademy in Leeuwarden, 29–31 March 2023.

⁸ This is an estimate given that an identical type was minted by Charlemagne and Charles the Bald: for the methodology see Coupland 2015.

⁹ Alphen aan de Rijn (Zuid-Holland/NL); Amay (Liège/BE); Amiens (Somme/FR); Bad Lippspringe (Nordrhein-Westfalen/DE); Brovst (Nord Jylland/DK); Buurmalsen (Gelderland/NL); Domburg (Zeeland/NL); Franeker (Friesland/NL); Franekeradeel (Friesland/NL); Houten (Utrecht/NL); Isère (FR); Nord-Isère (FR); Kregme (Sjælland/DK); Leiderdorp (Zuid-Holland/NL); Maastricht (Limburg/NL); Mainz (Rheinland-Pfalz/DE: 2); Pas-de-Calais (FR); Ravlunda Maletofta (Skåne/SE); Rhenen (Utrecht/NL); Rønge Hule (Jylland/DK); Schouwen (Zeeland/NL: 2); W. of Svendborg (Sydfyn/DK); Théroutanne (Pas-de-Calais/FR); Tissø (Sjælland/DK); Venlo (Limburg/NL); Verden (Niedersachsen/DE); Viborg (Nord Jylland/DK); Wieringen (Noord-Holland/NL: 2); Wijk bij Duurstede (Utrecht/NL: 11 deniers and 2 oboles); Wijnaldum (Friesland/NL); Winsum (Groningen/NL); Yonne/Loiret (FR).

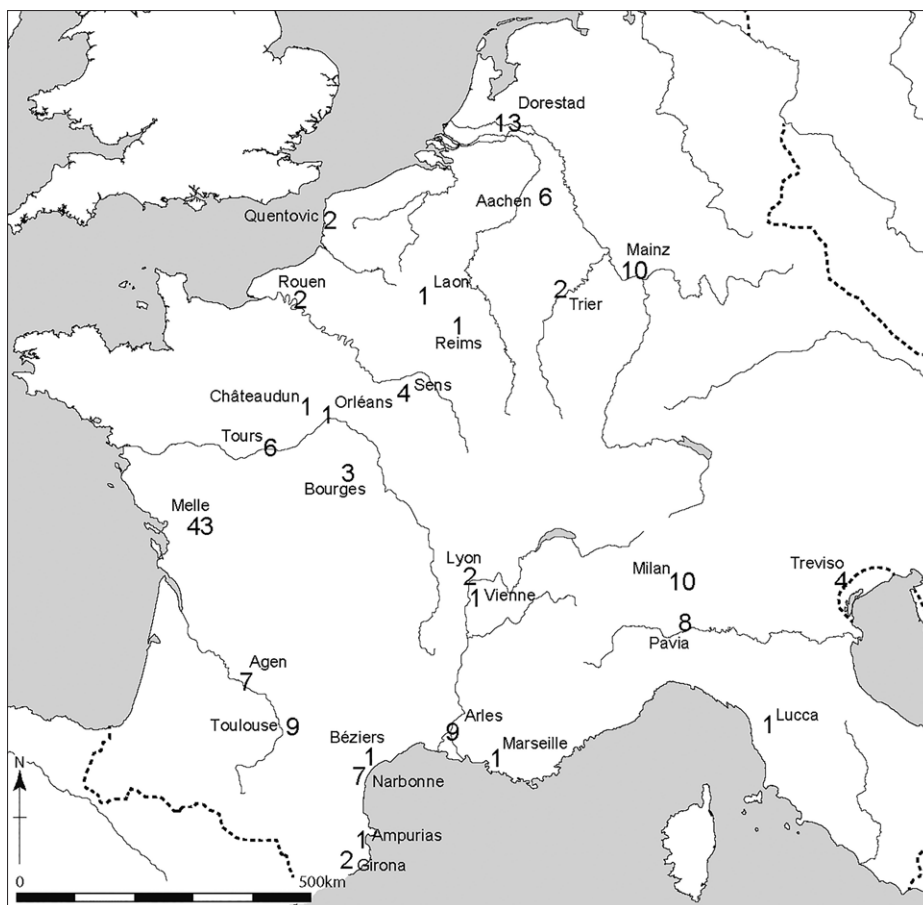


Fig. 2 Single finds of Charlemagne's monogram coinage from Wijk bij Duurstede by mint. – (Map S. Coupland).

all number of finds of Charlemagne's coins in Denmark: 33 monogram coins compared with 4 pre-reform deniers¹⁰. If the finds at Wijk bij Duurstede are compared with those elsewhere of Dorestad issues, it is evident that the latter travelled less widely and in smaller numbers. This suggests that the site was experiencing a trade surplus. Huge numbers of coins were flowing into the emporium from all over the empire, but silver was not leaving the port in anything like the same quantity. The likely explanation is that goods were flowing out which had been purchased with that silver. Some of these goods would have come from within the empire, but in the light of the Scandinavian connection, other exports were doubtless brought to Dorestad from the north.

The situation seems to have continued unchanged through the reign of Louis the Pious. The strength of the local economy is again apparent from **figure 1** (the slight rise and dip for the portrait type, minted from 814 to 816, and Class 2, 816–823, is not significant, because the types were minted for such short periods that a handful of coins makes a large difference on the chart). The mints represented are again scattered far and wide (Coupland 2010a, 100 fig. 81). Dorestad's prosperity and productivity under Louis is also evident from the distribution of its portrait deniers¹¹, particularly given that these were minted for just two years, and Class 2 coins¹². These have again turned up in Scandinavia – naturally in smaller numbers due to the shorter duration of minting –

¹⁰ The great majority of these are unpublished, reported on the private Facebook group »Carolingian Coin Finders Club«.

¹¹ Alstad (Skåne/SE); Augustinusga (Friesland/NL); Bergen (Noord-Holland/NL); Beuningen (Gelderland/NL); Buurmalsen (Gelderland/NL); Cuxhaven (Niedersachsen/DE); Domburg (Zeeland/NL); Elst (Gelderland/NL); Est (Gelderland/NL); Havsmarken (Ærø/DK: 2); Hedeby (Schleswig-Holstein/DE); 's-Hertogenbosch (Noord-Brabant/NL); Kerk-Avezaath (Gelderland/NL); Le Péage de Roussillon (Isère/FR); Mechelen (Antwerp/BE); Millingen aan de Rijn (Gelderland/NL); Neerijnen (Gelderland/NL); Overbetuwe (Gelderland/NL); Schouwen (Zeeland/NL); Tiel (Gelderland/NL: 4); Tzummarum (Friesland/NL: 2); Visbek (Niedersachsen/DE); Wijk bij Duurstede (Utrecht/NL: 10).

¹² Arnhem/Huissen (Gelderland/NL); Baincthun (Pas-de-Calais/FR); Beetgum (Friesland/NL); Bergagård (Halland/SE); Bonn (Nordrhein-Westfalen/DE); Boornbergum (Friesland/NL); Castricum (Noord-Holland/NL); Domburg (Zeeland/NL); Estinnes/Leptines (Hainaut/BE); Franekeradeel (Friesland/NL); Harlingen (Friesland/NL); Havsmarken (Ærø/DK); Horion (Liège/BE); Houten (Utrecht/NL); Kollum (Friesland/NL); Leiderdorp (Zuid-Holland/NL); Lorsch (Hessen/DE); Mainz (Rheinland-Pfalz/DE); Menaldumadeel (Friesland/NL); Neder-Betuwe (Gelderland/NL); Nijmegen (Gelderland/NL); Noord-Isère (FR); Oedenburg (Haut-Rhin/FR); Royston (Herts/GB); Schalsum (Friesland/NL); Schouwen (Zeeland/NL); Titz (Nordrhein-Westfalen/DE); Voorschoten (Zuid-Holland/NL); Wijk bij Duurstede (Utrecht/NL: 13); Wijnaldum (Friesland/NL); Worms (Rheinland-Pfalz/DE); Zouafques (Pas-de-Calais/FR).

and in Friesland on the route north. It is therefore clear that between 814 and 823 coinage from all over western Europe continued to flow into Dorestad and out to Scandinavia as well as back across the Carolingian empire.

From 822 or 823 the picture becomes less clear, because at that point Louis introduced the *Christiana religio* type, produced to exactly the same design in every mint across the empire. It is nonetheless possible to identify coins struck at Dorestad on stylistic grounds (Coupland et al. 2021, 122–123). A unique coin in a hoard from Tzummarum confirms the identification by having a reverse inscription which combines DORESTATVS MON and XPISTIANA RELIGIO (fig. 3). Unfortunately, the type is so common that individual finds are rarely illustrated, so it is not possible to establish how many coins found at Wijk bij Duurstede were minted locally or where Dorestad coins ended up. What can be established is that the number of finds at the site is comparable to the number of Charlemagne's monogram coins (fig. 1), and that large numbers of Dorestad coins have turned up in contemporary hoards (Coupland et al. 2021, 122–123).

It is also apparent that numerous *Christiana religio* coins minted in Dorestad ended up in Denmark. Some years ago, the lack of such coins in Scandinavian hoards suggested that the latter all represent-



Fig. 3 *Christiana religio* denier of Louis the Pious with hybrid reverse, Tzummarum 2 hoard. – (Photo P. Buis).

ed loot taken in raiding, since they were dominated by southern issues (Coupland 2011b, 113–115). In the interval, however, many more single finds have been discovered in Scandinavia, especially Denmark, including a significant number of *Christiana religio* coins which can be attributed to Dorestad. Above all the concentration of Carolingian coins found at Havsmarken on Ærø have convinced me and others that these were used in trade with Franks (Moesgaard/Uldum 2010; Coupland 2022a, 406). Eight of the *Christiana religio* deniers discovered there can be ascribed to Dorestad, evidence that silver was still reaching Scandinavia from the port at this time.

The Collapse: 840–855

With Louis' death in 840 and the ensuing conflict between his heirs which led to the division of the empire everything changed, not just at Dorestad but throughout all Frankish territories. One sign of this was a breakdown in the circulation of coinage not only between the different kingdoms but also within them. It would have been impossible for most people to distinguish between the coins minted by the four rulers, not only because each minted a variety of designs but also because several of those designs were identical to anyone unable to read (fig. 4). It cannot therefore have been the case that kingdoms excluded coins from their neighbours, but rather that coins no longer travelled as far as they had previously done. In a second development, coin production was significantly reduced in certain regions. In the eastern kingdom, the level of minting and the use of coin both dropped markedly under Louis the German (840–876: Coupland 2021). In Italy, the mint at Venice, which had been prolific under Louis the Pious, massively cut production, and the coin flow from Italy into Frisia, relatively abundant

between 816 and 840, slowed to a trickle (Coupland 2023, 117). At Wijk bij Duurstede, the disappearance of German and Italian coins was accompanied by a drop in the number of finds of West Frankish coins (fig. 5). This even applied to the coins of silver-rich Melle, the most prolific mint under Charlemagne and Louis the Pious. Although the number of single finds can only be estimated due to the minting of identical types by Charlemagne and Charles the Bald (840–877), hoard evidence shows that after 840 coins of Melle circulated in a limited area of southwestern France (Coupland 2015, 78–81). This must have led to a drop in the availability of silver across the rest of the Continent, including Frisia. Certainly, the 840s and 850s witnessed the debasement of Carolingian coinage in most if not all mints, perhaps due to political upheaval and perhaps also to a shortage of silver (Sarah 2008, vol. 1, 332–348). At Dorestad under Lothar I (840–855) the silver content fell to an average of 65–70 %, with some coins containing as little as 40 % silver (Sarah 2008, vol. 1, 337–338).



Fig. 4 *Christiana religio* deniers of Lothar I, Charles the Bald, Pippin II and Louis the German. – (Photos 1–3 S. Coupland; 4 A. Pol).

This breakdown in circulation was so widespread and profound that it can only have been a result of the political turmoil following the death of Louis the Pious and the ensuing conflict between the royal rivals and their magnates. It cannot have been due to the Viking incursions, which at this stage were still localised and short-lived and would not have impacted Germany or Italy.

These developments would have been disastrous for Dorestad's prosperity, for, as we have seen, it had grown rich on the silver brought by travellers from Italy, Germany and West Francia. The contrast between the coins found at the site during the first part of Charles the Bald's reign and the second half of Charlemagne's is striking (figs 2. 5). It is unfortunately not possible to date more precisely the coins minted between 840 and 864, but presumably there was a gradual decline in coin use at Dorestad over these 24 years, as these represent the last Carolingi-

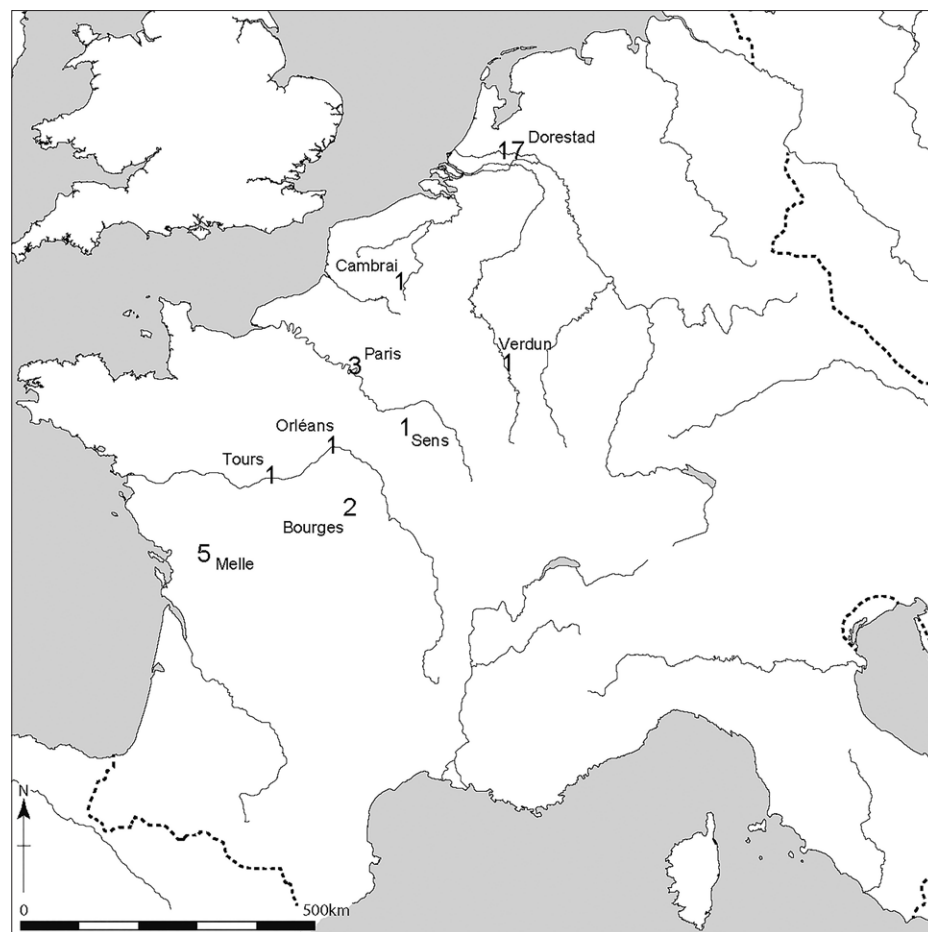
an coins found at the site. Certainly, among the locally minted coins, finds of temple deniers, Lothar's first type, outnumber those of his second type, with the mint name in field, by 14:3. There are no finds at Wijk bij Duurstede of coins of Lothar II (855–869), Louis II of Italy (855–875), or Charles the Bald's *Gratia dei rex* type, introduced in 864.

Given the reduction in the amount of coinage being brought to Dorestad after 840, it is surprising that minting apparently continued at a high level in the first part of Lothar's reign, even if it did then tail off. Dorestad temple coins have turned up in their thousands in hoards, some of which consist exclusively of this type (Coupland et al. 2021, 125). One hoard from Tzummarum contained over 2,000 (Coupland 2011a, no. 121). There are also numerous single finds, including several from England, a point to which we shall return¹³. Finds of Lothar's second type from Dorestad are, as at Wijk bij Duurstede, much less nu-

13 Arras (Pas-de-Calais/FR); Blije (Friesland/NL); Bourg-St-Pierre (Valais/CH); Buinen (Drenthe/NL: 2); Buren (Gelderland/NL); Castricum (Noord-Holland/NL: 3); Domburg (Zeeland/NL: 17); Eindhoven (Noord Brabant/NL); Erfurt (Thüringen/DE); Firdgum (Friesland/NL); Franeker (Friesland/NL); Dongjum (Friesland/NL); Oosterbierum (Friesland/NL); Gouda (Zuid-Holland/NL); Herford (Nordrhein-Westfalen/DE); Huizum (Friesland/NL); Karlburg (Bavaria/DE); Klokkeholm (Nord-Jylland/DK); Leeuwarden (Friesland/NL); Lutjelollum (Friesland/NL); Mainz (Rhein-

land-Pfalz/DE: 2); Nord-Isère (FR); Norfolk (GB); Pont-de-l'Arche (Eure/FR); Priesterwal (Friesland/NL); Schouwen (Zeeland/NL); Schwaan (Mecklenburg-Vorpommern/DE); Settle (Yorks/GB); Steenwijkerland (Overijssel/NL); Techum (Friesland/NL); Torksey (Lincs/GB); Trier (Rheinland-Pfalz/DE); Tzummarum (Friesland/NL: 2); Wangford (Suffolk/GB); Wellingborough (Northants/GB); Wijk bij Duurstede (Utrecht/NL: 14); Wijnaldum (Friesland/NL: 7); Ypres/Boesinghe (West Flanders/BE).

Fig. 5 Single finds of all rulers 840–864 from Wijk bij Duurstede by mint. – (Map S. Coupland).



merous than those of his first type. They occur in fewer hoards, and not in large numbers, and there are fewer single finds, their distribution concentrated around Dorestad¹⁴. Meaningful economic activity at the site was by now coming to an end¹⁵.

This still leaves the unanswered question: how was Dorestad able to produce such large quantities of coinage in the 840s, even with a lower silver content, when so few coins were flowing in from the rest of the empire? Where did this silver come from?

Three factors suggest that Scandinavians were the source. First, there are the finds of Lothar's Dorestad issues in England, all of them in Scandinavian contexts, including a single find from the Viking camp at Torksey and a hoard from York (Blackburn 2011, no. 28; Dolley 1965/1966). These coins were almost certainly brought to England by Scandinavians. Second, a number of silver objects found at Wijk bij Duurstede are undoubtedly Scandinavian in origin (Willemsen 2009, 161–169, but

see IJssennagger-van der Pluijm 2021). Recent research has shown that at this early date these items were unlikely to have been made from melted-down dirhams, but rather west European silver (Kershaw et al. forthcoming). These are not the only Scandinavian silver objects from this period in the Netherlands: the Westerklijf I hoard, deposited c. 850, contained silver ingots and a neck-ring and arm-ring of Viking manufacture alongside Carolingian coins, including nearly 60 from Dorestad (fig. 6; Besteman 1999; Coupland 2011a, no. 102). The origin of six other arm-rings in the hoard could not be established, but they resemble a bronze arm-ring found with Scandinavian oval brooches in an early 9th-century grave at Nebel on Amrum (Nebel 80: la Baume 1952–1953, 77–79 pl. 6). These ingots and rings are the chance survivors of what must have been a huge number of Scandinavian silver objects made from Carolingian deniers, Anglo-Saxon pennies, and non-numismatic items such as chalices, book

¹⁴ Alphen a.d. Rijn (Zuid-Holland/NL); Buren (Gelderland/NL: 2); Deventer (Overijssel/NL: 4); Domburg (Zeeland/NL: 2); Elst (Gelderland/NL); Franekeradeel (Friesland/NL); Grave (Noord Brabant/NL); Kerkwijk (Gelderland/NL); Kleve (Nordrhein-Westfalen/DE); Maasdriel (Gelderland/NL); Nijmegen (Gelderland/NL: 6); Ophemert (Gelderland/NL); Overbetuwe (Gelderland/NL); Susteren (Limburg/NL); Thetford (Norfolk/GB); Vestervig

(Jutland/DK); Wijk bij Duurstede (Utrecht/NL: 3); Xanten (Nordrhein-Westfalen/DE).

¹⁵ Coins with the mint-name of Dorestad were struck in the name of Arnulf (887–899) but in very small numbers, with just one find from Wijk bij Duurstede: van Herwijnen/Ilich 2006.



Fig. 6 Part of the Westerklijf I hoard, Rijksmuseum van Oudheden, Leiden. – (Photo S. Coupland).

mounts, belt fittings and the like. Many such items could have been brought to be traded at Dorestad before – in an ironic twist of fate – being thrown into a crucible to be turned back into Frankish coinage.

Third, the fact that the area was in the hands of Scandinavian warlords in the first part of the decade (Coupland 1998, 90–101) would surely also have encouraged other Scandinavians to bring their silver to the emporium to trade. In sum, there is every reason to believe that silver was still flowing into Dorestad through Scandinavians even if Frankish merchants were no longer coming in large numbers.

This economic activity did not last much beyond 850, and by the 860s had ceased altogether (fig. 1). What brought about this further loss of confidence and the departure of the merchants who had sustained the emporium through the 840s?

It seems no coincidence that it was at precisely this point that Arab silver began to flood into the

Baltic (Coupland 2010a, 103). This includes two dirhams of Harun-Al Rashid (786–809) found at Wijk bij Duurstede which were almost certainly imported from the north¹⁶. Although they were minted at the turn of the century, Abbasid dirhams like these only began to reach Denmark and the Netherlands around 850 (Coupland 2006, 255–256; Kilger 2008, 214–221). Contemporary texts describe merchants from Dorestad visiting the Danish port of Hedeby at precisely this time, with the Life of Anskar reporting that during the reign of Horik I (d. 854) »traders from Dorestad could freely visit that place« (»ut [...] negotiatores [...] ex Dorestado locum ipsum libere expeteruent«: *Vita Anskarii* c. 24, Waitz 1884, 53)¹⁷.

Given that the flow of silver from Italy, the Rhineland and Melle had now all but dried up, and that the dirhams then in circulation were of a higher silver content than the debased Frankish coinage, it seems highly plausible that shrewd and resourceful Scandinavian and Frisian merchants alike would

¹⁶ nnc.dnb.nl/dnb-nnc-ontsluiting-frontend/#/numis/object/1033482; www.nederlandsemunten.nl/Virtuele_munten_verzameling/Anders/schatvondsten/Vikingschatvondst/Verzameling_Zilveren_Viking_vond-scomplex.htm (21.05.2023).

¹⁷ The following comment, »et hac occasione facultas totius boni inibi exuberaret«, does not, however, refer to an abundance of goods but »an opportunity for [God's] goodness to abound«: cf. Robinson 1921, 84, contra Trillmich 1961, 81.



Fig. 7 Part of the Marsum hoard, Groninger Museum (Coupland 2011a, no. 168). – (Photo Groninger Museum).

have seen the opportunity for wealth creation provided by the increasing dirham flow and switched their attention from the south to the north. If not only Scandinavians abandoned Dorestad in favour of Hedeby and the Baltic, but also canny Frisian merchants, the emporium was doomed. Further credibility is lent to this theory by the fact that Carolingian Frisia was evidently a liminal region, a »Wild West« beyond Frankish control, arguably closer in outlook to Hedeby than Aachen (IJssennagger 2013).

The few Frisian coin hoards that date from between 860 and 900 clearly reflect this. With no local mint in operation and very few West Frankish coins reaching Frisia (Coupland 2022a, 397; 2022b, 118 tab. 5), contemporary hoards here are quite unlike those from Charles the Bald's kingdom, and in several cases more reminiscent of Viking hoards of the period. Certain finds thus contain dirhams, even some hoards which are unlikely to have been buried by Scandinavians (Coupland et al. 2023). Some con-

tain non-numismatic silver, principally jewellery, which again is a feature of 9th-century Viking hoards but rarely their Frankish counterparts (fig. 6-7; Coupland 2006, 257–260). Present in a few hoards and widespread as single finds are also gold coins imitating the *solidi* struck by Louis the Pious in the 810s (fig. 7). These were manufactured in numerous local workshops across Frisia, some almost certainly by Scandinavians, others perhaps by Frisians, but in both cases a further sign of the closeness of the ties between the two groups (Coupland 2022c). The ever-increasing number of single finds of dirhams points in the same direction (Coupland 2022b, 122 tab. 8), as do the Italian coins of the late 9th century which have turned up in Viking hoards in England, undoubtedly having passed through the Netherlands (Coupland et al. 2023).

In the final forty years of the 9th century almost all of Frisia was consequently dislocated from the Carolingian monetary economy and detached from

the rule of Lothar II and his successors. The use of coin and particularly the deposition of hoards appear closer in nature and spirit to the Scandinavians in the north than the Franks in the south. As for Dorestad, it found no local replacement for decades to come. Charlemagne's unification of the empire and trade with the north had brought it great prosperity for a time, but after the division of the empire it had become dislocated from the rest of

the Frankish world and apparently dependent on trade with Scandinavia. When even this dried up as merchants from Denmark and Frisia abandoned the port, drawn by Arabic silver from the Baltic, this once mighty northern emporium, the »*vicus famosus Dorstad*« (*Vita Gregorii* c. 5: Holder-Egger 1887, 71) effectively ceased to exist. »Alas, alas, the great city, where all who had ships at sea grew rich by her wealth!« (Rev. 18:19).

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