

NORTHERN EMPORIUM

Vol. 2 The networks of Viking-age Ribe

Edited by Søren M. Sindbæk



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RIBE STUDIER 3

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The numismatic evidence from Posthustorvet

8

Claus Feveile

1. Introduction

Since the first excavations were conducted at the emporium in Ribe, extensive numismatic material has emerged. In particular, there are a large number of sceattas: 281 coins so far (as of 2022). Other types of coins are also present, but in much smaller numbers. These are Roman coins, a few dirhams, a styca, a Carolingian denar, and Danish pennies from the ninth to tenth centuries. Finally, there were finds of several weights made of lead and copper alloy, which are mainly associated with metal workshops. A few weights that have emerged in recent years can be linked to a bullion economy that has not previously been described at Ribe.

The purpose of this article is to present the numismatic material from SJM 3 Posthustorvet and to offer perspectives on this material in relation to previous finds from Ribe. The main emphasis will be on the sceattas, especially because the current excavation is particularly suited to illuminate the use of coins as payment. At the same time, the shift from foreign types of sceattas to the emporium's own Wodan/monster sceattas, as well as their cessation date, can be made even clearer in this material than was possible for previous excavations (Bendixen 1981; 1994; Feveile 2006a; 2008).

2. Finds and taphonomy

At the excavation, 67 coins, a coin pendant, and 12 weights were found, a total of 80 objects (Table 8.1). The vast majority of the coins are sceattas. The high number

of coins in relation to the excavation area of c. 100 m² is primarily because all soil from the excavation was wet sieved (Feveile & Sindbæk 2022). Out of 63 sceattas, 17 were found during the excavation process and their location recorded, while the other 46 sceattas emerged during water-sieving and therefore cannot be positioned closer than the finds unit they originate from.

As shown in Table 8.1, coins are distributed very unevenly over the excavation phases. The absence of coins in the oldest phase of the emporium, phase F3, is particularly surprising, and similarly striking is the very low number of coins from phase F12 onwards. Two coins can be dated to the High and Late Middle Ages and one to the nineteenth century.

In the assessment of numismatic material from the thick deposits in Ribe, especially the sceattas, a special factor that must always be taken into account is the preservation conditions. The chemical composition of the soil means that the conditions for metal finds are usually extremely poor, although completely localized conservation conditions can reverse this process, meaning that in a few fortunate cases, artefacts of metal, including coins, can be almost perfectly preserved (Kristiansen & Tjeldén 2022). The vast majority of coins, however, are heavily corroded and often covered by a very hard corrosion layer. This sometimes contains an imprint of the coin as it looked at the time of loss, while the original coin in these cases is significantly less well preserved. Because of this, the coins from Ribe are often not suitable for stamp analysis.

Date	Phase	Roman	Sceatta				Coin pendant	'Civil war' coin	Bracteate coin	Skilling	Weights	
											Lead	Copper
c. 1500–2017	F18		1					1				1
c. 1400–c. 1500	F17								1			1
c. 1300–c. 1400	F16									1	2	
c. (900–)1100–c. 1300	F15										1	
c. 880–c. 900/920	F14										1	1
c. 860–c. 880	F13										1	
c. 830–c. 860	F12		1								1	
c. 810–c. 830	F11		3			1						
c. 790–c. 810	F10		4		1							
c. 760–c. 790	F9	1	13				1					
c. 750–c. 760	F8		6									
c. 740–c. 750	F7		5									
c. 730–c. 740	F6		3		3						2	
c. 723/4–c. 730	F5		17									
c. 710–723/724	F4		3	2							1	
c. 690/700–c. 710	F3											
c. 1–c. 690/700	F2											
– c. 1	F1											
		1	56	2	4	1	1	1	1	1	9	3

Table 8.1. *Distribution by phase of coins, coin pendants, and weights.*

Similarly, the weight of the coins cannot be used for coinage analysis, as the weight is greatly reduced due to corrosion. This is not a constant, but a ratio that can fluctuate markedly from coin to coin and makes the weight unpredictable. Thus, the average weight of 49 sceattas from SJM 3 (not including those clearly fragmented) is 0.59 grams (range 0.21–1.06). Hilberg calculates the average weight of 95 Wodan/monster sceattas from Domburg as 0.68 grams (range 0.52–0.81; Hilberg 2014, 154). The values in Domburg, however, are also not an expression of the original weight of the coins. It is clear from the publication of the Domburg coins that these coins also were exposed to a significant weight loss caused by taphonomic processes and corrosion. If you instead look at the average weight of a hoard find with well-preserved coins, like that of Hallum in Friesland, 155 Wodan/monster sceattas weigh on average 1.08 grams (range 0.74–1.43; own data from a study visit to the Fries Museum in Leeuwarden in 2007). This weight average and range are without a doubt much more accurate for the coins' original weights: they are also matched by the relatively few well-preserved coins in Ribe. Breternitz, Stangier, and Tillmann (2017) have argued that half-sceattas were implemented, as the authors do not believe that weight loss through corrosion can explain a number of low weights for Porcupine sceattas. I do not share this view, especially not for Wodan/

monster sceattas, as will be seen in a forthcoming work (Feveile & Hrnjic, forthcoming).

The almost total cessation of coins from phase F12 onwards takes place at the same time as the change from the small, thick sceat blank of 11–12 mm to the wide, thin blank of 18–20 mm used for the later Danish pennies and foreign denarii. Previous finds of Danish pennies from the emporium's cultural layer clearly show how degraded these thin coins often are (Feveile 2006a, 296–298). It takes luck for them to survive the journey from excavation by a shovel or trowel, transport via buckets and wheelbarrows, and the water-sieving process. When the very harsh conditions for the preservation of thin coins are combined with the fact that a large decrease is seen in the number of coins from the 700s to the 800s at similar emporia and even in whole landscapes (Blackburn 2008, 34ff), this may perhaps in a general way explain the absence of coins in the phases from the ninth and tenth centuries.

Other factors that must also be taken into account are both the size of the coins and the circumstances under which the coins were lost. A small coin like a sceat of 11–12 mm will be harder to find than a penny of c. 20 mm. A coin is more likely to be picked up from a solid trampled clay floor or, in some cases, a wooden floor, than from an outdoor location, muddy conditions, or

from floors that consist largely of loose bedding in the form of straw, for example.

It is thus highly probable that coins would have continued to be used through the ninth century, but that the frequency of losses was simply significantly less than before. Combined with the poor preservation conditions for thin silver coins, this can overall explain the absence of coins in the younger phases. On the other hand, the finding of a small late-medieval coin in phase F17 shows that small, thin silver coins could actually survive well in the younger layers.

3. Weights

Twelve finds belong to the weights group (Table 8.2, Fig. 8.1). Nine are of lead and two of copper alloy, while the last has a copper-alloy surface, possibly with an inner core of lead, based on previous findings of this type. There is a clear predominance of weights in the youngest phases, from phase F12 (c. 820–c. 840) onwards, from which nine weights originate, but the last three are from phase F4 (c. 710–723/724) and F6 (c. 730–c. 740).

3.1. Lead weights

Small tablet-shaped weights of lead make up the bulk of the finds (Fig. 8.1). On some, stamped markings are seen on one or both sides. A connection has previously been demonstrated in Ribe between lead weights and metal crafts (Feveile & Jensen 2006, 143–144), which is also the case at, for example, Birka and Kaupang (Gustin 2004, 21; Pedersen 2008).

At SJM 3 Posthustorvet, it is striking that a quite extensive metal-casting materials has been found in phases F10 and F11 that is not matched by a similar find of lead weights.

In phases F11 and F12 are found soapstone tuyeres in which circular depressions have been cut, probably to cast weights (Sindbæk & Barfod, this volume, Chapter 6, Fig. 6.4). So far, lead weights have been understood as part of the metalworker's inventory, used, for example, to weigh alloys (Feveile 2006a, 144; for further discussion see Pedersen 2008). Another possibility is that the weights were in operation when the metal foundry sold its products, perhaps especially those of precious metal.

Date	Fase	Find no.	Number	Weight (gr)	Metal type	Shape	Marks	Moulds (gr)	Crucible (no)
c. 1500–2017	F18	X10	1	4. 83	Lead	Truncated cone			
c. 900–1500s	F16/F17	X1471	1	4. 73	Lead	Tablet	One side with a central dot in negative		
c. 1400–c. 1500	F17							105	33
c. 1300–c. 1400	F16	X5	1	(2. 62)	Copperalloy	Polyhedral		392	153
		X51	1	12. 12	Lead	Tablet			
c. (900–)1100–c. 1300	F15	X113	1	4. 27	Lead	Tablet	Six small dots in negative, on both sides	554	217
c. 860–c. 900/920	F13/F14	X137	1	2. 92	Lead	Tablet		2882	490
c. 880–c. 900/920	F14	X208	1	(2. 77)	Copperalloy	Polyhedral		7425	457
c. 860–c. 880	F13	X207	1	8. 26	Lead	Barrel	Faint impression on one side, possible dot in negative on the other side	1331	223
c. 830–c. 860	F12	X360	1	27. 28	Lead	Tablet	On side with a blurred small central dot	8241	456
c. 810–c. 830	F11							8326	325
c. 790–c. 810	F10							4432	321
c. 760–c. 790	F9							1092	155
c. 750–c. 760	F8							34	26
c. 740–c. 750	F7							12	33
c. 730–c. 740	F6	X1190	1	3. 45	Lead	Tablet		34	25
		X1197	1	3. 46	Copperalloy (plated lead ?)	Tablet	One side with concentric circles		
c. 723/4–c. 730	F5							3	21
c. 710–723/724	F4	X1323	1	(7. 35)	Lead	Tablet	One side with impression of a coin, Continental runic, type 2c	8	4
c. 690/700–c. 710	F3								10
c. 1–c. 690/700	F2							9	
–c. 1	F1								

Table 8.2. *Weights compared to mould fragments of clay and crucible sherds.*



Figure 8.1. Top: Lead weight with impression of vanished coin, together with matching silicone replica. Phase F4, A882 X1471, ID 200301706. Middle: Lead weight with small central dot. Phase F12, A11 X360, ID 200301686. Bottom: Lead weight with faint impression on one side. Phase F13, A151 X207, ID 200301682. Lead weight with six small dots in negativ on both sides. Phase F15, A105 X113, ID 200301680. Scale: 2:1

In this situation, weighing the finished product could be part of determining the price.

The amount of lead weights is relatively sparse, and, taking into account both the low number and their preservation, there is a clear tendency to group the weights at 4-g intervals – at Posthustorvet, weights of 4, 8, 12, and 28 g are also seen in the assemblage. A closer assessment of the significance of weights on this excavation, however, must await the processing of the very extensive metalworking assemblage in the form of fragments of moulds, crucibles, and tuyeres, as well as how this material relates to the weights.

3.1.1. Weight with embedded coin – Series D, type 2c

The oldest weight, from phase F4 (c. 710–723/724), is a small tablet-shaped weight that in its current form weighs 7.35 g (Fig. 8.1a). On one side is the negative imprint of a coin that has been pressed down into the surface and originally adorned one side. The imprint, which consists of a straight-armed cross with dots in the cross-arms and surrounding lines, can be identified as the reverse of a Series D, type 2c, a Continental Runic. The coin itself is missing, but whether it was removed on purpose or lost cannot be clarified. This type corresponds to the other coins in the same phase, which are exclusively either Continental Runic or Porcupines.

Cylindrical coin weights with attached sceattas or stycas are known from Scandinavian sites such as Kaupang, as well as from British sites (Pedersen 2008, 167; Williams 1999). Williams argues that the British finds are from the Viking Age and that they reused old coins. At Posthustorvet, both the type of sceat and the find context of the weight, however, point to a date in the 710s, so far the only known example of this early date. With the coin, the weight would have been c. 8.3–8.5 g, perhaps related to an *ertog* (cf. Pedersen 2016, 140).

A weight with an inserted coin raises the question of what it would have been weighed against. This is not the only example of a weight without connection to a metal workshop; there are a few other weights from both SJM 3 (see below) and from previous excavations at Ribe. These finds, combined with the notable absence of weights and clip metal alongside the consistent presence of coins, leads us to conclude that there was a developed coin economy where transactions were paid with coins by number, not by weighing the coins.

In a coin-based economy, the mint stands as a 'guarantee' for authenticity and value and users have confidence in the currency. Thus, testing of the coins would usually not occur. This also applies to sceattas from the Ribe emporium, where there are no traces from testing on the 281 sceattas from the emporium (as far as the preservation of the coins can indicate). This is in accordance with the thousands of single-find sceattas scattered across north-western Europe.

In some notable cases – all treasure finds – there is a consistent testing of sceattas, performed as a deep cut across one side of the coin in contrast to the pecking on tenth- and eleventh-century coins. This applies to the Föhr hoard (Hatz 2001) and the Cothen hoard (Metcalf & Op den Velde 2014; Op den Velde 2015). The five Wodan/monster sceattas from Dankirke have also been tested in this way; on this basis, as well as other factors, they are considered to be one single deposit or hoard (Feveile 2006b).

Hilberg sees the testing of the coins in the Föhr hoard as proof that they were assessed for their content of precious metal – in other words, by weighing the coins (Hilberg 2014, 155). In the case of the Cothen hoard, the authors imagine that it might have been a particularly sceptical merchant who had tested a batch of coins (Metcalf & Op den Velde 2014, 41f).

It is striking, however, that one does not see such testing on single-find coins. It is therefore hardly a general distrust of the coins that prevails, but rather an action that

takes place in direct relation to the deposit of the coins. When coins were deposited as savings, it is precisely the best coins (heaviest, highest silver content, etc.) that were collected for the future, while these factors meant less in everyday life. The testing of the coins in the hoards was more probably done to ensure that the coins saved for the future were of good quality.

Weights in Ribe, including the one with a Continental Runic coin as decoration or special marking, can of course in certain circumstances have been used for weighing coins – but the general picture from the numerous excavations in Ribe clearly shows that it was not a normal procedure.

3.2. Polyhedral weights and the bullion economy

For the first time, polyhedral weights were excavated in Ribe (Fig. 8.2), one from phase F14 (c. 880–c. 900/920) and another from phase F16 (c. 1300–c. 1400). The latter is undoubtedly redeposited, as the phase dates to the Middle Ages but the assemblage contains some finds from the Viking Age.

The small polygonal weights must be seen in the context of oblate spheroid weights and are linked to a bullion economy, in which small pieces of metal – typically small dirham clips or cuts from bars or jewellery – are used as payment by weight. The weights from Ribe are heavily corroded and the weight is thereby reduced by an unknown level. It is generally accepted that the weights are adjusted either towards the Scandinavian *ertog* or *aurar*, maybe originally based on or inspired from the weight system in the Islamic caliphate, the *mitqal* (Kilger 2008; Pedersen 2008). Only a single piece of silver can be considered a weighed means of payment: a small fragment of a spiral-striated rod of silver from Phase F12 (c. 830–c. 860; X371, A11, ID200301496). It should be noted, however, that the finds from this phase largely show a connection to metalworking (e.g. mould fragments, crucibles, tuyere fragments, and melted copper-alloy lumps). Similar objects have been found in Kaupang, for example, where they are believed to be part of the bullion economy (Hårdh 2008; Skre 2008, 349). It cannot be determined whether the single find in Ribe should be seen as a piece of scrap metal on its way to the metalworker's crucible or as a cut piece of silver for payment (see also Søvsø 2020, 165f).

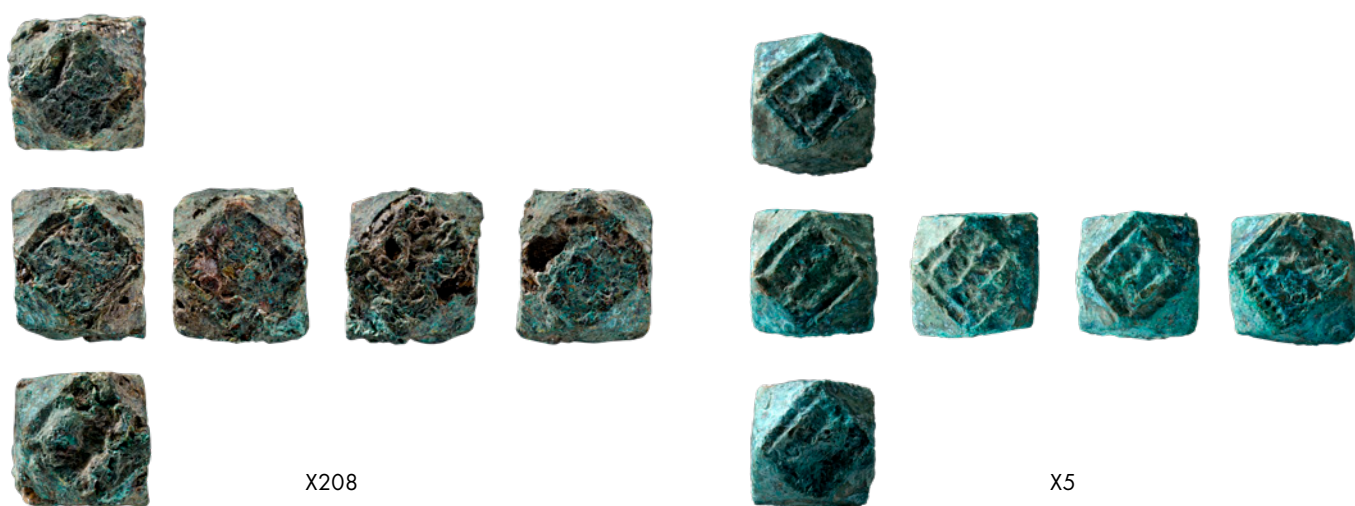


Figure 8.2. Polyhedral weights. Phase F14, A145 X208, ID 200301559 (2.77 g, corroded) and Phase F16, A57 X5, ID 200301516 (2.62 g, corroded). Scale: 2:1.



Figure 8.3. Spherical weight (SJM 348, X179), and three small cut dirhams (SJM 348, X478 and X481). SJM 348 Rosen Allé. Without measurements.

In addition to the two polyhedral weights, an excavation in 2014–16 conducted a few hundred meters to the east of SJM 3 Posthustorvet revealed a spherical weight and three small fragments of dirhams (Fig. 8.3; Croix et al. 2019; Søvsø 2020, 210).

The bullion economy, which was a well-known part of the economy in the late ninth and tenth centuries, has finally been proven in Ribe, although the finds are still few and scattered compared to the other Scandinavian cities and emporia of Birka, Hedeby, and Kaupang (Gustin 2004; Hilberg 2011; Pedersen 2008). The reason for the scarcity in Ribe compared to the other Scandinavian Viking-age towns is that preserved culture layers and other features from the late ninth and tenth centuries are few and scattered in Ribe, and it is impossible to conduct large-area metal detecting like at Hedeby and Kaupang.

4. Moulds for sceattas

It has been debated since the 1980s whether Wodan/monster sceattas were made for use in or even minted at Ribe. With the discovery of four small fragments of clay moulds with imprints of Wodan/monster sceattas, it can be established that at least copies or forgeries of sceattas were made in the central part of the emporium (Table 8.3,

Date	Phase	Mould with W/M-sceatta	
c. 760–c. 790	F9		1
c. 750–c. 760	F8	2	
c. 740–c. 750	F7	1	

Table 8.3. Mould fragments with impression of Wodan/monster sceattas.

Fig. 8.4). This possibility has previously been considered in connection with an assessment of whether, in the event of the possible production of coins in Ribe, coins were minted with the assistance of foreign experts or whether coins were simply cast in the form of ‘barbarian imitations’ (Nielsen 2010, 182).

All four mould fragments emerged within 2–3 square meters, close to the boundary of the excavation. One fragment is from phase F7, and two are from phase F8. In an attempt to supplement the material, a ‘box’ was excavated further into the section profile, whereby a fourth fragment emerged. Due to the excavation conditions, this fragment cannot be dated more precisely than phase F7–F9. It is our belief, however, that all four fragments belong to the same short-term production. As no similar fragments have previously appeared in the nearby excavations from the 1970s and 2009 (ASR 4M75 Kunstmuseets Have and ASR



Figure 8.4. Mould fragments with sceattas. Phase F8, A396 X1024, ID 200300098; Phase F8, A396 X1025, ID 200300099; Phase F7, A440 X1102, ID 200300100 and Phase F7–F9, A363/A396/A440 X1508, ID 200300104. Scans and graphic: S. Croix.

15 Kunstmuseets Kælder, unpublished), it is apparently a stand-alone event that need not have included more than a few handfuls of coins. Thus, there was no major production that took place over a longer period.

None of the four fragments are complete. Either a large part of the mould is missing or the surface showing the imprint is damaged. It can be concluded, however, that there are imprints of the face mask on three fragments, while the last fragment shows an imprint of the 'monster'. The prints have been scanned, and after a detailed examination it is clear that they are made from at least three different coins, as none of the imprints of the three Wodan sides were made with the same coin. Whether the imprint of the monster on the last fragment originates from the same coin as one of the imprints of Wodan cannot be determined, though it is a reasonable assumption. It is somewhat surprising that different coins were used as templates for each individual casting. It seems unnecessarily arduous if the purpose was simply to produce coins of a quality and appearance that could have slipped unnoticed into the emporium's coin circulation.

Wodan/monster sceattas can be divided into two main types. Type 31 is the most frequent and the type attributed to Ribe. Here, the beard of the face consists of arches or lines and the animal is almost always turned with its body to the left. On the second main type, type 31a – often called Insular, as it is presumed to be minted in England – the chin on the face is usually visible, and the animal often has a markedly different appearance than on type 31. To further complicate the picture, both main types are exposed to both copying (i.e. they are completely identical or very similar) and imitations (i.e. they may differ quite a bit from the model).

The three imprints of the face are all of the regular type 31 and could very well be cast from an official coin. The last fragment shows the forehead of the monster, which here is turned to the right and not to the left as is usual. The

style – to the extent that it can be determined – is, however, identical to official or close copies or imitations of type 31. The coins used as templates for the castings may thus be quite common circulating coins without any discrepancies.

It is thus a question of copying coins that were identical to coins that were in circulation, meaning that the copies would have been able to slip unnoticed among the other coins in circulation. A copy may have been made with both the same weight and quality of the metal as the official coins. Since a coin would be worth more than just its weight, a counterfeiter would thus be able to get an increase in the value of silver. The copy could also be made with a lower weight and/or a significantly lower quality than the coin being copied. Then the purpose could be both to undermine confidence in the official coins or to get an even greater financial gain. Both purposes, however, would require quite a large production to be effective and to contribute to any considerable gain.

Previous analyses of mould fragments from Ribe have shown that 'traces of metal' residues on the mould can be identified, but only in the form of 'present' or 'absent'. The composition itself and thus the grade of the alloy used in the casting cannot be deduced from the analysis results (Orfanou et al. 2021). We can therefore not determine based on the moulds whether the cast Ribe coins were of good silver or with a significantly lower silver content than official sceattas.

Most types of sceattas were subject to quite extensive copying and imitation. This also applies to Wodan/monster sceattas, where both extremely good copies or more irregular imitations can be found either in good silver or so strongly debased that they appear as almost pure copper coins. Some coins show exactly the combination that appears from the mould fragments, i.e. an official-looking Wodan obverse combined with a regular



Figure 8.5. Example of coins similar to the mould fragments. A: silver coin, Cat. no. 47, X923. B: Unknown provenance, Netherlands.

but right-facing animal on the reverse (Fig. 8.5). The coins shown certainly do not correspond to the four fragments from the excavation but illustrates what they may have looked like, either as silver or completely debased.

It has not been possible to prove the origin or the result of the castings among the coins in Ribe, a task made more difficult by the preservation of the mould fragments (as only parts of the embossing have been preserved) and the often quite poor preservation of the Ribe coins.

The production of cast sceattas in Ribe cannot be explained as 'barbarian imitations' in the way Nielsen suggests (Nielsen 2010, 182). First, they are not among the earliest Wodan/monster examples in Ribe, which are dated to the 720s at the latest, but they were made a few decades later, around the mid-700s. Nor are they 'barbaric', understood in the sense that they are not of inferior character or imitated in a way that differs significantly from an 'official' coin, even though the right-handed animal is unusual. Although the number is hardly large, the desire for economic gain must still be seen as the most plausible explanation for the casting of a few Wodan/monster sceattas in the heart of Ribe.

5. Coin pendant; imitation of an Arab dinar

From phase F9 (c. 760–c. 790) originate a few fragments of a very thin copper-alloy disc with imitation of Kufic characters (Fig. 8.6a). The piece, which must be a coin pendant, has only been cleaned on one side by removing the thick corrosion layer from the surface of the object itself. The opposite side is completely covered with corrosion residues and cannot be cleaned. The disc is so thin that it is undoubtedly a bracteate; the piece is thus one-sided. No eyelet or other types of suspension have been preserved on the remaining part, though the fragment shows great similarity to a find from Leiderdorp in the Netherlands (Fig. 8.6b; Verhoeven 2016, 201; Verhoeven & Dijkstra 2017, 335), where the thin metal disc is expanded with a flap that is rolled into a tubular shape and thus forms a small suspension loop. The piece from Ribe resembles this. While the Leiderdorp find imitates the front of a gold coin, a dinar from the Umayyad dynasty, the new fragment from Ribe is an imitation of the reverse of a similar gold coin. Even



Figure 8.6. a: Fragments of a coin pendant imitating an Arabic dinar. Left: three fragments of the corrosion layer. SJM 3, A364 X968, ID 200301642. b: Leiderdorp coin pendant. c: Nummular brooch, West Rudham. d: Small pile of coin hangers from the Post Office excavations 1990–1991, ASR 9 X500. (Photos: b after Verhoeven 2016; c after Davies 2011, fig 114. d after Feveile 2006a).

though the starting point was the same, they are not identical pieces. Yet another bracteate dirham imitation is known from West Rudham, England, albeit with a somewhat different appearance and lacking a suspension loop. (Fig. 8.6c; Davies 2011, 213).

An earlier find from Ribe, at ASR 9 Posthuset, which has been published as a small pile of four to seven coin imitations based on Umayyad dirhams (Feveile 2006a, 299, no. 63), can now be better assessed based on the two above-mentioned finds. These are hardly coins, but rather coin pendants (Fig. 8.6d). On the find from ASR 9, small fragments of tubular protrusions are seen around the edges. They have not previously been fully explained, but, based on the Leiderdorp find, the small tubular extensions in the pile can now be explained as corresponding suspension loops. These are not imitative coins, as earlier stated, but rather a small deposit of coin pendants, where the loops on each of the pieces is rotated slightly in order to bring the metal discs closer to each other, while at the same time there is room for the loops around the edges. From the appearance of the heavily corroded piece, it is assumed that the metal was silver, in contrast to the new fragment and the Leiderdorp piece, which were made of a copper alloy, perhaps brass.

While there are clear differences in the character of the new piece from SJM 3 Posthustorvet, it seems – judging from photographs – that there are strong similarities between the find from ASR 9 Posthuset and the one from Leiderdorp, so strong that they may even be identical or made in the same workshop. The late 700s was about half a century before the first major wave of dirhams that flowed into Scandinavia, but Arabic coins were not unknown in Western Europe. In particular, gold coins, dinars, were well known and accepted in the Mediterranean region for trade. That the coin type was also known in north-western Europe is shown in part by a gold coin minted by Offa (757–796) imitating a contemporary dinar from the Abbasid Caliph al-Mansur (754–775) (Anwar & Bacharach 2013).

The finds from Leiderdorp and Ribe can be dated to the decades just before or around 800 – that is, at the same time as the start of an extensive import of Middle Eastern glass beads. It seems obvious that such coin imitations would have accompanied the glass beads and were thus made in the Middle East.

6. The coins

6.1. Miscellaneous coins

The oldest coin from the present excavation is a fragment of a large Roman coin of copper alloy, either a dupondius or sestertius, halved with a notch. It adds to a few other Roman coins from the emporium (Bendixen 1981, 93, no. 33; Feveile 2006a, 299, no. 62 and 306, no. 10) and must be understood as scrap metal intended for melting in the metal workshop. The coin was found in phase F9 (c. 760–c. 790).

A so-called ‘civil war’ coin, a small penny from the period c. 1250–1330, appears as an almost pure copper coin with perhaps a bit of silver. The coin cannot be dated further, as the imprint of the strongly corroded coin has not been preserved. The coin was found in layers from the 1800s.

In phase F17 (c. 1400–c. 1500) was found a silver bracteate coin that cannot be more closely identified. A dating to c. the fourteenth century, however, agrees well with the phase content of ceramics (Knudsen, this volume, Chapter 2) and shows that in fortunate cases, thin silver coins can survive in the ground.

Finally, there was a one-shilling piece from 1812, minted under Frederik VI (1808–1839). It was redeposited, perhaps via animal activity, into phase F16, which dates to the Late Middle Ages.

6.2. Sceattas

At the excavation, 63 sceattas were found. The vast majority, 56 coins, can be associated with a single phase, while 7 originate from finds units that cover two phases. 60 sceattas can be identified as main types, while the last three are considered to be sceattas on the basis of size and appearance but which have a surface so degraded or fragmented that further identification is not possible. The types follow the well-known distribution of sceattas in Ribe: 46 (77%) are Wodan/monster, 12 (20%) are Porcupines, and the last 2 (3%) can be identified as Continental Runics (Table 8.4).

The distribution of the coins by type and phase follows the general picture that previous excavations in Ribe have shown (Feveile 2006a; 2008) but also presents some new, sometimes surprising observations. Based on Metcalf & Op den Velde (2009–2010), the Porcupine coins have been classified into varieties or subvarieties within the three main groups: *primary* (c. 695–715/720), *secondary* (c. 720–740), and *tertiary* (c. 740–800?).

Date	Phase	Sceatta			
c. 1500–2017	F18	1			
c. 1400–c. 1500	F17				
c. 1300–c. 1400	F16				
c. (900–)1100–c. 1300	F15				
c. 880–c. 900/920	F14				
c. 860–c. 880	F13				
c. 830–c. 860	F12	1			
c. 810–c. 830	F11	3			1
c. 790–c. 810	F10	4		1	
c. 760–c. 790	F9	13			
c. 750–c. 760	F8	6			
c. 740–c. 750	F7	5			
c. 730–c. 740	F6	3		3	
c. 723/4–c. 730	F5	17		2	
c. 710–723/724	F4	3	2		
c. 690/700–c. 710	F3				
c. 1–c. 690/700	F2				
– c. 1	F1				
		56	2	4	1

Wodan/Monster			Porcupine			Cont. Runic		Undef.
								1
1								
3		1						
4	1							
13								
5								1
3			1					1
3	2			1				
10			7	1		1	1	
			2					
42	3	1	10	1	1	1	1	3

Table 8.4. *Sceattas in total and divided by main type.*

6.2.1. Coinless period, phase F3 (c. 690/700–c. 710)

While phases F1 and F2 are significantly older than the emporium and thus not interesting in this context (Croix et al. 2022), the oldest emporium phase, F3, is somewhat surprisingly completely without coin finds. The phase is radiocarbon dated; via Bayesian modelling, the start of the phase is dated to the second half of the 600s and the end to the decades around the year 700 (Philippsen & Olsen 2022, fig. 10.2). Given the absence of dendro-chronologically dated oak to before 700, both at this excavation and elsewhere in Ribe, it is argued that it is unlikely that activity began much earlier than c. 690/700 (Croix et al. 2022, 71).

If the absence of coins in this phase is not just coincidental, it may indicate that phase F3 predates the coins of both the Continental Runic and the Porcupine types – that is, before c. 690/695 and not, as proposed, to c. 690/700–c. 710. Phase F3 of the SJM 3 Posthustorvet excavation could be thought to be largely contemporary with the earliest activities at ASR 7 Sct. Nicolaj Gade 8, horizon L, which is also completely without coins. On the other hand, a negative testimony in the form of missing finds of coins at a few limited excavations cannot stand

alone as proof of a completely coin-free phase, just as the exact dating of the start of the coinage is also unknown (Metcalf & Op den Velde 2010, 70ff and 255).

6.2.2. Porcupine and Continental Runic, phase F4 (c. 710–723/724)

Three coins, a Continental Runic and two Porcupines, can be safely ascribed to phase F4, while another one of each type can be ascribed to either phase F4 or the earliest part of phase F5. Both Porcupines are relatively well preserved but cannot be immediately classified in the varieties or subvarieties separated by Metcalf & Op den Velde (2009–2010). They can both, however, be classified as secondary: X1475 most closely resembles a coin from Domburg (no. 433; Op den Velde & Klaassen 2004), which is classified by Metcalf & Op den Velde (2009–2010) as a secondary Porcupine, subvariety e. X1397 is probably also a secondary Porcupine.

Regardless of whether the Continental Runic and the Porcupine that can only be attributed to either phase F4 or F5 are contemporary with the three coins from phase F4, there is also a short phase observed at Ribe where primary Continental Runic, Type 2c, coins circulated and

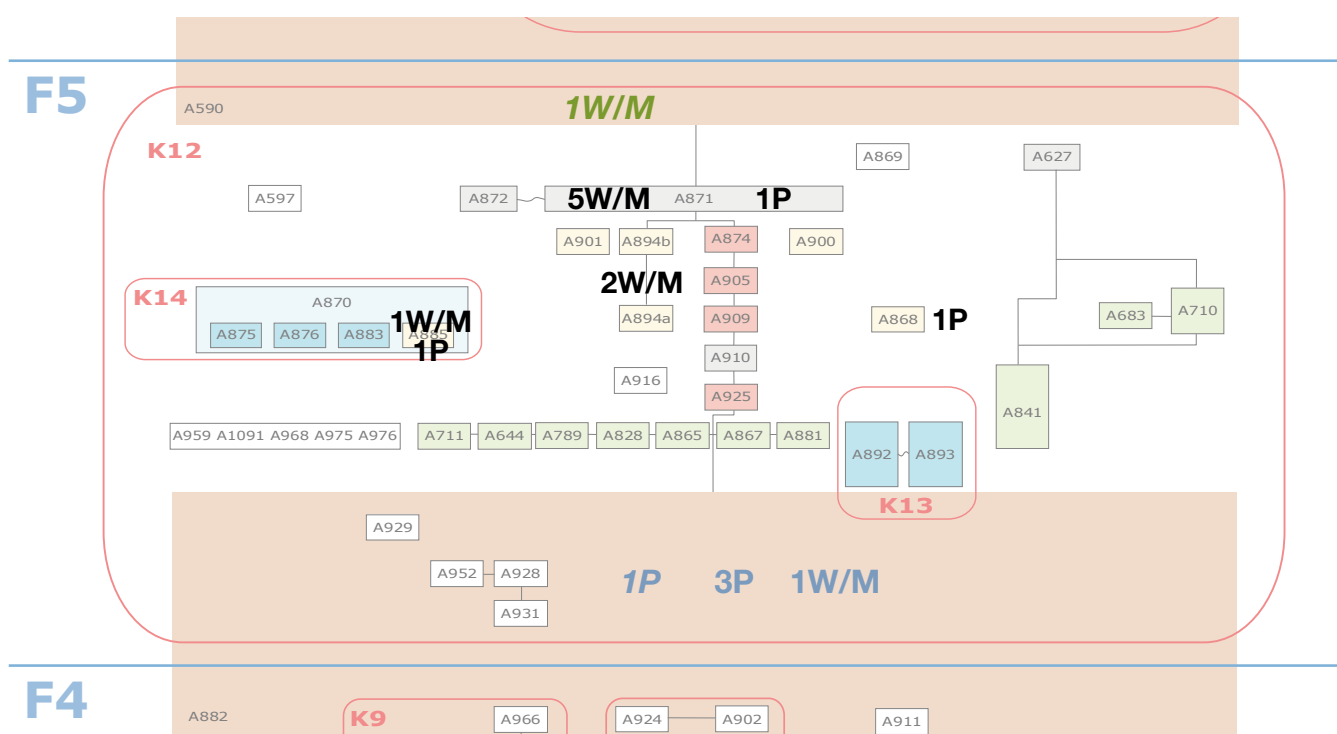
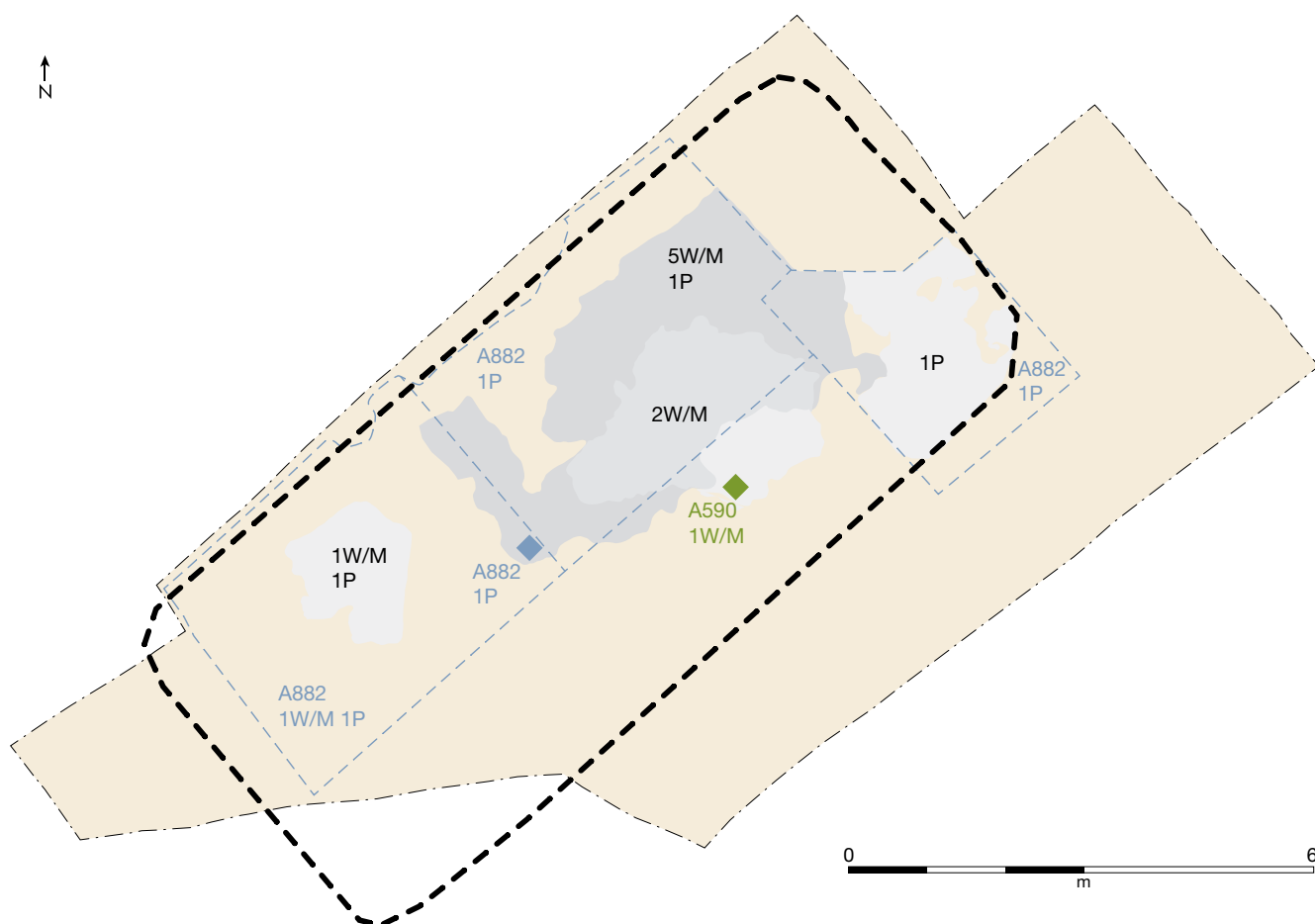


Figure 8.7. Simplified plan of building K12 in phase F5. Distributions of coins in three levels, blue, black, and green, according to the matrix. Two coins (marked on the map with a rhombus) were found in the excavation and measured, while all other coins were found during water-sieving and are placed 'within' the A-unit (grey or yellow) or finds-registration unit (dotted blue line) they belong to. WM: Wodan/monster P: Porcupine.

were lost simultaneously with secondary Porcupines. At the same time, it must be stated that primary Porcupines have still not been found with certainty at Ribe, since the preservation of the coins prevents secure identification.

6.2.3. Introducing Wodan/monster sceattas, phase F5 (723/724–c. 730)

Phase F5 is characterized by the fact that much of the trench comprises a house, K12, with roof-bearing post-holes and walls constructed of wickerwork. No fewer than 17 coins can with certainty be attributed to the phase; all emerged within the framework of house K12. Two coins from layer A882 cannot be linked closer than phase F4 or the earliest part of phase F5 and consist of a presumed Porcupine (X1381) and a Continental Runic (X1380). Three coins, two Wodan/monster and a secondary Porcupine, are from layer A590, which form the latest part of phase F5 and continues into phase F6. Thus, if these coins are from phase F5, they belong to the very end of the phase.

In the remaining part of phase F5, only secondary Porcupines and Wodan/monster sceattas have been found in almost equal numbers. There is a clear tendency for Porcupines to dominate in the earlier part of the phase, while Wodan/monster became almost dominant in the later part of the phase, which covers the period from 723/724 to c. 730. It can thus be concluded that Continental Runic ceased to be lost in Ribe either before or just around 723/724 at the latest; that Porcupines (all secondary?) circulated simultaneously with Continental Runic and then continued in circulation through the 720s; and finally, that the Wodan/monster type was introduced just around or shortly after house K12 was established in 723/724, within a few years largely displacing Porcupine and other types of sceattas from circulation.

As shown in Figure 8.7, house K12 occupied the majority of the excavation trench in phase F5. It is striking that not a single coin was found outside the house. Looking more closely at the distribution inside the house, the coins can reasonably be divided into three horizons. In the oldest horizon (indicated by blue) the coins were scattered in all parts of the house, while later in the phase (indicated by black), 8 out of 11 coins were found concentrated in the central part of the house. A single coin from the latest part of the house (marked in green) also appeared in the central part of the house.

Out of the 17 coins that can certainly be linked to house K12, only 2 were found during the actual excavation and

measured (rhombuses in the figure). The other coins were found via the consistent water-sieving carried out on all layers in the excavation. The coins appeared scattered about and there is nothing to suggest that any could be a lost purse or a small deposit, for example, in the case of the five Wodan/monsters and one Porcupine from layer A871. The coins are all interpreted as lost individually through numerous transactions.

The quantity and distribution clearly show that coins were frequently used in economic transactions and that these were not necessarily limited to particular parts of the house, although a concentration is seen in the central space of the house. Neither in the house itself nor in phase F5 in general have silver fragments, bars, clips, or weights been found. The coins remain as the only direct evidence of financial transactions, which apparently took place solely with sceattas. Initially, this exchange perhaps consisted exclusively of Continental Runic and secondary Porcupines with an abrupt change to Wodan/monsters.

The quite numerous sceattas in building K12 correspond to a similar find in Ribe. In a new processing/reworking of ASR 7 Sct. Nicolaj Gade 8, excavated in 1985–1986 (Frandsen & Jensen 1988; 2006), a correspondingly high concentration of sceattas is shown in a building that is also presumed to have burned down (Croix 2020). In both cases, however, the coins are so scattered that there is no indication that the fire situation itself had an influence on either the quantity or the location of the coins in the burned-down houses.

6.2.4. Wodan/Monster sceattas, phase F6-F10 (c. 730–c. 810)

In the phases covering the next c. 80 years, up to 36 coins were found. The majority of these, 31 coins, can be placed within a single phase of the phases F6 to F10 and consists of 28 Wodan/monster, a Porcupine, and 2 unidentified sceattas. Another three coins (two Wodan/monster and one Porcupine) might be slightly older (phase F5 or F6), one Wodan/monster cannot be dated more precisely than either phase F9 or F10, and a single unidentified sceat may be slightly younger (Phase F10 or F11). Based on a current assessment, all Wodan/monster are official Type 31 coins, except for a single outlier (X1007, F8), which is of the so-called Insular (English) type, Type 31a.

The picture at SJM 3 Posthustorvet thus completely corresponds to the picture seen at all other excavations in Ribe with thick cultural layers from the eighth and ninth

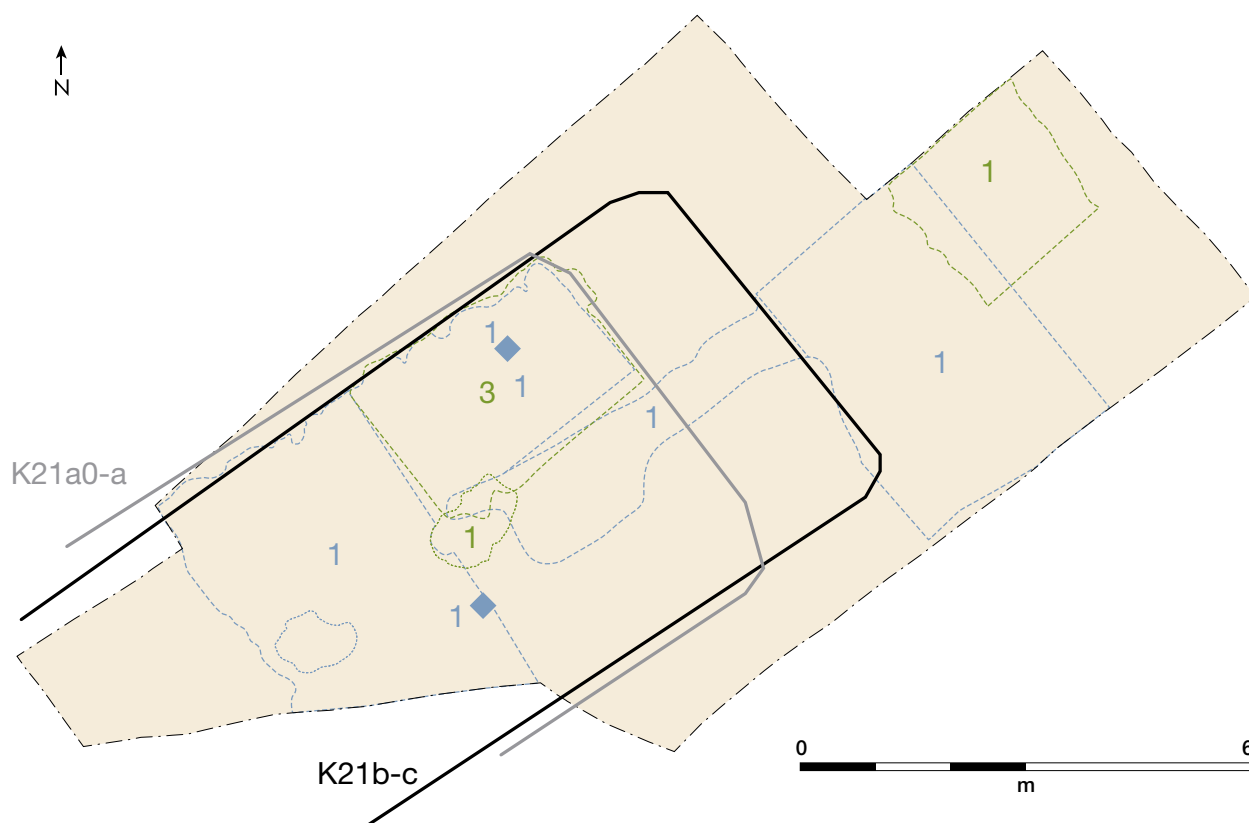


Figure 8.8. Simplified plan of building K21 in phase F9. Distributions of coins in two levels: green: building phase K21a0-a; blue, building phase K21b-c. Two coins (marked on the map with a rhombus) were found during excavation and precisely located, while the other coins were found during water-sieving and are placed 'within' the A number or finds-registration unit they belong to.

centuries: after the 720s and over the next c. 100 years, Wodan/monster was the dominant type of coin in the emporium at Ribe. There is some variation in the occurrence of the coins in the different phases, but it should be noted that the phases do not cover the same number of years. Phase F9, with 13 sceattas, is estimated to cover about 30 years, but the other phases are hardly longer than one or two decades. The loss frequency per year is thus largely the same throughout the period as a whole, which emphasizes that circulation was at approximately the same level throughout the period.

House K21 in phase F9 (c. 760–c. 790) serves as an example of coin distribution in the second half of the 700s (Fig. 8.8). The house was repaired several times, with a total life of c. 30 years. As can be seen from the figure, most of the coins in phase F9 were found within the extent of the house, with only a few found outside. All coins from this phase are Wodan/monster. Like house K12 in phase F5, the vast majority of coins were lost indoors. The find spots of two coins can be precisely located (rhombuses), while the other coins were found by water-sieving and can therefore not be located more precisely than the extent

of the cultural layer or the finds unit they are from. A certain concentration of coins can be seen in the front of the house, especially in the earliest part of the phase, with three out of four coins found in that part of the house.

6.2.5. End of sceattas, phase F11–F12 (c. 810–c. 830)

The most recent loss of sceattas took place in phases F11 and F12. The three sceattas in F11, all Wodan/monster, originate from the north side of house K23. One sceat, which can be from either phase F10 or F11, is from the same area of the house (Fig. 8.9).

The single Wodan/monster from phase F12 is not associated with any construction or house. With just a single coin from this phase, it is hardly justifiable to claim that there was still a general and consistent use of sceattas, even though this must still have been the case in phase F11. Two out of three coins from F11 appeared in one of the youngest layers of the phase, so there is no basis for concluding that sceattas were only in circulation at the very beginning of the phase – on the contrary, the distribution shows that the coins were used throughout the entire phase.



Figure 8.9. Simplified plan of building K23 in phase F11, with distributions of coins in green. One coin (marked on the map with a rhombus) was found in the excavation and precisely located, while two coins were found during water-sieving and are placed 'within' the A-unit or finds-registration unit (dotted green line) they belong to. One coin (black) is from either phase F10, building K22 or phase F11, building K23.

Phase F11 is dated to c. 810–c. 830 by radiocarbon dating (Philippsen & Olsen 2022; Croix et al. 2022, 181). This corresponds to the dating of the most recent loss of sceattas at ASR 9 Posthuset, in phase G, which was dated to approximately 800–820. Both excavations thus document the late use of Wodan/monster sceattas and the probably uninterrupted transition to the subsequent coins of Malmer's type KG4–5 and later KG 6. This excavation does not further contribute to the discussion about the transition or dating of KG4–6, as none of these types were found at the excavation. The use of sceattas in the first decades of the ninth century continues to accord with the dating of the subsequent coins, which Malmer (2007, 18) dated to the 820s or 830s; there is thus nothing to suggest that coins of type KG4 or 5 were minted as early as 800.

On this occasion, it is important to remember again that the late phases in Ribe cannot be dated to precise years, as dendrochronological dating does not exist for this part of the cultural layers. At the excavation ASR 9 Posthuset (1990–1991), the latest sceattas were found in phase G, which was dated to c. 800–820 (Feveile & Jensen

2000). This is a dating that is not fixed, but which was proposed because pennies of the types KG(4?)–5–6 were found in the subsequent phase H/I. If the phases ought to be moved forward or backward in time, however, it must be forward to a younger dating (Feveile & Jensen 2000, 16–17). Conversely, it is not impossible that phases F11 and F12 at SJM 3 Posthustorvet could be moved a decade backwards when looking at the radiocarbon intervals given for the beginnings and ends of the phases (Philippsen & Olsen 2022).

An overall conclusion on the cessation of sceattas in Ribe is that they certainly circulated in the first few decades of the 800s and possibly extended a decade or two more. From this, it follows that the subsequent coins may similarly have been minted a little earlier or later than proposed by Malmer in 1966. The evidence for dating the later phases in Ribe simply does not allow such narrow and secure dating, but it provides some elasticity, which is essential to keep in mind. It does not seem probable, however, that coins of the types KG4 or KG5 should already be in production c. 800, as previously proposed by Søvstø (2020, 166f).

6.2.6. Missing pennies and a glimpse of the bullion economy, phases F12–F14 (c. 830–c. 900/920).

Apart from a single Wodan/monster sceat in phase F12, the only silver find from phases F12–F14 is the previously mentioned fragment of a tightly-twisted rod of silver. It cannot be ruled out that the reason for the lack of coins and small pieces of silver is the chemical composition of the layers. Other factors, such as the size of the coins and floor type, may explain the missing coins. This excavation therefore does not contribute further to an elucidation of the shift from sceattas to pennies or to the relationship between Scandinavian pennies and other coin types. However, the discovery of the Damhus hoard (Feveile 2021), with 262 coins of Malmer's type KG4 alongside the previous finds of KG 4–5–6 coins in Ribe clearly show that there must have been a significant circulation of coins of these types.

In the other Nordic emporia and cities, Hedeby, Kaupang, and Birka, a significant element of the bullion economy is seen in the form of cut silver and coins in combination with spherical and polyhedral weights (Gustin 2004; Pedersen 2008; Hilberg 2011). A similar phase could not previously be determined at Ribe, but

with the discovery of two small polyhedral weights from phase F14 (c. 880–c. 900/920) and F16 (residual) it can now also be detected in Ribe, just as the fragment of twisted silver rod from phase F12 (c. 830–c. 860) can be interpreted as a piece of silver for payment.

7. Discussion

7.1. Sceattas

The distribution of sceattas at the emporium of Ribe is very marked (Fig. 8.10). The vast majority of coins are concentrated in the area of parcelled-out plots centrally located in the emporium, while there are only a few sceattas in other parts of Ribe (Søvsø 2018; 2020). The distribution clearly shows that countless transactions involving sceattas took place here, and as this excavation has documented, it is predominantly inside the houses themselves that circulation and thus losses took place.

In relation to the origin of the emporium, in terms of both the dating and the character of the oldest settlement, it is striking that there might be a very early phase without the presence of sceattas. This makes it possible that the

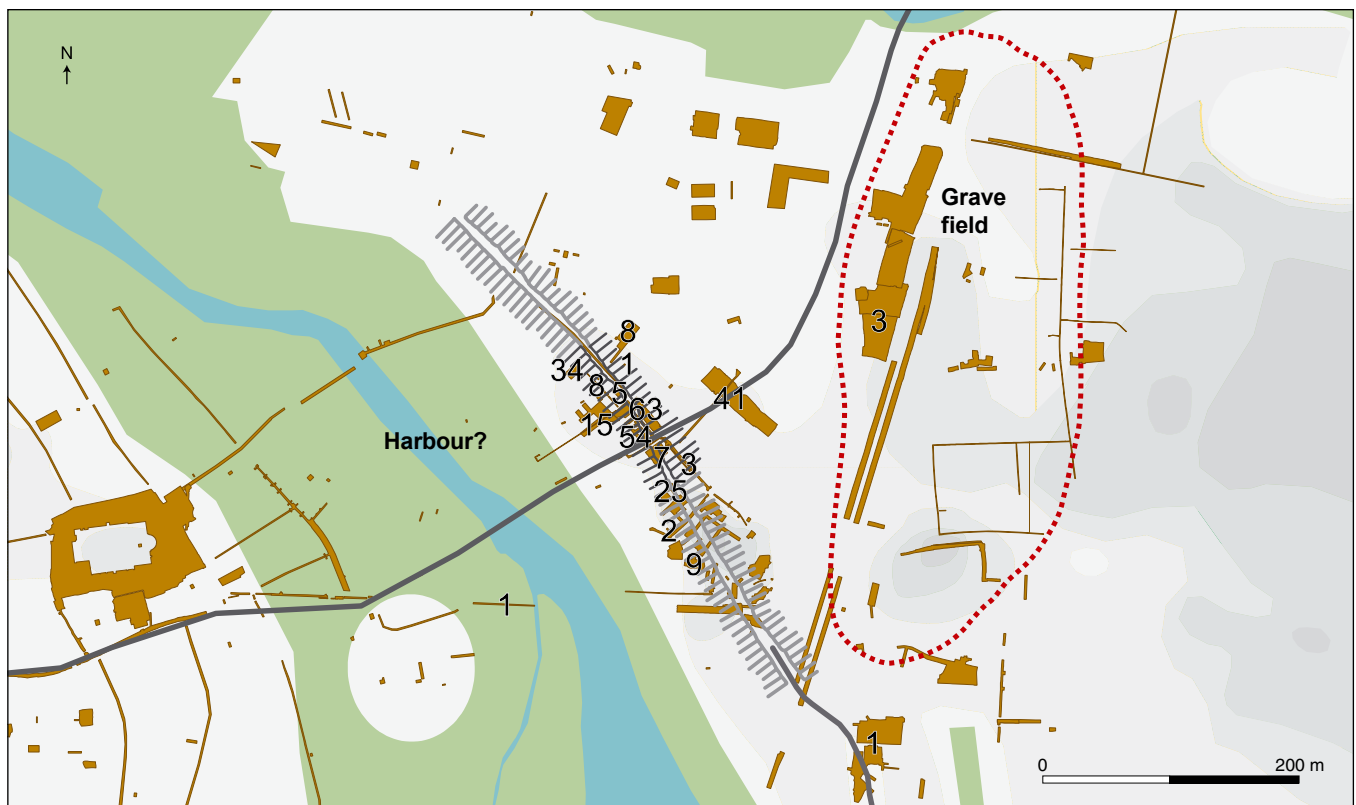


Figure 8.10. Simplified elements from eighth-century Ribe on a topographical model of the landscape. Excavated areas in brown. Numbers of sceattas from each excavation shows a dense concentration along the lane with the plots on each side, while coins are very rare in the outskirts of the emporia.

founding of the emporium at Ribe took place before the minting of sceattas – especially the Continental Runic coins – began, although it cannot be denied that there may be merely coincidences behind the missing coins in the earliest phase F3. Based on the excavation methods used over the years, it is especially the evidence from ASR 7 Sct. Nicolaj Gade 8 and SJM 3 Posthustorvet, both without coins in the earliest phase, that provides the most secure information, even though they together comprise no more than c. 150 m². A dating of the oldest layers to before c. 695 is not contradicted by other datings but can still not be concluded with certainty.

The oldest type of sceat in Ribe is the Continental Runic. The number is not large; at SJM 3 there were only two coins found in phases F4 and F5, while at ASR 9 Posthuset, there were three in phase B and one in a somewhat later context. The absence of other primary sceattas, that is, sceattas whose minting period ends no later than c. 715/20, is striking. Why are they missing? The mint place of the Continental Runic type 2c coinage is still debated. Metcalf & Op den Velde (2009–2010, 144) propose Friesland, while a few years earlier, they also placed parts of the coinage in the ‘Big Rivers region’ (Op den Velde & Metcalf 2007, 96). They attribute primary Porcupines to somewhere in what Op den Velde & Metcalf refers to as the ‘Big Rivers region’ (Rhine, Meuse, etc., e.g. Dorestad and/or Domburg), while secondary porcupines are attributed to both the southern and northern parts of the Netherlands, depending on the subvariety. The Ribe coins are often so poorly preserved that they cannot be determined more closely than secondary, and their presumed place of minting can therefore not be specified.

Recently, Theuws (2018) has argued that both Continental Runic and Porcupines, instead of being from what is now the Netherlands, were produced at various places in England and that their frequent occurrence on the continent is due to the purchase of wine from the Rhine for use in the numerous English churches and monasteries. This fact, however, cannot explain the presence of either Continental Runic or secondary Porcupines in Ribe, as the cultivation of grapes and the production of wine did not take place so far north. Apart from a single sceat of English origin – a Series J, BMC 37 (Feveile 2006a; Cat. ASR 9, no. 7) – there are no other types of objects that indicate close contact between Ribe and England around AD 700. On the contrary, the imported artefacts and goods (basalt, glass from tesserae and vessels, a few pieces

of jewellery, imported ceramics) all point to continental north-western Europe, whether arriving directly from the Rhine (the ‘Big Rivers region’), or via intermediate stations and contacts further north in the Netherlands.

When the coins are shown schematically according to the phase to which they belong, it gives the impression that coins appearing in the same phase also circulated at the same time (Table 8.4; Feveile 2008, fig. 7). This is generally correct; it is often not possible to divide a phase into shorter events with certainty. In phase F5 at SJM 3 Posthustorvet, however, the contours of a shift internally in the phase from predominantly secondary Porcupines to Wodan/monsters become apparent. The detailing of the stratigraphic observations, however, has its limitations, as in several cases these are dark, brown, and rather homogeneous layers where the formation history cannot necessarily be determined at a micro-level. Thus, the schematic representation in phases where Continental Runic and secondary Porcupines circulate and are lost simultaneously may well be correct. On the other hand, it is not unreasonable, based on the data that especially SJM 3 and ASR 9 provide, to imagine a development where Continental Runic circulated almost exclusively until perhaps in the late 710s, when they were replaced by secondary Porcupines, which themselves were replaced by Wodan/monster sceattas during the 720s.

The dating frameworks that are recognized for Continental Runic (c. 695–c. 710) and secondary Porcupines (c. 720–c. 740), and the dating used for the phases in Ribe (based partly on dendrochronological dating), all involve some uncertainty, so both explanatory models can in fact be correct. If one is to take the Ribe datings at face value, the datings of phases F4 and F5 could possibly suggest that Continental Runic continued to be in circulation and was also lost in the 710s, that is, a bit longer than the accepted dating frames suggest, and perhaps also overlapping for a shorter time with secondary Porcupines.

In Ribe, Porcupines are far more frequent than Continental Runic. At SJM 3 there are twelve Porcupines compared to two Continental Runic. In the whole emporium at Ribe, there are 35 Porcupines but only 6 Continental Runic, while only a single coin is of English origin (Feveile 2006a, Cat. ASR 9, no. 7). This distribution between Porcupines and Continental Runic in Ribe is in marked contrast to the distribution of the two series along the Danish part of the Wadden Sea. At 6 sites in this area, a total of 17 Continental Runic have been found, compared

to only 4 Porcupines (of which 1 is primary), while only 2 coins were English sceattas (Fig. 8.11; Bendixen 1981, cat. nos 42–43; Feveile 2019). Until sometime in the 710s, Continental Runic was almost exclusively dominant in south-western Denmark, both in the emporium at Ribe but also in the hinterland of the Wadden Sea.

I have previously suggested that the impression given by the finds indicates a deliberate Frisian push towards this part of the Wadden Sea coast (Feveile 2019). Continental Runic is attributed to the Frisian king Radbod (c. 690–719), and the mint is presumed to have been in Friesland, i.e. in northern Holland (Metcalf & Op den Velde 2009–2010, 145; for a critique of this interpretation, see Theuvs 2018, 46ff). King Radbod probably lost control of the main trading towns of Dorestad, Domburg, and Utrecht, among others, to the Frankish duke Pepin II in the early 690s (Op den Velde & Metcalf 2007, 115ff). It has been suggested several times that the Frisians played an active role in the founding of Ribe

around the year 700. This may be reflected in the many Continental Runic coins – perhaps Radbod’s – both in Ribe itself but especially in the surrounding region. It also may be that the Frisian king, after Dorestad and other towns were lost, was attempting to find a foothold in the border area with the Danes by means of expanding contacts and increased interest. Perhaps it was close contact between Ribe and the northern parts of Friesland that excluded primary Porcupines from circulating in Ribe. It can hardly be coincidental that Continental Runic appears in large numbers around Ribe as well as at high-status places in Eastern Denmark – the Danish king’s possible residence, according to Søvssø (2018) – practically to the exclusion of other types. If the picture is valid, and a similar concentration of Continental Runic cannot be detected further down the Wadden Sea coast, the picture can be interpreted in such a way that the (north?) Frisian interest focused on the area that soon came to house Scandinavia’s first emporium. The sailing route through the Wadden Sea into Ribe went close by the rich settlements south and south-west of the emporium (Søvssø 2020, 135).

Of course, it cannot be ruled out that the coins were instead brought back by Danish merchants from Friesland, where they may have encountered coin-using communities, whether directly at one of the major trading venues or through other contacts. But again, their contact to the south would need to have been limited to areas where only Continental Runic was in use. Otherwise, the picture in south-western Denmark cannot be explained in a satisfactory way.

Did a Danish royal power observe – and perhaps also actively participate? When the minting of Continental Runics ceased, either as early as c. 710 or perhaps five to ten years later, they were replaced by secondary Porcupines, whose place of origin may have been both in the southern, Frankish-controlled part of the present-day Netherlands or, for some varieties, in the northern part, Friesland, which was outside direct Frankish control.

After the introduction of the Wodan/monster type in the 720s, it soon became completely exclusive and only exceptions of other coin types slip into the emporium over the following century. Ribe eventually got its own coin – or, as is suggested by Søvssø (2018), the Danish royal power, based in Lejre, minted Wodan/monster sceatta for use at its three international trading places: Ribe, Gross Strömkendorff (Reric), and Åhus.

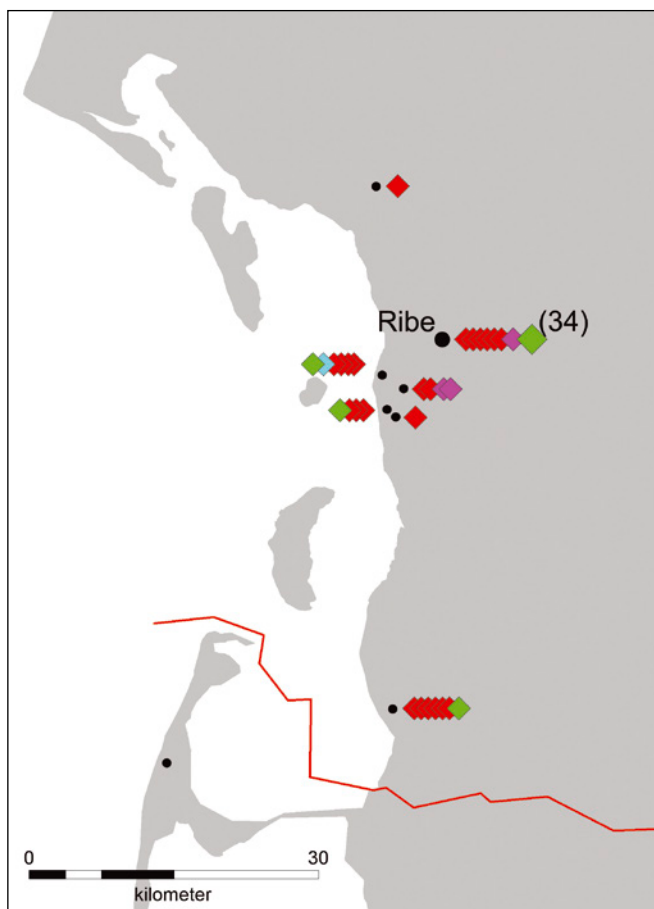


Figure 8.11. Sceattas that could have been deposited before the circulation of Wodan/monster sceattas in the 720s. Red: Continental Runics; blue: primary Porcupines; green: secondary Porcupines; purple: English series J and G2. After Feveile 2019, with additions.

A very tight control of the circulation is seen at Ribe, as only a few other coin types find their way to the emporium and are lost. At SJM 3 Posthustorvet, it is a single secondary Porcupine from phase F7 (c. 740–c. 750); at ASR 9 Posthuset, a tertiary Porcupine from phase D (c. 760–780) and an imitation of a Continental Runic in phase D/E (c. 760–790); while on ASR 7 Sct. Nicolaj Gade 8, a single so-called Maastricht sceat was registered from workshop horizon 6 (last part of the 700s). It was perforated and therefore demonetarized.

7.2. Pennies and other coins

As can be seen, no coins from the emporium were found at Posthustorvet that are later than Wodan/monster sceattas. This may be due to conservation conditions or just coincidence. In any case, coins became far fewer in number in the ninth and tenth centuries, a phenomenon that is not only limited to Ribe but is found at many other sites (Blackburn 2008, 34ff). Sixteen coins from other excavations in Ribe date to the period between c. 825 to the middle of the 900s (Fig. 8.12).



Styca, ASR 2165 X6



Denar, Louis the Pious, SJM 348 X784

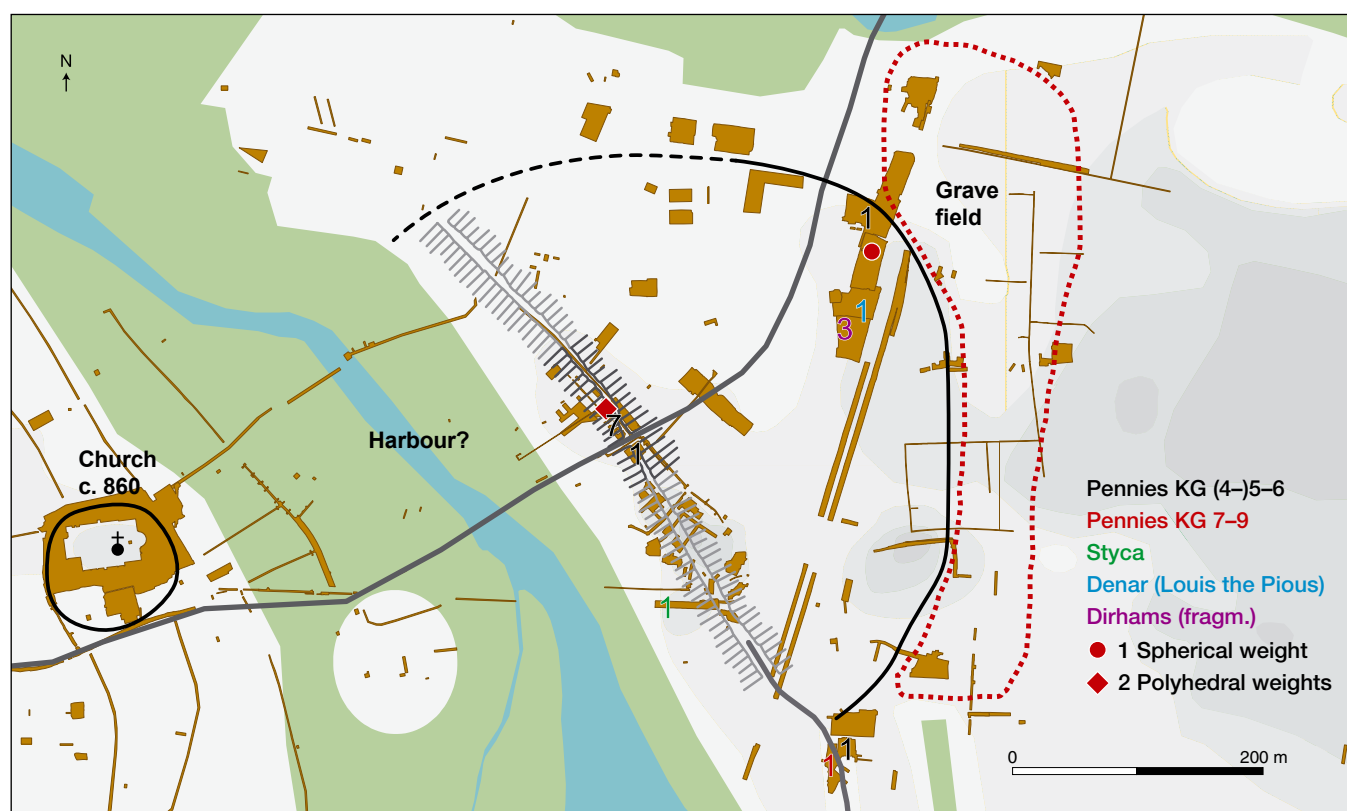


Figure 8.12. Simplified elements from ninth-century Ribe on a topographical model of the landscape. Excavated areas in brown. Numbers of coins from each excavation shows a concentration of KG(4)–5–6 along the lane with the plots on each side, while a few foreign coins are from the outskirts of the emporia.

The most common type is pennies (Feveile 2006a). Some are without definite imprint, some can be carefully determined as Malmer's KG(4?)-5-6, and others with certainty belong to KG 5. Two of the coins are from the edge of the emporium, while the last eight were found centrally in the area divided into plots. It should be noted, however, that some of the seven coins from ASR 9 Posthuset probably should be perceived as a small treasure find or a lost purse, as the coins were found close to each other in the same soil layer and four of the coins were corroded together in pairs. Instead of seven single coin losses, they can probably be reduced to three, maybe four losses, so that the total ten KG 4-6 represent six different instances of loss. There is general consensus that KG 5-6 types are Ribe coins (Malmer 2007; Williams 2007; Hilberg 2014) while Moesgaard (2018) has proposed that the KG 4 with embossed 'Face/forward-looking deer' type should also be associated with Ribe. Moesgaard's proposal was strengthened when a hoard of 258 coins of just that type, as well as four KG 4 with embossed 'Ship/forward-looking deer', a total of 262 coins, was excavated just a few kilometres south of Ribe in 2018. No other items such as jewellery or clip silver was found with the coins, and none of the coins bore the marks of being perforated or otherwise demonetized. A stamp analysis of the 'Face/forward-looking deer' type shows that they were made with many different stamps, suggesting a fairly extensive production that could easily include several hundred thousand coins. At the same time, it turns out that the 'Ship/forward-looking deer' type must also be added to types belonging among the ninth-century Ribe coins. It can best be understood as a half-penny, assessed on the basis of the weight of relatively few coins (Feveile 2021).

There are only a few other coin types from the 800s and the first part of the 900s present at Ribe. It is characteristic that they are all merely found as single examples and at the outer edges of the emporium. This seems to imply that there was still a strict control of the coin circulation in Ribe into the ninth century.

A new contribution to our understanding of Ribe is that a bullion economy can now be documented sparingly here in the form of the two polyhedral weights, a spherical weight, and three dirham fragments. The bullion economy probably was not used until very late in the ninth century, continuing through the tenth and perhaps into the eleventh centuries, based on the dating of the spherical weights.

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Catalogue

List of coins with basic information. As the coins are corroded in different ways, the weight is not included. Further information and digital photos can be found at <http://sol.sydvestjyskemuseer.dk/> most conveniently through a 'simple search' using the ID number.

Cat. no.	ID number	Journal no.	Find no.	From Finds unit	Find method	A-no.	Construction	Phase	Remarks
1	200301485	SJM 3	x937	Finds unit x937	Wet sieving	A377	K21a	F9b	Roman coin, fragment, dupondius or sesterts
2	200324601	SJM 3	x1378	Finds unit x1363	Wet sieving	A882		F4	Sceat, Continental Runic, type 2c, only corrosion is preserved
3	200301827	SJM 3	x1397	Finds unit x1394	Wet sieving	A882		F4	Sceat, Porcupine
4	200301829	SJM 3	x1475	Finds unit x1475	Excavation, measured	A1093-1		F4a	Sceat, Porcupine
5	200301824	SJM 3	x1380	Finds unit x1370	Excavation, measured	A882		F4/F5	Sceat, Continental Runic
6	200301825	SJM 3	x1381	Finds unit x1370	Excavation, measured	A882		F4/F5	Sceat, Porcupine? Serie D, type 8 can not be ruled out
7	200301807	SJM 3	x1254	Finds unit x1209	Wet sieving	A590	K12	F5	Sceat, Wodan/monster
8	200301809	SJM 3	x1305	Finds unit x1281	Wet sieving	A871	K12	F5	Sceat, Porcupine
9	200301810	SJM 3	x1306	Finds unit x1281	Wet sieving	A871	K12	F5	Sceat, Wodan/monster
10	200301815	SJM 3	x1319	Finds unit x1281	Wet sieving	A871	K12	F5	Sceat, Wodan/monster
11	200301808	SJM 3	x1302	Finds unit x1284	Wet sieving	A868	K12	F5	Sceat, Porcupine
12	200301817	SJM 3	x1324	Finds unit x1294	Wet sieving	A882	K12	F5	Sceat, Wodan/monster
13	200301818	SJM 3	x1325	Finds unit x1294	Wet sieving	A882	K12	F5	Sceat, Porcupine
14	200301811	SJM 3	x1315	Finds unit x1309	Wet sieving	A885	K14	F5	Sceat, Wodan/monster
15	200301812	SJM 3	x1316	Finds unit x1309	Wet sieving	A885	K14	F5	Sceat, Porcupine
16	200301813	SJM 3	x1317	Finds unit x1310	Wet sieving	A871	K12	F5	Sceat, Wodan/monster
17	200301814	SJM 3	x1318	Finds unit x1310	Wet sieving	A871	K12	F5	Sceat, Wodan/monster
18	200301822	SJM 3	x1350	Finds unit x1311	Wet sieving	A882	K12	F5	Sceat, Porcupine
19	200301816	SJM 3	x1320	Finds unit x1312	Excavation, not measured	A871	K12	F5	Sceat, Wodan/monster
20	200301819	SJM 3	x1336	Finds unit x1326	Wet sieving	A894	K12	F5	Sceat, Wodan/monster
21	200301820	SJM 3	x1344	Finds unit x1326	Wet sieving	A894	K12	F5	Sceat, Wodan/monster
22	200301826	SJM 3	x1388	Finds unit x1377	Wet sieving	A882	K12	F5	Sceat, Porcupine (?)
23	200301821	SJM 3	x1347	Finds unit x1294	Excavation, measured	A882	K12	F5	Sceat Porcupine
24	200301802	SJM 3	x1156	Finds unit x1142	Wet sieving	A590		F5/F6	Sceat, Wodan/monster
25	200301805	SJM 3	x1168	Finds unit x1142	Wet sieving	A590		F5/F6	Sceat, Porcupine, only corrosion is preserved
26	200301806	SJM 3	x1169	Finds unit x1162	Wet sieving	A590		F5/F6	Sceat, Wodan/monster
27	200301828	SJM 3	x1443	Findunit x1174	Wet sieving	A624	K15	F6a	Sceat, Wodan/monster
28	200301803	SJM 3	x1159	Finds unit x1148	Excavation, measured	A590	K15	F6a	Sceat, Wodan/monster
29	200301804	SJM 3	x1161	Finds unit x1148	Excavation, measured	A590	K15	F6a	Sceat, Wodan/monster
30	200325040	SJM 3	x2175	Finds unit x1044	Wet sieving	A440		F7	Sceat, Porcupine
31	200301799	SJM 3	x1071	Finds unit x1055	Wet sieving	A440		F7a	Sceat, Wodan/monster
32	200301798	SJM 3	x1054	Finds unit x1050	Wet sieving	A440		F7b	Sceat, Wodan/monster
33	200325220	SJM 3	x2160	Finds unit x1769	Wet sieving	A548	K19b	F7b	Sceat, Unidentified, only corrosion is preserved
34	200301800	SJM 3	x1074	Finds unit x1068	Excavation, measured	A440		F7b	Sceat, Wodan/monster
35	200301796	SJM 3	x1027	Finds unit x1021	Wet sieving	A420		F8	Sceat, Wodan/monster
36	200301795	SJM 3	x1016	Finds unit x1013	Wet sieving	A396		F8a	Sceat, Wodan/monster, imbedded in corrosion
37	200301790	SJM 3	x987	Finds unit x977	Wet sieving	A396	K35	F8b	Sceat, Wodan/monster

Cat. no.	ID number	Journal no.	Find no.	From Finds unit	Find method	A-no.	Construction	Phase	Remarks
38	200301791	SJM 3	x1007	Finds unit x980	Wet sieving	A396		F8b	Sceat, Wodan/monster, type 31a
39	200301794	SJM 3	x1008	Finds unit x980	Wet sieving	A396		F8b	Sceat, unidentified
40	200301797	SJM 3	x1030	Finds unit x999	Excavation, measured	A396		F8b	Sceat, Wodan/monster
41	200301779	SJM 3	x0823	Finds unit x814	Wet sieving	A343		F9	Sceat, Wodan/monster
42	200298495	SJM 3	x881	Finds unit x837	Wet sieving	A343		F9	Sceat, Wodan/monster
43	200301785	SJM 3	x935	Finds unit x927	Wet sieving	A365		F9	Sceat, Wodan/monster
44	200301786	SJM 3	x966	Finds unit x949	Wet sieving	A391	K21a-0	F9a	Sceat, Wodan/monster
45	200301787	SJM 3	x967	Finds unit x949	Wet sieving	A391	K21a-0	F9a	Sceat, Wodan/monster
46	200301788	SJM 3	x973	Finds unit x963	Wet sieving	A391	K21a-0	F9a	Sceat, Wodan/monster, only corrosion is preserved, animal turned right
47	200301784	SJM 3	x923	Finds unit x920	Wet sieving	A361	K21a	F9b	Sceat, Wodan/monster, animal turned right
48	200301781	SJM 3	x883	Finds unit x896	Excavation, measured	A362	K21b	F9c	Sceat, Wodan/monster
49	200301783	SJM 3	x897	Finds unit x896	Excavation, measured	A362	K21b	F9c	Sceat, Wodan/monster
50	200301782	SJM 3	x889	Finds unit x889	Wet sieving	A362	K21b	F9c	Sceat, Wodan/monster
51	200301780	SJM 3	x832	Finds unit x841	Excavation, measured	A351	K21c	F9d	Sceat, Wodan/monster
52	200301778	SJM 3	x813	Finds unit x799	Wet sieving	A335		F9e	Sceat, Wodan/monster
53	200313767	SJM 3	x2170	Finds unit x2170	Control sample A335	A335		F9e	Sceat, Wodan/monster
54	200301777	SJM 3	x745	Finds unit x744	Wet sieving	Numerous		F9/F10	Sceat, Wodan/monster
55	200301775	SJM 3	x693	Finds unit x679	Wet sieving	A291		F10	Sceat, Wodan/monster
56	200301776	SJM 3	x695	Finds unit x685	Wet sieving	A291		F10	Sceat, Wodan/monster
57	200301830	SJM 3	x1700	Finds unit x1913	Wet sieving	A262	K22c/K23	F10/F11	Sceat, Wodan/monster
58	200301773	SJM 3	x660	Finds unit x665	Excavation, measured	A288	K22b	F10b	Sceat, Wodan/monster
59	200301774	SJM 3	x669	Finds unit x670	Excavation, measured	A288	K22b	F10b	Sceat, Wodan/monster
60	200301707	SJM 3	x457	Finds unit x457	Wet sieving	A239	K23b	F11	Sceat, Wodan/monster
61	200301710	SJM 3	x538	Finds unit x457	Wet sieving, Baulk 4	A239	K23b	F11	Sceat, Wodan/monster
62	200301772	SJM 3	x573	Finds unit x596	Excavation, measured	A256	K23a	F11	Sceat, Wodan/monster
63	200301771	SJM 3	x320	Finds unit x311	Wet sieving	A196		F12	Sceat, Wodan/monster
64	200301770	SJM 3	x15	Finds unit x10	Wet sieving	A1		F18	Sceat, unidentified, imbedded in corrosion.
65	200301640	SJM 3	x32	Finds unit x10	Excavation, measured	A1		F18	Civil war coin (c. 1250–1330), unidentified
66	200301484	SJM 3	x44	Finds unit x35	Wet sieving	A52		F17	Bracteate coin (15th cent.?), unidentified
67	200301641	SJM 3	x233	Finds unit x213	Excavation, measured	A65		F16	1 skilling 1812, Frederik VI 1808-1839



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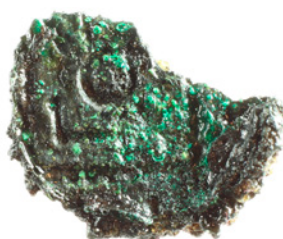
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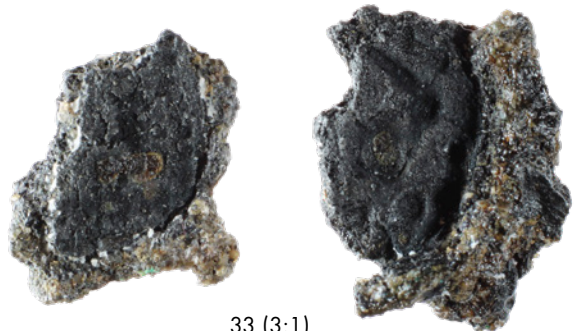
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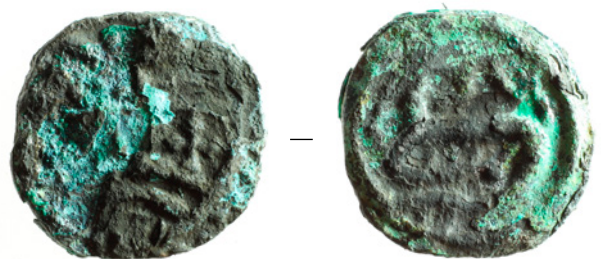
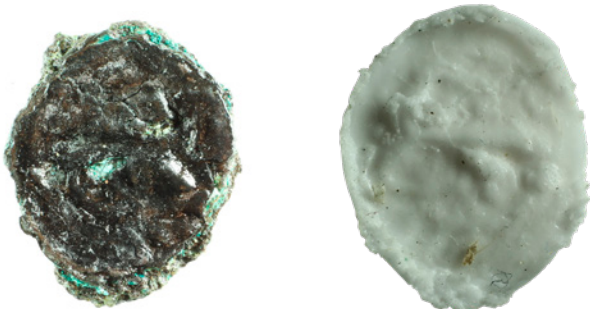
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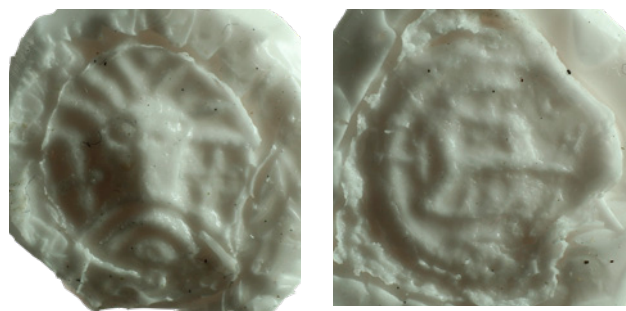




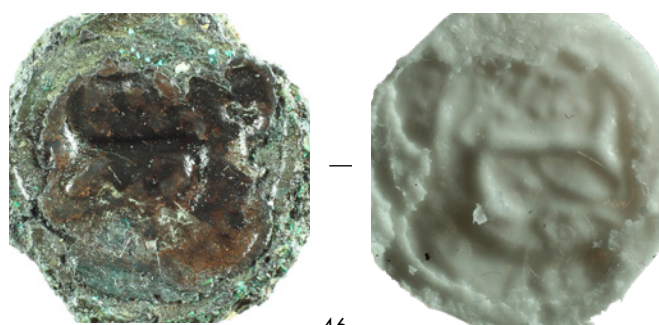
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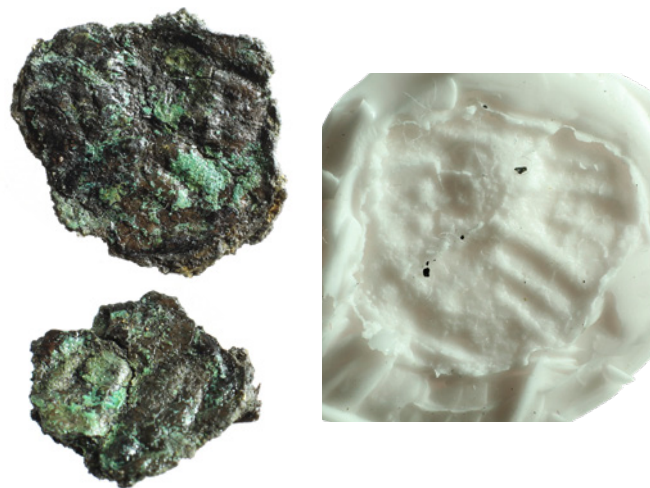
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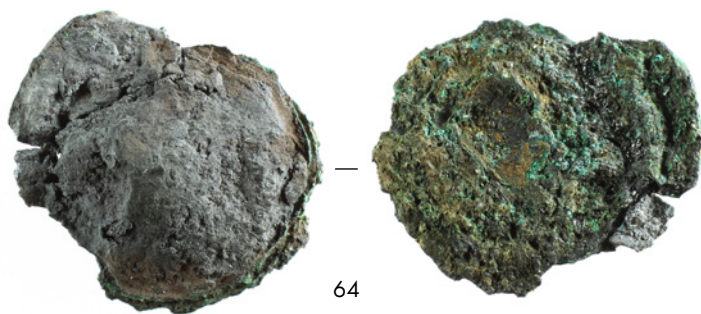
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65 (3:1)



66 (3:1)



67 (3:1)