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Cat. 520 Jernved, KG 4:1 Face/
Forward Looking Deer and Cat. 511 Gåbense, KG 3:1 Carolus/
DorZtat.

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Claus Feveile
Pennies for the King's Towns.
Ribe and Haithabu-pennies from 9th Century

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Pennies for the King's Towns

Ribe and Haithabu-pennies

from 9th Century

By Claus Feveile



This paper presents 540 pennies from Brita Malmer's combination groups 3-6 (KG 3-KG 6). The analysis divides the coin types into pennies from Ribe and Haithabu, the most prominent towns in Viking Age Denmark. The coins are divided into 10 main types, and a detailed review of types and varieties is presented, which are dated based on numismatic considerations, input from treasure finds and archaeological excavations. The period of minting is extended from c. 825-60 to cover the remaining part of the 9th century and, for one of the coin types, extended further to cover a period well into the 10th century. The coins are divided according to their use: as payment or in a demonetized form as coin-pendants. Based on the use of the coins as either payment or converted into coin-pendants and in combination with the geographical distribution, it is argued that there were two economic zones, one around Ribe and one around Hedeby in the 9th century where money was used as a managed local currency, so that pennies from the two towns largely excluded each other. In connection with the earliest penny from Ribe (c. 820/30-c. 850), one of the main types presented is a halfpenny – a significant innovation in Danish monetary history. Finally, the coinage is linked to a strong royal presence that had both the necessary power and control, as well as the organizational skills to implement and maintain coinage over quite long periods of time, and to a certain extent to enforce managed local currencies.

Danish coins from the 800s are rare, but the number of finds is steadily increasing, especially due to the use of the metal detector. In her first detailed presentation in 1966, Brita Malmer knew of 72 coins, while in her latest work, with finds catalog up to 2011, the number increased to approximately 153 coins (Malmer 2023, 27). In the spring of 2025, c. 540 coins are known belonging to the combination group KG 3-KG 6 from at least 116 find sites (Fig. 1). 266 coins, about half of the known examples, come from a single find: the Damhus hoard. Another very significant part of the growth since 2010 is made up of coins found with metal detectors,



Fig. 1. Distribution map with find sites of KG 3-KG 6.

predominantly within the current Danish borders.

The purpose of this paper is to provide a comprehensive overview, thus laying the foundation for future work on the coins, the dating, mintage and use of which will probably be subject to further discussion and clarification in the future. It has not been possible to fully examine the coins in as much detail as Malmer assumes in her work (Malmer 2023, 19-21).

The material consists of Malmer's published catalog from 2023, with coins added later, especially from the Coin and Medal Collection in Copenhagen. For the most recent finds, information from personal communication with Danish and Norwegian finders and museums has also been included. Most of the coins have only been available as images and usually without actual cleaning or conservation, which is only exceptionally carried out

on Danish coins at the National Museum in Copenhagen. This naturally affects the possibility and accuracy of using information such as weight and die identification.

The coins included in the study are limited to Malmer's combination group KG 3-KG 6, which she continues in 2023 to date overall within the period c.825-860. KG 2 is excluded from the study as it consists of imitations of Charlemagne's denarii from Dorestad. The mintage of these unofficial coins is disputed. Based on a treasure find from Dorestad (van Gelder 1980), among other things, Moesgaard has suggested a relatively nearby mintage site (2018, 131), while it has also been suggested that they were made somewhere north of the Carolingian Empire – perhaps Friesland or northwest Germany and thus outside the Danish kingdom (Hilberg 2014, 174, note 204; Malmer 2023, 27). Finally, it is also possible that the coins were

struck somewhere in Danish territory, for example in southern Jutland, as suggested by Blackburn (1986, 7) and Varenius (1994, 190). It should be mentioned that this combination group has also appeared in increasing numbers with metal detectors in Denmark and, as Malmer suggests, this interpretation also needs a closer look.

At the more recent end, KG 6 is included, while the largely contemporary coin type, KG 7, from the decades around 900 and well into 10th century is not included, as a very large proportion of the coins from the later decades are usually only generally attributed to KG 7-9. A more detailed identification would require careful examination, which has not been possible in this context.

Based on the numerous coin finds from Stolpe's 1870s excavations in Birka, Hildebrand (1887) suggested that the coin group must have been minted there. Building on this, Hauberg (1900) divided the oldest coin group into seven types. He rejected Birka as a likely minting site and suggested that based on the seven known sites, five of which were in the eastern part of Denmark, they should probably be attributed to Lund. Hauberg also mentions Schleswig (Haithabu) as a possibility due to the light weight of the coins, but the lack of finds led him to stick with Lund. The idea that the coins were minted within the Danish realm did not catch on, and in the coming decades the coins were usually referred to as *Birka coins*.

In Malmer's original work from 1966, the KG 3-KG 6 combination groups were considered as a chronologically contingent development and with only one minting site. The location of the site was proposed to be in Malmer's geographical zone II, which included Schleswig-Holstein, south of the current border with

Denmark, probably Haithabu (Malmer 2023, 195 and Fig. 9). Thereafter, all coins within KG 3-KG 6 were referred to as Hedeby coins in numerous contexts and publications. The attribution of all the coins to zone II (Hedeby) was reasonable given the find picture at the time. Since then, new finds were made and in the 1990s Ribe was introduced as the most likely mint for KG 5 and KG 6 (Metcalf 1996), while Moesgaard argued that Ribe in the 800s was an enclave with a coin economy in an almost coinless hinterland (Moesgaard 2007, 121). Recently, it has been suggested that KG 4:1 and KG 4:2 should also be attributed to Ribe (Moesgaard 2018b; Feveile 2021). Finally, Birka has once again been suggested as a mint for the coin type KG 4:3 Cockerels/Ship (Metcalf 1996, Bjarnestam 2022).

Based on the results of this paper, it is suggested that the types KG 3:1, 3:2, 3:4 and KG 4:3 can be attributed to Haithabu, which with some uncertainty probably also applies to KG 3:3 and KG 3:5, while KG 4:1, KG 4:2, KG 5 and KG 6 can be attributed to Ribe. This means we can assume that the two towns predominantly minted in parallel and simultaneously, although a more precise date and duration for the individual types, both within the two mints and between each other, is not known. For minting in both Haithabu and Ribe, a start date of around 820/830 is assumed. In Haithabu, I suggest at least a single variety as being from the second part of the 800s – and probably circulating until the change to Haithabu KG 7 around 900. In Ribe, coinage continues well into the 900s with KG 6, which probably fully belongs to the first part of the 900s.

Combination group (KG) 3-6

When Malmer divided the coins into combination groups in 1966, it was mainly based on stylistic features on the individual coin sides. Malmer describes the method

as strictly rational with objective and well-defined boundaries. The strict methodical approach has led to the separation of one side of a coin from the other. It requires in-depth knowledge of the entire coin group to keep track of which motifs from one side of a coin are combined with which motifs from the other. As a consequence of the separation of the two sides of the coins, studies often present case studies where one side of several coins are juxtaposed without any indication of how they are actually combined on the coins (Malmer 2007, Fig. 1; Malmer 2023 Fig. 3; Varenius 1994, Fig. 3).

The combination groups are quite varied in their content. The KG 3 types have the same main motif on one side, a corruption of the CAROLUS inscription with the addition of various signs and figures and are combined on the opposite side with five completely different main motifs (Dorstat-inscription, House, Man, Ship and Backward Looking Animal). Coins with a ship as a reverse motif have such distinctly different ship images that one could argue for a division into subtypes and not just varieties.

KG 4 consists of three types: Face/Forward Looking Deer, Ship/Forward Looking Deer and Cockerels/Ship. The latter, like Carolus/Ship, also contains significantly different ship motifs, and similarly, it can be argued that the main type should be divided into two subtypes.

Finally, KG 5 and KG 6 consist of only one type each, both with the motifs Face/Backward Looking Animal. Here, the difference between the two combination groups lies in the details and given the very different contents of KG 3 and KG 4, KG 6 could easily be seen as a fairly close variety of KG 5.

Types and varieties

With the greatly increased number of coins, the original combination groups are no longer

operational as the only reference to coin types. Therefore, a reorganization of the coins into 10 types based on a combination of the main motifs on both sides of the coin is proposed (Fig. 3-5 and 8-14). To facilitate comparison with Malmer's combination groups, they will continue to be named KG 3-6, combined with the coins' main motif. Malmer divided KG 4 into KG 4:1 and KG 4:2, arguing that the latter were 'mules' or 'reverse combined with reverse'. I believe the premise is wrong and therefore consider all the coins as real types, without a more complicated use of motifs or dies. Each of the 10 types can be divided into a number of varieties based on differences in usually both obverse and reverse designs (Fig. 6 and 7, Table 2, 54). Many of the 10 types are still so few that the individual varieties often end up being represented by just one or a few dies. With so few coins per variety, it is usually not possible to discern which varieties within a type are of crucial value for understanding the development, duration or chronology of the type, and which are simply due to variations within the die cutting. Therefore, a more detailed naming of the 10 types' varieties has not been made – this must await further, clarifying findings. Despite this, the following text points out selected varieties of the 10 types that are very likely to be of chronological value. This applies in particular to certain varieties within KG 3:1 Carolus/Dorstad and KG 5 Face/Backward Looking Animal. Similarly, there are also significant differences in the ship motif on the type of KG 3:4 Carolus/Ship and KG 4:3 Cockerels/Ship – but whether the reason is chronological or due to other factors cannot be determined.

Within the groups KG 3 to KG 6, the edge of the die, and thus the edge of the mintmark, can be designed in two ways, which Malmer refers to as decorated or smooth edge (Malmer 1966, 97-100; 2023, 46). Dense border



Fig. 2.

Examples of Dense decorated border (upper row) and smooth edge (lower row). Numbers refer to Catalog.

decoration means that the mintmark is delimited by a circumferential wire with a cross line, which can be either thin, dense lines or more triangular figures. Smooth edge means that the bead lacks a cross line (Fig. 2). Malmer argues for a chronological development from Carl the Great's official Dorestad coins with a clear bead edge, via KG 2, 3 and 4 with smaller and more closely spaced beads that

change to cross lines. KG 5 has an ever-increasing proportion of smooth edge, which is the only known edge type in KG 6 (Malmer 2023, 46). Dense decorated border is thus the oldest and changes to smooth edge border during the coinage. A significant contribution to Malmer's division, cf. below, is the identification of a group of KG 3:1 Carolus/Dorstad varieties with smooth edge.

KG 3 Carolus, combined with five reverses

The main motif on the CAROLUS side is a distorted inscription in two lines. The division into varieties is based on Malmer's arrangement by inscription and combination of added characters and figures (CA, CB, CC and CE), most of which are only combined with a single reverse variety. The exceptions are the CC1 and CC2 varieties, which are combined with *Dorstat*, *Dorztat*, *House* and *Ship*).

The entire group consists of approximately 82 coins, with uncertainty about the actual number as older, drawn specimens are probably representations of coins now in private ownership, cf. the comments on Cat. 34 (Malmer 45.1024 and 67.1045), Cat. 54 (Malmer 24.1018 and 66.1044), and uncertainty regarding Cat. 111 (Malmer 160.1072).



Fig. 3.
KG 3:1 Carolus/Dorstat with STAT and ZTAT. Numbers refer to Catalog.

KG 3:1 Carolus/Dorstats

The type consists of 51 coins, of which 24 can be identified at the level of variety. The main design on the obverse is a distorted two-line CAROLUS inscription, while the main design on the reverse is a distorted two-line DORSTAT inscription. There are a number of different varieties on both sides. Within the varieties, two distinct groups emerge. In one group, Dorstat is spelled STAT and the S is usually in line with TAT (Variety DS1a-e), while the other group consists of the spelling ZTAT, where Z is placed lower than TAT (Variety DZ1a-c). STAT is combined with other varieties on the CAROLUS side than ZTAT, except for the Carolus variety CC2, which is primarily seen together with the ZTAT variety, but is also known in one case together with STAT. Another significant difference between the two groups is the border design. STAT is found exclusively with dense border decoration, while 13 out of 17 ZTAT coins in the second group have a smooth border.

It should be noted that the special Carolus variety CD/CE, which is otherwise only known on KG 3:3 Carolus/Man, is found on a heavily fragmented coin whose reverse is probably a Dorstat-inscription with an axe at the bottom (Cat. 167). However, the coin

cannot be determined at the variety level and is therefore not included in Fig. 6. The coincidence in the very uncommon obverse variety between KG 3:1 and KG 3:3 confirms that they may be from the same workshop.

KG 3:2 Carolus/House

The type consists of 12 coins, eight of which can be categorised at variety level. Only two varieties of Carolus are used, CC1 (common with Dorstat and Ship) and CB2, which is only known in combination with a house on the reverse. The reverse is more varied, but the differences are minor. Cat. 507, which cannot be accurately determined at the variety level, differs on both sides from the other coins. The type has dense border decoration.



Fig. 4.
KG 3:2 Carolus/House.
Number refer to Catalog.

KG 3:3 Carolus/Man

The type consists of just two coins, both with minor differences. The two obverse varieties show significant differences, while there is less variation on the side with the man. The type have dense border decoration.



Fig. 5.
KG 3:3 Carolus/Man.
Number refer to Catalog.

Malmer 2023		KG 3 Carolus																						KG 4 Cockerel	
	Feveile 2024	CA1	CB1	CB4	CC8	CB2	CC1	CC2	CB3	CC7			CC6	CC3	CC4	CC10	CC1a	CC2a	CC5	CD1	CD1a	CE1	CC9	B1	B2
KG 3 DorSTAT	DS1a		1	1																					
	DS1b						1																		
	DS1c							1																	
	DS1d	2																							
	DS1e				1																				
KG 3 DorZTAT	DZ1a							5					1		4	3	1								
	DZ1b							1		1			1												
	DZ1c								2																
KG 3 House	H1a					3																			
	H1b					1																			
	H1c					1																			
	H2a					1	1																		
	H2b					1																			
	H3a																								
KG 3 Animal	DE3a																						4		
KG 3 Man	M1																			1		1			
KG 3 Ship	S1a																1								
	S1b							1																	
	S4a							1										1							
	S6a							2																	
KG 3+4 Ship	S2a							2									1	1						5	
KG 4 Ship	S5a																							2	
	S5b																							1	

Fig. 6.

KG 3:1-3:5 and KG 4:3. Combination diagram of obverse and reverse varieties. Only coins that can be identified at variety level on both sides are included. The distribution of the individual main types by variety is highlighted. Bold line vertically at variety CC1 and CC2 and horizontally at variety S2a shows the connection at variety level between different main types.

- KG 3:1 STAT

KG 3:1 ZTAT

KG 3:2

KG 3:3
- KG 3:5

KG 3:4

KG 4:3
- Dense border decoration

One coin with dense border decoration, one with smooth edge

Smooth edge

Malmer 2023		KG 4 Ship				KG 4 Face						KG 4 Face						KG 5 Face						KG 6 Face				
	Feveile 2024	S3a	S3b	S3c	S3d	F1a	F1aa	F1b	F1ba	F1bb	F2a		F2b	F2ba	F2c	F2d	F3a	F3a1	F3e	F3b	F3c	F3d	F4a	F4b	F4c	F4d	F4e	
KG 4 Forward looking deer	DE1a					63	26	27	1		6		7	1														
	DE1ab																	1										
	DE1b					29	13	112		1					1													
	DE2a	2		2																								
	DE2b	4																										
	DE2ba	1																										
	DE2c	1																										
	DE2d	2	1																									
	DE2e				1																							
KG 5 Backward looking deer	DE3a1																				2	4						
	DE3b																	1	1									
	DE3c															1	2	2		9	14	9						
	DE3d																			3								
KG 6 Backward looking deer	DE4a																						1	2	1			
	DE4b																						2			1		
	DE4c																						2					
	DE4d																						3					
	DE4e																										1	

Fig. 7.

KG 4:1-2, KG 5 and KG6. Combination diagram of obverse and reverse varieties. Only coins that can be identified at variety level on both sides are included. The distribution of the individual main types by varieties is highlighted. Bold line vertically at variety F3a1 show the connection at variety level between different main types.

KG 4:2

KG 4:1

KG 5

KG 6

Dense border decoration

One with dense border decoration, one with smooth edge

Smooth edge

Ob: Smooth edge, rv: Dense border decoration

KG 3:4 Carolus/Ship

The type consists of 13 coins, 10 of which can be categorised at variety level. The obverse varieties are all within the CC1, CC1a, CC2, CC2a and CC5 variants, where CC1 is common with House and Dorstat, while CC2 is common with Dorstat. The reverse consists of distinctly different ship shapes: S1a, S1b, S2a, S4a and S6, where S2a is shared with Cockerels. The type has dense border decoration.



Fig. 8.

KG 3:4 Carolus/Ship with four varieties of ships. Numbers refer to Catalog.

KG 3:5 Carolus/Backward Looking Animal

The type consists of three coins, all of which can be categorised at variety level. Only one obverse and one reverse variety are used, both of which are only found on this type. The three coins are struck with different dies. The type has been controversial (e.g. Malmer 2023, 43f; Metcalf 1996, 417f; Moesgaard 2007, 120f) as it combines a typical Haithabu motif (Carolus) with a typical Ribe motif (Backward Looking Animal, from KG 5). The type has dense border decoration.



Fig. 9.

KG 3:5 Carolus/Backward Looking Animal. Number refer to Catalog.

KG 4 – three distinctly different types

Malmer placed a group of pictorial motifs under the collective name KG 4. The group includes motifs of completely different appearances, both obverse and reverse, in the form of faces, ships, forward-looking deer and cockerels. Since 1966, the number of coins in KG 4 has increased significantly, and the group has surprisingly been found to include a halfpenny. KG 4 is therefore divided into three completely different types.

KG 4:1 Face/Forward Looking Deer

Only one example of this type was known in Malmer's 1966 text but in Malmer's 2023 text (catalog to 2011), two specimens were identified. 291 specimens are currently known, 262 of which are from the Damhus hoard. The last 10 years of metal detecting in Denmark and Norway has thus produced an

average of 2-3 coins per year. A die study has been carried out on the type and all coins have been connected to specific dies. 39 Face (obverse) dies and 61 Forward Looking Deer (reverse) dies have been identified. The face can be divided into a number of varieties, but there are three main varieties (F1a, F1aa and F1b), which are easily distinguished by the coiled snakes at the bottom of variety F1a and at the top of variety F1b. F1aa differs from F1a in that the hairlines have small dots on the inside. On the reverse is the forward-looking deer, here divided into two variants. In addition to the two common varieties, there are a number of rare varieties (F1ba, F1bb, F2a-c). The rare varieties should probably be seen as errors produced during the die cutting, and not deliberate variations with meaningful content related to factors such as chronology or internal production conditions at the mint.

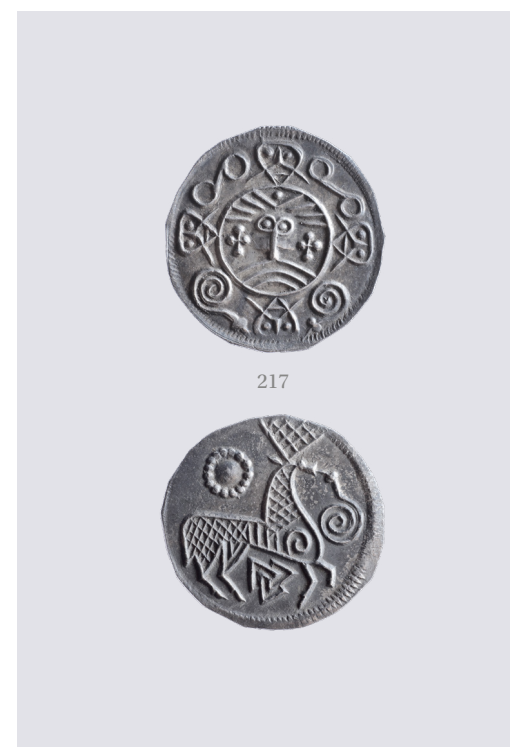


Fig. 10.

KG 4:1 Face/Forward Looking Deer. Number refer to Catalog.

It is important to emphasize that the type is understood as directly following Wodan/Monster-sceattas and especially the front en face has close stylistic features in common with the 'Wodan' on the sceatta. The face differs in only one respect: on a Wodan/Monster sceatta, the eyes are always pointed oval, while on the KG 4:1 they are circular. Furthermore, the shape of the face itself is clear on KG 4:1, while on KG 5 it is often reduced to a wide, triangular "nose", or completely missing (especially KG 6). All KG 4:1 Face/Forward Looking Deer have dense border decoration.

KG 4:2 Ship/ Forward Looking Deer – a halfpenny

The type is known in 19 specimens with many dies. It has previously been argued that this is a halfpenny that was minted with KG 4:1 Face/Forward Looking Deer (Feveile 2021; Feveile in press). The coin is smaller in diameter (average 17.6 mm) and weighs about half (average 0.53 g) of a KG 4:1 Face/Forward Looking Deer (average 19.5 mm and 0.98 g in the Damhus hoard). The ships are all of variety S3, which is only combined with forward looking deer, DE2 and thus clearly differs from the ships of KG 3:4 and KG 4:3. The type has dense border decoration.



Fig. 11.

KG 4:2 Ship/Forward Looking Deer.
Number refer to Catalog.

KG 4:3 Cockerels/Ship

The type is known in eight specimens, all of which can be categorised at variety level. The ships consist of three varieties, S2a (common with KG 3:4 Carolus/Ship) and S5a-b, while the cockerels consist of two varieties (B1, B2). All eight coins are part of three small die-links, each consisting of 3-4 dies and in die-link 11 the ship variety S5a is combined with S5b via cockerel variety B2 (Fig. 6). The type has dense border decoration.



Fig. 12.

KG 4:3 Cockerels/Ship with two varieties
of ships. Numbers refer to Catalog.

KG 5 and KG 6 Face/Backward Looking Animal

As previously mentioned, in 1966 Malmer separated the two types into their own combination groups, although the difference, which is only in detail, is significantly smaller than seen within the combination groups KG 3 and KG 4. The differences between KG 5 and KG 6 are seen on both sides of the coins. On the obverse, the differences can be seen in the appearance of snakes and a closed S or 8 figure in the border. The snakes on KG 5 are always coiled, while on a KG 6 they are represented as a closed circle with a clear dot in the middle and a line extending from the circle. In addition, the 8-like figures on KG 5 are always empty, while on KG 6 there is a clear dot in the middle. Similarly, on the reverse, the snake under the animal's belly is coiled on KG 5, while on KG 6 the snake appears as an encircled dot with a line.

Fragmentation or poor preservation means that several coins cannot be categorised further than KG 4:1, 5 or 6 (8 pieces), KG 4:1 or 5 (1 piece), KG 5 or 6 (12 pieces).

KG 5 Face/Backward Looking Animal

The type consists of 82 specimens, of which 46 can be categorised at variety level. Stylistically, three rare face varieties, F2d, F3a and F3a1, with dense decorated border, are so close to KG 4:1 that it would not be surprising to one day see a coin combining these face varieties with a KG 4:1 Forward Looking Deer (See Appendix). During the KG 5 mintage, the dies change edge from dense decorated to blank. Variant F3b is the only variant with dies with both types of edges. Variants F3c-F3e all have a smooth edge.

Malmer grouped the KG 5 animal according to the orientation of the crosshatching. In the division into varieties chosen here, this element is disregarded and a number of other criteria, such as antlers or dots beside the back or forelegs, are chosen instead. The type can be divided into an older group of varieties with dense border decoration and a more numerous, younger group with a smooth edge.

A special group consists of coins where the obverse variety is F3d. Here the style of the face is quite dissolved, there is often disorder in the hairlines and the cross at the cheeks usually consists of irregularly placed dots. This is

probably a late – the latest? – variety of KG 5, cf. its occurrence in several late finds, see below.

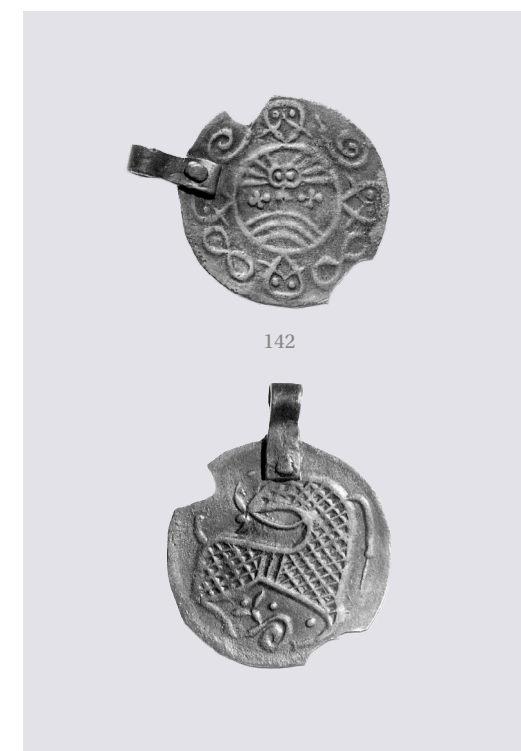


Fig. 13.

KG 5 Face/Backward Looking
Animal. Number refer to Catalog.

KG 6 Face/Backward Looking Animal

The type consists of 28 specimens, 13 of which can be categorised at variety level and, as noted above, differs from the closely related KG 5 in that the snakes on both the obverse and reverse are not coiled but consist of a line emanating from a dot circle. In addition, the 8-like figure in the obverse border always has a clear dot in the middle. The type has a generally homogeneous appearance with only minor differences between the face and animal varieties. The nose and the face of the animal itself have now completely disappeared. The type has a smooth edge.



Fig. 14.
KG 6 Face/Backward Looking
Animal. Number refer to Catalog.

Die-duplicates and Die-links

Tabel 1 presents 32 die-duplicates or die-links that include all the types except KG 4:1 Face/forward-looking deer. It consists of 24 links/chains, some of which have previously been presented, but otherwise await a complete publication of the Damhus hoard (Feveile 2021). It should be noted that the identification is made solely based on available photos, and that I present a number of die duplicates and die links that Malmer has not noted as links in her work. The relatively few coins within each main type result in die-duplicates or small die-links consisting of three-four dies. Most often, the small die-links are limited to the same variety on both obverse and reverse. In a few cases, different varieties are connected, for example, Ship S5a with S5b in die-link 11 and Face F2d with F3a in die-link 14 – but so far these are exceptions. Similarly, based on the current data it seems that the obverse varieties CC1 and CC2, which are used with reverse varieties of House (KG 3:2) and Ship (KG 3:4), as well as DorSTAT and DorZTAT (both KG 3:1), are not linked together. The same applies to the reverse variety Ship S2a, which is used with both the obverse motifs Carolus (KG 3:4) and Cockerels (KG 4:3).

The analysis shows that several KG 5 pennies in the Birka graves, both internally but especially across the graves, are struck with dies from the same die-duplicate/-link that also

include pennies from the rest of the Mälars area: Die-link 12: Helgö grave 14. Die-link 13: Birka graves 526 and 646, Helgö grave 14. Die-link 15: Birka grave 184 and Spillings II. Die-link 17: Birka graves 184, 806B, 943 and 963. Die-link 20: Birka grave 184, Spillings II. Metcalf (1996, 413f) has previously suggested that coins in the same grave could have arrived at the same time, as multiple coins in the same grave are often of the same type. Perhaps links across graves could be used to narrow down the number of episodes where a larger number of coins, for example a group of KG 5 coins, may have arrived in the Birka area in relatively few batches and without first entering into a monetary use, transformed into coin-pendants and finally, over a longer period of time, ended up as grave goods in selected graves.

The few and very short die-duplicates/-links clearly indicate that, with the exception of KG 4:1 Face/Forward Looking Deer, we still have limited insight into the complexity, duration and scope of the minting. The relatively few die-duplicates and die-links we see within the other nine main types present a picture akin to the situation for KG 4:1 before the Damhus hoard (Moesgaard 2018, comments in the catalog text about links). Given this, it is not at all unreasonable to imagine issues of at least the same size as KG 4:1 Face/Forward Looking Deer, which was probably produced in the 100,000s (Feveile 2021, 58).

Table 1.
Overview of die-duplicates and die-links.

Number	Type	Variety	Findspot and catalog number
Die-duplicate 16	KG 3:1	CC4	OB: Hedeby140 = Schuby141
		DZ1b	RV: Hedeby140 = Schuby141

The table is continued on the next page

Number	Type	Variety	Findspot and catalog number
Die Link 2	KG 3:1	CC2	OB: Privat12<>(Hedeby?)13 = Ukendt14 = Hedeby15 = Gåbense511
		DZ1a	RV: Privat12 = (Hedeby?)13 = Ukendt14 = Hedeby15 = Gåbense511
Die Link 3	KG 3:1	CC10	OB: Lerchenborg38 <> Birka39 = Hedeby40
		D*, DZ1*, DZ1b	RV: Lerchenborg38 =? Birka39 <> Hedeby40
Die Link 4	KG 3:1	CA1	OB: Birka1<>Kastanjehøj163
		DS1d	RV: Birka1 = Kastanjehøj163
Die-duplicate 5	KG 3:1	C*, CC3	OB: Ukendt33 =? Truso493
		D*, DZ1b	RV: Ukendt33 =? Truso493
Die-duplicate 6	KG 3:1	C*, CC3	OB: (Hedeby?)34 ? NO
		DZ1b	RV: (Hedeby?)34 = Gl. Lejre159
Die Link 7	KG 3:2	CB2	OB: Hedeby137 <> Hedeby138 = Birka139
		H1a	RV: Hedeby137 = Hedeby138 = Birka139
Die-duplicate 8	KG 4:2	S3a	OB: Tissø115 = Damhus409
		DE2a	RV: Tissø115 = Damhus409
Die Link 9	KG 4:2	S3a	OB: Järrestad123 = Spangereid124 <> Löddeköpinge126
		DE2b	RC: Järrestad123 = Spangereid124 = Löddeköpinge126
Die Link 10	KG 4:2	S3*, S3c	OB: Helgenæs181 <> Damhus264
		DE2a	RV: Helgenæs181 = Damhus264
Die Link 11	KG 4:3	B2	OB: Ukendt118 = Strøby-Toftegård182 =? Bakkegården183
		S5a, S5b	RV: Ukendt118 <> Strøby-Toftegård182 <> Bakkegården183
Die Link 12	KG 4:3	B1	OB: Helgö129 = Helgö130
		S2a	RV: Helgö129 <> Helgö130
Die Link 13	KG 4:3	B1	OB: Birka131 = Birka132 = Helgö133
		S2a	RV: Birka131 <> Birka132 <> Helgö133
Die Link 14	KG 5	F2d, F3a	OB: Birka61 <> Bakkely513 <> Nørholm169
		DE3c	RV: Birka61 = Bakkely513 = Nørholm169
Die Link 15	KG 5	F3*, F3c	OB: Birka62 = Spillings63 = Foldager517 =? Kaupang68
		DE3c	RV: Birka62 <> Spillings63 = Foldager517 = Kaupang68
Die-duplicate 16	KG 5	F3b	OB: Birka64 = Foulum Vest156
		DE3c	RV: Birka64 = Foulum Vest156
Die Link 17	KG 5	F3c	OB: Birka66 = Birka143 = Birka144 = Birka142 = Birka145 = Hillerslev209
		DE3c	RV: Birka66 = Birka143 = Birka144 <> Birka142 = Birka145 = Hillerslev209
Die Link 18	KG 5	*, F3*, F3c	OB: NO Birka70 = Bjern199=Giek71=?Alt-Arch77 NO =? Grisebj122=Birka153
		DE3*, DE3a1, DE3c	RV:Lønb207g=Birka70<>Bjern199=Giek71= Alt-Arch77=Lønb207d<> Grisebj122=Birka153

Number	Type	Variety	Findspot and catalog number
Die Link 19	KG 5	F3b	OB: Lupawa73 <> Bregninge206
		DE3c	RV: Lupawa73 = Bregninge206
Die Link 20	KG 5	F3c, F3d	OB: Spillings78 <> Birka146 = Lakenheath147
		DE3c	RV: Spillings78 = Birka146 = Lakenheath147
Die Link 21	KG 5	F*, F3d	OB: Gniezno79 =? Halland148 = Terslev149 = Dalszewo491<>Terslev150
		DE3a1	RV: Gniezno79 = Halland148 = Terslev149 = Dalszewo491 = Terslev150
Die Link 22	KG 6	F4*	OB: Sejerø104 <> "Schlesien VII"490
		DE3-4*	RV: Sejerø104 = "Schlesien VII"490
Die Link 23	KG 5	F3d	OB: "Halland"151 = "Cuerdale"152
		DE3c	RV: "Halland"151 <> "Cuerdale"152
Die-duplicate 24	KG 5	F3b	OB: Sdr. Hygum173 =? Sejlgård495
		DE3c	RV: Sdr. Hygum173 =? Sejlgård495
Die-duplicate 25	KG 5	F3d	OB: Fæsted157c =? BjerndrupII196 = Bjerndrup198 = Bjerndrup201
		*, DE3c	RV: NO BjerndrupII196 = Bjerndrup198 = Bjerndrup201
Die-duplicate 26	KG 5	*, F3d	OB: Bjerndrup200 = Roager208a NO
		DE3b	RV: Bjerndrup200 = Roager208a = Roager208c
Die-duplicate 27	KG 5	F3b	OB: Roager208b = Bramming216 =Lviv Oblast506
		DE3d	RV: Roager208b = Bramming216 =Lviv Oblast506
Die-duplicate 28	KG 5	F3*	OB: Nidogård211 =? Klaks Møllevej508
		DE3*	RV: Nidogård211 = Klaks Møllevej508
Die-duplicate 29	KG 6	F4b	OB: Terslev85 = Toftum Næs165
		DE4a	RV: Terslev85 = Toftum Næs165
Die-duplicate 30	KG 6	F4a	OB: Näsby135 = Ukendt134
		DE4b	RV: Näsby135 = Ukendt134
Die-duplicate 31	KG 6	F4*, F4a	OB: Grisebjerggård86 =? Gjerrild Klint99
		DE4c	RV: Grisebjerggård86 = Gjerrild Klint99
Die Link 32	KG 6	F4a	OB: Waterneverstorf91 <> Slubbemåle100 ? Træhede93
		DE4d	RV: Waterneverstorf91 = Slubbemåle100 = Træhede93
Die-dublikate 33	KG 3:5	CC9	OB: 43Birka = 524Skumsnes
		DE3a	RV: 43Birka = 524Skumsnes
Die Link 34 See Appendix	KG 4:1/ KG 5	F3a1	OB: 525Grønhøjgård = 58Birka
		DE1ab, DE3b	RV: 525Grønhøjgård <> 58Birka

Mint and date of issue

Malmer dates KG 3, KG 4 and KG 5 to 820s (Malmer 2023, 30), while KG 6 is given as both “slightly later” (Malmer 2023, 41), or “c.850 with a wide margin in both directions” (Malmer 2023, 40). Significantly, no date is given for the coins or their circulation period, even though various publications date KG 5-6 to the period c. 840-860. As a result, the dating (and thus the circulation period?) of the individual combination groups, but especially KG 3 and KG 4, appears very narrow and leaves the impression of a very short-lived and precisely dated coinage, which I do not consider correct. A good example is the Giekau hoard, Kr. Plön, a hack silver hoard consisting of both objects and coins. A single KG 5 penny is set as the end coin for the Haithabu coins at 825, while the many Carolingian, Arabic and English coins have end coins in the period 900-921 and the TPQ of the hoard is thus 921 (Wiechmann 1996, 97). In my opinion, the single KG 5 penny is not a significantly older coin, but rather has been interpreted that way because of an overly narrow and earlier dating of the KG 5 penny. The one KG 5, which is also die-duplicate with a penny in the Bjerndrup I hoard (TPQ 910/11) (Brøgger & Hartvig 2021), was probably made in the mid-800s at the earliest or, not at all impossible, right up to around 900.

Today, there is widespread agreement that the entire series KG 3 through KG 6 was either fully, or at least predominantly, minted in either Ribe (KG 4:1, KG 4:2, KG 5 and KG 6) or Haithabu (KG 3:1, KG 3:2, KG 3:4, KG 4:3). The types with only few known coins are most in doubt. With only two known finds of KG 3:3 Carolus/Man, one of which is without provenance, the minting site must of course be questioned. The same goes for KG 3:5 Carolus/Backward Looking Animal. The

type is made with dies from Carolus variety (CC9) and one Backward-looking animal variety (DE3a), which are only known on this type. Finally, it has also been suggested that KG 4:3 Cockerels/Ship could be a Birka coin (Metcalf 1996; Bjarnestam 2022). I consider this possibility unlikely, as the ship variety (S2a) is also used on KG 3:1 Carolus/Ship, and all but one of the coins from the Mälars area (Cat. 129 Helgö) were transformed into pendants and only found in graves/burials.

The Ribe mintage

Ribe was established as a wic, or emporium, c. 690/700. In a limited area along the northern bank of the river, the stratified layers are preserved up to three meters thick and consist of house remains, floor layers, hearths, workshops and outdoor areas. These can be divided into phases of 10-30 years, dated by dendrochronology or Bayesian modelling of C14 dating, from the foundation of the site up to the early 900s. From Ribe, 282 sceattas are known, which in the oldest phases consist of secondary Porcupines, and to a lesser extent Continental Runic and a few other types. Then there is an abrupt shift to Wodan/monster c. 725, which is then almost exclusively present until the early 800s. These finds are clear evidence of the extensive use of coins in a managed local currency, with forced exchange for the city's own coins. In total 11 pennies from the 9-10th century were found in Ribe. Eight are from the area with thick culture layers, two are from the inn-fill of a pithouse on the southern outskirts of the Town and the last is from the northern section of the ditch that surrounded the town (Feveile 2023). One of the pennies from the pithouse is a KG 7-9, while the others are either certainly identifiable as KG 5 or are extremely corroded coins which can be identified with less certainty as belonging to groups KG 4:1, 5 or 6.

At the ASR 9 Postoffice excavation in 1990-91, the phases were referred to as phases B-H/I. The preservation conditions allowed dendrochronological dating in phases B and C, while the later phases were dated based on the artefacts in each layer. The last phase with Wodan/monster-sceattas, phase G, was dated to 800-820 and the subsequent phase H/I with pennies, including KG 5 Face/forward-facing deer, to 820-850. Crucial to the dating of the most recent phase, H/I, was a Byzantine lead seal and the KG5 coins themselves (Feveile & Jensen 2000, 14). The authors used Malmer's then recognized dating of the KG5 coins to a short period around c. 825.

In 2017-18, a research excavation, SJM 3 Posthustorvet, was carried out a few meters from the previous excavation, published under the title Northern Emporium. Here, the relevant phases are F3 to F14. Again, the preservation conditions only allowed dendrochronological dating of a selection of the phases, F5 to F9, while the earliest and latest phases were dated mainly on the basis of Bayesian modelling of C14 dates. Based on this modelling, the phases were dated to shorter intervals of c. 10-30 years. The most recent finds of Wodan/monster-sceattas occur in phase F11 (c.810-c.830) with three pieces and phase F12 (c.830-c.860) where only one specimen was found. The subsequent phases unfortunately yielded no finds of either Danish pennies or other coin types, except for a few 13-14th century medieval coins in the much later high medieval phases.

Comparing the phases from the two studies means that we must extend the dating of ASR 9 Postoffice excavation phase H/I to include the entire period c.820/830 – c.880 (Croix et al 2022, 56f). Furthermore, one must be cautious with both dates and emphasize

that this is based on Bayesian Modeling of the C14 dating. Both the start and end dates can, without conflicting with the modeling, be shifted at least a decade in each direction.

An overall conclusion on the cessation of sceattas in Ribe is that they certainly circulated in the first few decades of the 800s and use of the coins possibly extended a decade or two later. From this, it follows that the subsequent pennies may similarly have been minted a little earlier or later than proposed by Malmer. 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 pennies of the type KG 4:1 or KG 5 would already have been in production c. 800, as previously proposed by Bendixen and later Søvsø (Bendixen 1981, 76f; Søvsø 2020, 166f).

The first minting of Ribe pennies is a rather unusual one, comprising a penny weighing c. 1 gram, KG 4:1 Face/Forward Looking Deer and a halfpenny, KG 4:2 Ship/Forward Looking Deer, weighing c.0.53 grams (Feveile 2025; Feveile in press). Although the two coin-types together make up about half of all known KG 3-KG 6 pennies, these coins can only be dated by stylistic features as succeeding Wodan/monster-sceattas and also being older than KG 5 Face/Backward-looking animal. The Damhus hoard, which consisted exclusively of KG 4:1 and KG 4:2 type coins, does not in itself contribute to a more precise dating, but shows that the two coin types are contemporary and together constitute a managed local currency. Neither do the other finds of the two types provide better dating information. While KG 4:1 Face/Forward Looking Deer does not appear in other hoards than the Damhus hoard, there is a single KG 4:2 Ship/Forward

Looking Deer in the Kislaya hoard in Russia, with TPQ 837/38. Neither of the two types appear in the later major hack silver hoards from the second half of the 9th or 10th century. Given the sparse background, the coinage and probably also the circulation must be placed within a shorter period, perhaps 10-20 years, in the period 820/30 up to c. 850.

With the switch to KG 5 at the latest, the minting of halfpennies probably ceased, and we can assume that KG 4:1 Face/Forward Looking Deer would soon have been withdrawn, as the weight of the vast majority of KG 5 and KG 6 coins weigh only c. 0.8 grams, a reduction compared to the c.1 gram weight of the KG 4:1 examples. However, it cannot be ruled out that the weight reduction did not occur until some time into the mintage of KG 5, as the early varieties of KG 5 (F2d, F3a and F3a1) include coins close to 1 gram, all with dense decorated borders. A few also have traces of a register hole/line from the blank's production, which is a feature that is quite prominent on the older KG 4:1 (Feveile 2025). KG 5 Cat. 169 weighs 1.02 grams, while Cat. 61 and 58, which both lack a little edge, but are given a little weight by partially preserved loops, weigh 0.91 and 0.96 grams respectively. As this is just a few specimens we may be looking at coins at the heavy end of a normal distribution around 0.8 grams. Whether the weight reduction from approx. 1 to 0.8 grams occurs at the same time as the change from KG 4:1 to KG 5, or slightly inside the KG 5 series, must be clarified through future finds.

There are several finds that clearly indicate that KG 5 was also used as a monopoly coin. This applies both to the seven pennies from the Postoffice excavation 1990-91 (if they were all KG 5?), which are perceived as a total loss (spread in the layers c. 2x4 m), but especially the pure KG 5 coin stacks that

have appeared in recent years in the South and West Jutland area: Roager, Fæsted and Lønborggård (Feveile et al 2025). The small coin stacks provide excellent insight into the contents of an ordinary, small portion of pennies, perhaps a purse, but do not in themselves contribute to the dating of the type. KG 5 pennies first appear in hoards in Spilling II with TPQ 870/1, far away from Southwestern Jutland.

In the Bjerndrup I hoard (TPQ c. 910/11), located approximately halfway between Ribe and Haithabu, Ribe KG 5 pennies is found together with Haithabu KG 7-9 pennies (as well as hack silver, Arabic and Western European coins). The variety in the hoard is face F4d, where the style is quite dissolved. The same variety is found in the Curedale? hoard (TPQ c.905) and the 'Halland' hoard (TPQ 939/40). It is not uncommon for older coins to appear in the large silver hoards, which are usually composed of very diverse objects and coin types. However, I would suggest that variety Face F3d belongs to the late production period of KG 5 – and can perhaps be seen as a sign of less regular conditions in the coinage before stabilizing again with the subsequent KG 6 issue.

If we accept the evidence from the Bjerndrup hoard that KG 5 appears together with KG 7 (or later) and that the absence of KG 6 is not a coincidence, this means that KG 5 and KG 7 circulated together shortly after 900 and that KG 6 was not yet in production. A similar type of composition is seen in the small coin stack from Frejlev in North Jutland, also a detector find (Feveile et al 2025), from a part of Denmark where Ribe and Haithabu coins are usually only found transformed into coin-pendants. The Frejlev stack consisted of six non-demonetized pennies, two of which are Ribe pennies, one KG 5 and one

KG 5/KG 6, while the four Haithabu pennies consist of two KG 7 and two KG 7/KG 8. Like the Bjerndrup I hoard, this small hoard also demonstrates that KG 5 and KG 7 pennies circulated simultaneously.

A significant extension of the production or at least circulation period of KG 5 pennies is in line with Moesgaard's suggestion that KG 5 was minted during much of the second half of the 9th century and was not replaced until around 900 by KG 6, which thus belongs to the first part of the 10th century (Moesgaard 2018a, 130; Moesgaard forthcoming). Another argument points in that direction: Unlike the other types, KG 3-KG 5, among KG 6 pennies there are several examples of clear half-bracteate strikes where the strike of the opposite side is seen in negative – a feature that is quite common on pennies from KG 7 onwards, dated to the 10th Century, but not known from KG 5.

The Haithabu mintage

Archaeological excavations in Haithabu have been ongoing for more than 100 years. As in Ribe, there are areas with extremely well-preserved cultural layers and detailed stratigraphy that, with modern excavation techniques, will undoubtedly provide as detailed and short phase divisions as in Ribe, while other areas do not offer the same possibilities. Haithabu was founded in the early 800s at the latest, but several studies point to the presence of settlements, detector finds and a few burials from the 700s, probably in the form of a "not ordinary farmstead". It wasn't until the 800s that the function of the site changed to an emporium and Viking town (Hilberg & Kalmring 2024).

At present, we know of 22 Danish pennies from the 9th century that were certainly or presumably found in Haithabu. These are 15 KG 3:1, six KG 3:2 and a single KG 6. The

finds are distributed between settlement/cultural layers (Cat. 13, 32, 47, 48 and 140), burial finds (Cat. 16, 40, 41, 50 and 52), the harbour (Cat. 3-6, 137, 13 and 505), and stray finds or finds without further context (7, 13, 34, 37 and 519). The main types KG 3:3, KG 3:4, KG 3:5 and KG 4:3 are not present among the pennies from Haithabu, which despite some corroded and fragmented pieces are better preserved than the pennies from the excavations in Ribe.

Some of the coins were found under conditions that indicate they were lost or deposited together (Wiechmann 1996; 2007). In pit 13, three KG 3:1 Carolus/Dorestad were found; two KG 3:1 from chamber tomb I and two KG 3:1 from chamber tomb III. In addition, due to corrosion on the finds, Malmer suspects that two coins without find information, both KG 3:1, must originally have been together and thus lost/deposited at the same time. The contents of a purse lost in the harbour consisted of six KG 3:2 Carolus/Hus, a Cristiana Religio denarius from Louis the Pious, and several hundred identical small glass beads of the small drawn cut bead type (Hatz 1985; Sindbæk 2012). Moving further away from Haithabu itself, the picture is a little less clear. Here we see finds where coins of different types appear at the same time. At Yderik in West Jutland, three coins, one KG 3:1 and two KG 3:4, were folded close together, making them unsuitable as a means of payment individually and at the same time unsuitable as coin-pendants. The same applies to some of the graves in Birka, where a combination of several types of coins from Haithabu was found in some graves (Grave 526: two KG 3:1, four, perhaps five KG 3:4 and one KG 4:2 and Grave 646: one KG 3:2 and one KG 4:3). However, in the case of grave finds where the coins have been turned into coin-pendants and far from Haithabu, we

must be significantly more cautious about the value of the statement. The coins may have been brought together on more occasions and through different channels over a long period of time. There are several examples from Birka, where coins from a presumably disparate instances of production are found as coin-pendants in the same grave (Audy 2018).

Looking at the situation in Haithabu in isolation, the findings clearly show that the different coin types within KG 3 are not mixed, which provides an important clue that the coinage is not as disorganized as Malmer assumed. Presumably, there was to some extent successive coinage, with changes between types within KG 3, or at least with changes within the main type (akin to the small differences between KG 5 and KG 6).

We can probably go a step further and point to a Haithabu coinage belonging to the second half of the 800s, thus extending the coinage significantly longer than Malmer estimated. Malmer considered KG 3 to be a short coinage contemporaneous with KG 4 and dated it to c. 825. Other researchers have previously argued against the very short period, whether it is only the minting itself or the total circulation period. Steuer pointed out that the settlement and burial finds from Haithabu show a continuous circulation of KG 3 pennies throughout the 9th century (Steuer 1974, pp 34).

In my analysis, I divide KG 3 into five types, KG 3:1 - KG 3:5, where the defining element of the five types lies in significantly different motifs on the reverse: Dorstat-inscription, House, Man, Ship and Backward Looking Animal.

Malmer describes KG 3 and KG 4 as all having a dense decorated border and sees this as an early feature, while KG 5, predominantly, and KG 6, exclusively, have a blank border (Malmer

2023, 46). By dividing KG 3:1 Carolus/Dorstat into two subtypes, where the difference lies in the spelling on the Dorestad side, a group of coins is distinguished where the spelling is ZTAT and where the majority of coins have a smooth edge – a late feature, cf. Malmer. It is probably contemporary with the large group of Ribe's KG 5 with smooth edge.

Pennies with ZTAT and smooth edge are found in the following contexts: Haithabu cultural layer from the second half of the 9th century (Cat. 15, 32); Haithabu pit house 13, TPQ 867 on Arabic coins (Cat. 140, see also 47 and 48); Haithabu Chamber Burial I, dated to the second part of the 9th century to the first few decades of the 10th (Cat. 52, see also 40); Haithabu Chamber Burial III, dated as Chamber Burial I (probably ZTAT and smooth edge, Cat. 41, see also 50); Haithabu Burial 56/904, dated to late 9th/early 10th century (Cat. 16). Outside Haithabu pennies with ZTAT and smooth edge are found in: Lerchenborg, TPQ 837/8 on an Arabic coin, but since the women's jewelry – corresponding to a complete jewelry set from a rich women's grave – must be dated to the late 9th or 10th century (Skovmand 1942, 108), the very early TPQ is without dating value (Cat. 38); Spilling II (TPQ 870/71), contains two KG 5 (Cat. 63, 78) and two KG 3:1, one of which is ZTAT and smooth edge (Cat. 35), and the other (Cat. 36) has a smooth edge, while S/Z is not preserved on the fragment. The obverse variety of the two coins is CC4, recorded on a total of four coins, and the other three are all combined with the reverse variety ZTAT.

It can therefore be concluded that pennies of the type KG 3:1 Carolus/Dorstat with the spelling ZTAT and smooth edge were produced in the second half of the 9th century and circulated until the minting of KG 7, which is usually placed in the decade around 900.

How we interpret the development among the coins that are more or less likely to be associated with the Haithabu mintage (All KG 3? and KG 4:3 Skib/Cockerels) remains uncertain. KG 3:1 Carolus/Dorstad, spelled with STAT and a dense decorated border, is stylistically the closest to the presumed model, KG 2. Moesgaard suggests that Carolus/House (dense decorated border) is a development from this, with the two gables of the house coming from the T's while the door comes from the A. Furthermore, the purse from the harbour at Haithabu suggests that the type circulated as a managed local currency for a period. Moesgaard also suggests that the reverse designs were only later changed to Man and Ship and thus considers these types to be Haithabu pennies as well (Moesgaard 2018a, 131). The few finds that contain both KG 3:1 and KG 3:4, Yderik and Birka burial 526, could indicate that the two types circulated simultaneously, but the sites are far from Haithabu, and they are demonetized, so the predictive value is not great.

Were halfpennies also minted in Haithabu, in the first period alongside pennies, as in Ribe? If so, it must be found among the types with dense decorated border – i.e. all main types and varieties other than KG 3:1 ZTAT. However, there is no such indication, based on the few weights that can be understood as accurate (considering effects of corrosion, fragmentation, attached loop), that any of the other types within the group of KG 3 pennies can be interpreted as halfpennies belonging to, for example, KG 3:1 Carolus/Dorstad (STAT) or appearing in other combinations (Feveile in press). As mentioned, Malmer concluded that KG 3 was probably minted at the same time as KG 4, and it is now clear, especially from the well-preserved coins in the Damhus hoard, that KG 4:1 has a weight

of around 1 gram. Among the KG 3 pennies, there are also several with a weight that is significantly above the average KG 3 weight of 0.8 grams. Could there be an early mintage with a weight of around 1 gram like in Ribe – or is it a random scatter with slightly heavier coins, but within the normal distribution of around 0.8 grams? The sample is too small at this point, but I would not be surprised if this turns out to be the case. Malmer lists eight coins that she attributes to "KG 2, later part", of which the four most complete coins (and without loops) are close to 1 gram in weight (Malmer 2023 1.1001, 2.1002, 5.1005 and 6.1006).

Another significant observation for the coins found in the settlement layers in Ribe and Haithabu is that none of the coins are demonetized by piercing, looping or significant bending. This also applies to the coins from the graves in Haithabu, which is in contrast to the coins in the burials at Birka, all but one of which have been transformed into coin-pendants. This is particularly evident in Haithabu burial 56/904, where the coin, as the only burial gift, was placed at the waist – perhaps it was in a purse or in the corpse's hand as payment in coin for the crossing to the realm of the dead? (Arents & Eisenschmidt 2010, Plate 92, 904).

The coins in the two Viking towns were used as coins from their introduction probably in the 820s (Fig. 15). In Ribe, the penny and half-penny replaced an existing monopoly coin, the Wodan/monster-sceattas, while in Haithabu the minting of coins began with the pennies. Presumably not as direct imitations of Charlemagne's official Dorestad denars, but rather as imitations of imitations, the distinctive KG 2 (Moesgaard 2018a, 131). The Ribe coinage shows a clear and unambiguous development from KG 4:1 (with the halfpenny KG 4:2), via

KG 5 in the second part of the 9th century to KG 6 either predominantly or probably fully from the first half of the 9th century. After this, minting in Ribe ceases. The Haithabu coinage is more difficult to understand. KG 3:1 spelled STAT is probably the oldest, while KG 3:1 spelled ZTAT must be considered the most recent, belonging to the second half of the 800s. Based on both the Carolingian denarius and the glass bead types, the purse containing the six KG 3:2 pennies with a House on the reverse probably ended up in the harbour before c. 850, and if Carolus/House represents a specific phase in the Haithabu coinage, it is chronologically placed between the two subtypes STAT and ZTAT of KG 3:1.

The absence of the other KG 3 types and KG 4:3 Cockerels/Ship from finds in or around Haithabu makes a more precise chronological placement impossible, but as mentioned, they belong to the dense decorated border period. Only KG 3:4 Carolus/Ship and KG 4:3 Cockerels/Ship are found in double-digit numbers, while KG 3:3 Carolus/Man and KG 3:5 Carolus/Backward Looking Animal are so far only known in very few examples.

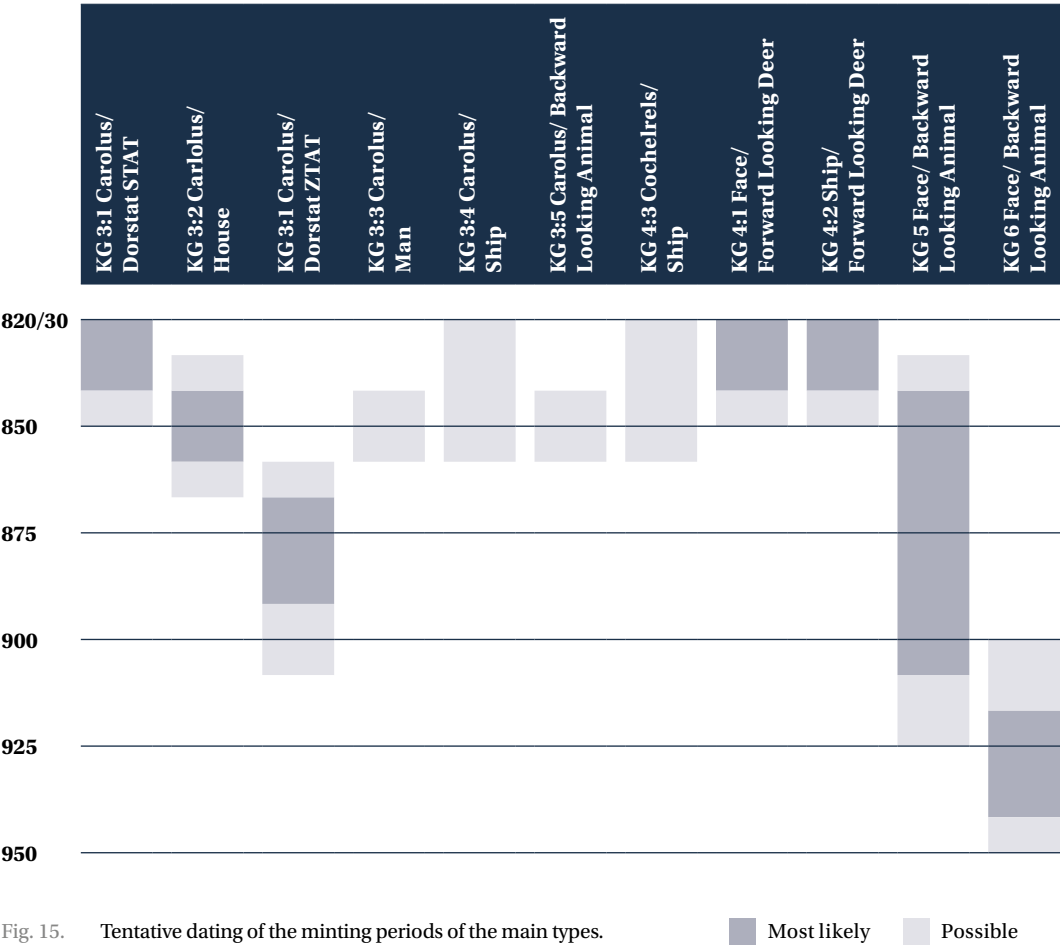


Fig. 15. Tentative dating of the minting periods of the main types.

■ Most likely □ Possible

Pennies outside Ribe and Haithabu

If we look at 20-30 year old distribution maps of KG 3-6, one gets the impression of few and scattered sites, where the number of coins in the graves at Birka and settlement/graves at Haithabu is especially notable (Metcalf 1996, maps 2a, p. 411; von Heijne 2004, Figure 5.10). Today, at least 116 sites are known, geographically spreading from England in the west, Russia in the east, the Mälär region and southern Norway in the north, to Poland and possibly Ukraine in the south (Fig. 1). 77 sites are within the current Danish borders, mostly due to the widespread use of metal detecting. In Sweden and Schleswig-Holstein, metal detecting have been used to a much lesser extent in recent decades than in Denmark, and it can therefore be assumed that single coins are underrepresented in these areas (Fig. 16).

As can be seen from the distribution maps, the vast majority of finds consist of a single or very few coins. A number of finds consisting of small stacks of corroded coins (Roager, Lønborggård, Fæsted and Frejlev) are particularly interesting and are comparable to other finds of small collections of coins such as the purse from the harbour in Haithabu, the deposit in the pit house in Haithabu Südsiedlung, or the small deposit from the late phases in Ribe. In such cases, these are not carefully selected coins for deposition, but rather random losses of, for example, the contents of a purse, and thus provide an important clue as to which types were in circulation at the same time and in which geographical area. The pennies in the small stacks could not be separated, so they were identified using three-dimensional X-ray scanning (Feveile et al 2025). The stack of five pennies from Roager consists entirely of KG 5

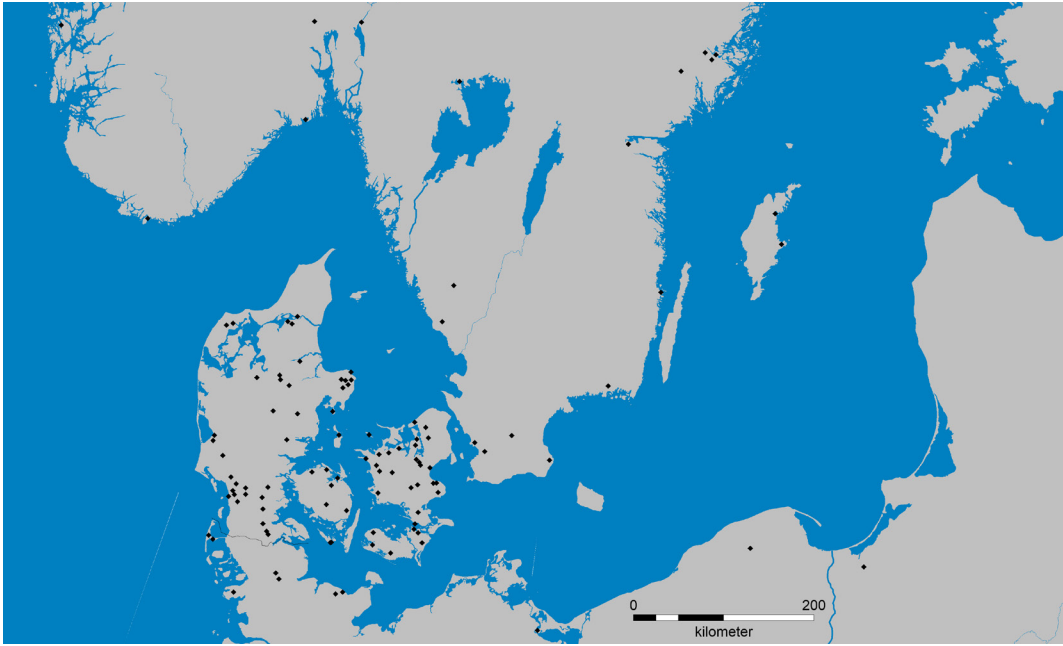


Fig. 16. Distribution of find sites in Southern Scandinavia. Most sites are located within the Viking Danish realm.

Face/Backward Looking Animal, and the same is probably true for the stacks from Fæsted and Lønborggård, although the identification is not as clear-cut as the Roager find. Together with other single coins found, it shows a clear use of Ribe pennies exclusively, in a geographical area that includes all of South, Central and West Jutland.

When Moesgaard in 2018 examined KG 4:1 Face/Forward Looking Deer based on the then 13 known coins and suggested that this type should also be attributed to Ribe, he illustrated his point with a map showing the coins divided into three types: pennies without transformation, pennies transformed into coin-pendants by piercing or looping, and uncertain (fragment, or without information).

Here the coins are divided in the same way, with the modification that the reworked coins include not only coins that have been transformed into coin-pendants but also coins that have been demonetized in other ways, such as rolled into cylinders or bent tightly together in a way that cannot be explained by post-depositional processes. It has not been possible to examine the fragmented coins to determine to what extent the fragmentation is due to deliberate cutting or breaking in the Viking Age, or whether the fragmentation is due to damage caused by plowing the soil. The latter may be particularly relevant for the many coins found by metal detecting, which have probably been in the plow layer for centuries and have thus been exposed to the mechanical effects of agricultural cultivation.

KG 3:1 Carolus/Dorstat (Fig. 17) is particularly frequent in Haithabu itself, where half are coins, while the rest are fragmented with no traces of being turned into pendants. Outside Haithabu, the pennies are present in numerous specimens in Janów Pomorski (Truso) and Birka, while elsewhere they are found mainly in the eastern part of

Denmark and Northeast Jutland. In the whole of western and southern Jutland only a single demonetized coin is known (Yderik, together with two KG 3:4 Carolus/Skib). Outside Haithabu, the vast majority have been converted into pendants or are fragments. Only a few finds are coins.

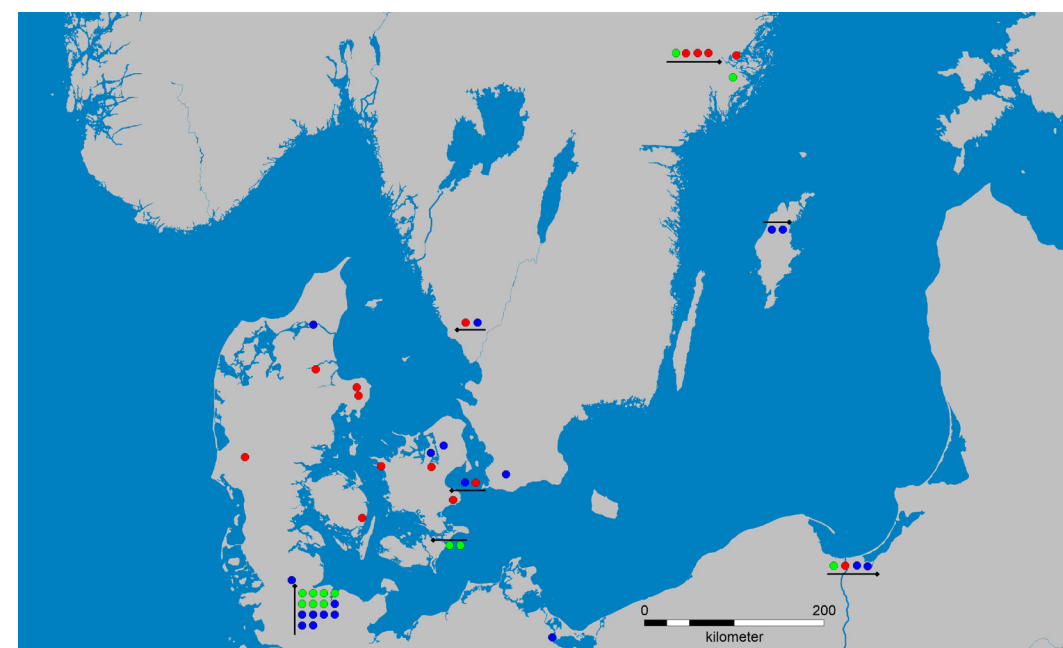


Fig. 17. Geographical distribution of KG 3:1 Carolus/Dorstat. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.

KG 3:2 Carolus/House (Fig. 18) is a rare type. The purse from the harbour in Haithabu with six specimens are the only ones that are preserved as coins, while the other finds, again located east and north, are either transformed into jewelry or fragmented.



Fig. 18. Geographical distribution of KG 3:2 Carolus/House. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.

KG 3:3 Carolus/Man (Fig. 19) is found in two specimens, one of which is without provenance and is in a museum collection. The one find that can be placed geographically is from Tissø on Zealand (Pedersen 2000). More frequent is KG 3:4 Carolus/Ship (Fig. 20), where the largest number of finds in the same locality are the burial finds from Birka. The other examples are located in eastern Denmark/Scania, while two coins from Yderik in West Jutland were found together

with a KG 3:1 Carolus/Dorstat. Only one coin is unaltered/fragmented, the coin from Okholm near Ribe in southwest Jutland. Finally, KG 3:5 Carolus/ Backward Looking Animal (Fig. 21) is known in three specimens, two pieces from Birka and one fragment from Zealand. Characteristic of all three types, KG 3:3-5, is that they have not yet been found in Haithabu itself. The attribution of KG 3:3 and KG 3:5 to Haithabu is particularly doubtful – we must await further finds.



Fig. 19. Geographical distribution of KG 3:3 Carolus/Man. Red: Coin-pendant.

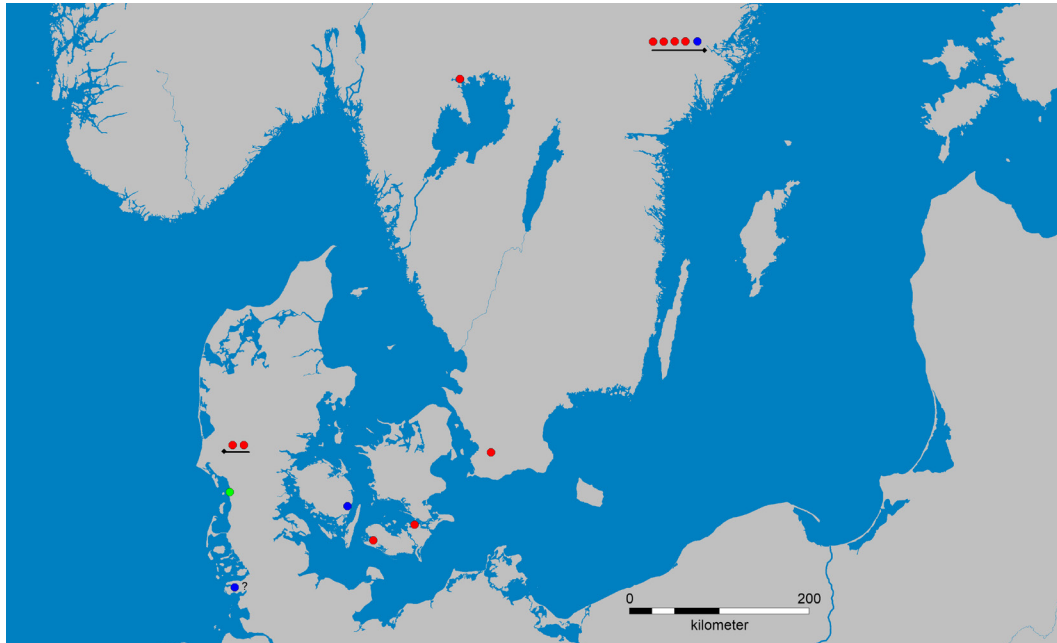


Fig. 20. Geographical distribution of KG 3:4 Carolus/Ship. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.



Fig. 21. Geographical distribution of KG 3:5 Carolus/Backward Looking Animal. Red: coin-pendant, Blue: fragment.

KG 4:1 Face/Forward Looking Deer (Fig. 22) is, due to the Damhus hoard, by far the most numerous coin type within KG 3-KG 6. As can be seen, the coins in South Jutland and one from Funen are unaltered, while the rest of the finds that concentrate on the Danish Viking Age land area, i.e. current Denmark as well as Scania and the Oslofjord, have

all been transformed into jewelry or are fragments. Hillerslev in Thy stands out with three coin-pendants, found quite scattered and thus lost individually. It is also noteworthy that this coin type has not been found in Sweden outside Scania, just as it has not been found in South Schleswig or in the Viking town of Ribe.

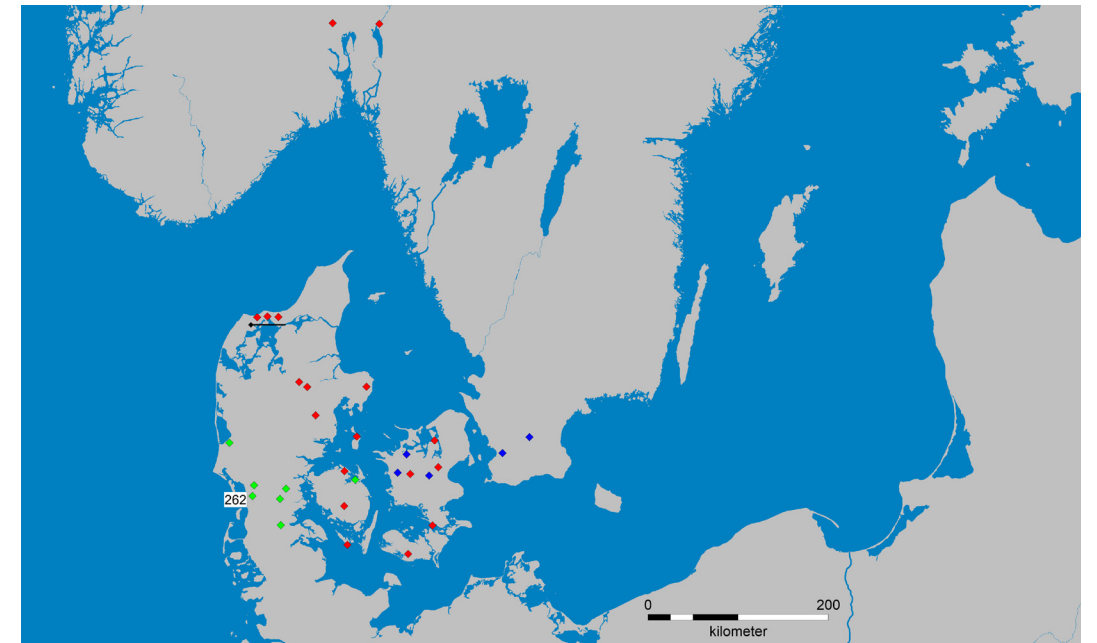


Fig. 22. Geographical distribution of KG 4:1 Face/Forward Looking Deer. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.

KG 4:2 Ship/Forward Looking Deer (Fig. 23) is similar in its current distribution to KG 4:1, i.e. Danish Viking Age areas, except for a single coin from Birka and one in the Kislava hoard in Russia (off the map). Only the finds from the Damhus hoard are coins (despite minor fragmentation), while all others have

been transformed into coin-pendants or fragmented. Four coins from Spangereid on the south coast of Norway are from the same grave find. The lone fragment from Birka is of a special variety where both the obverse and reverse are different from all other coins within the type.

KG 4:3 Cockerels/Ship (Fig. 24) is considered a Haithabu coin due to its coincidence at variety level on the ship side, S2a, with coins of the type KG 3:4 Carolus/Ship. Until recently the type only appeared in the Mälär area as both coin, coin-pendants and fragments, while recent finds are from

Zealand and Djursland in Denmark. This type has not been found in Haithabu.

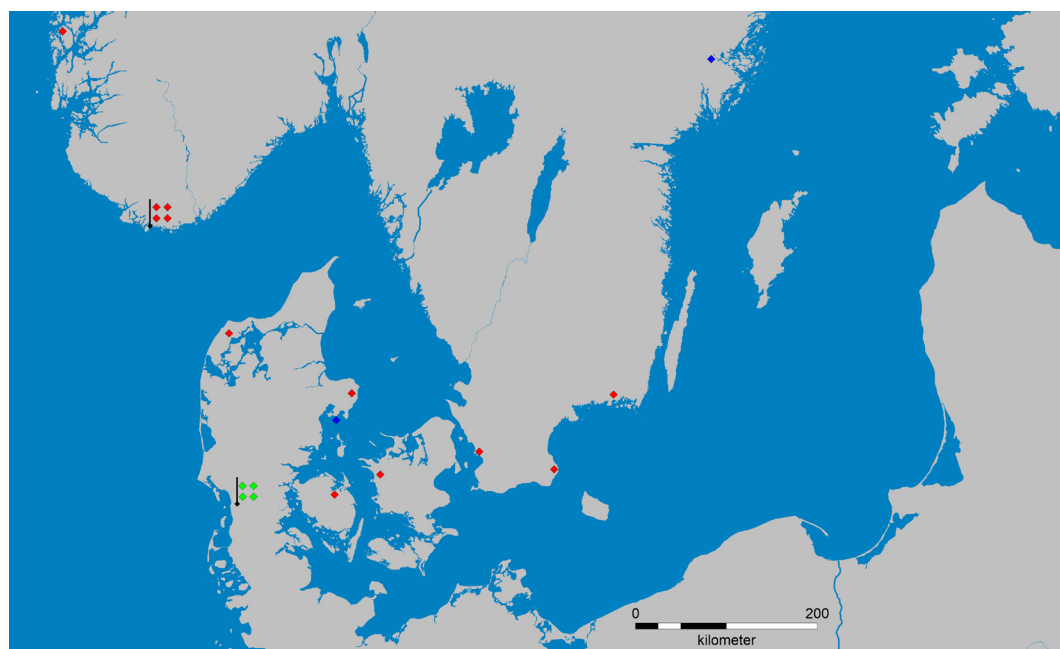


Fig. 23. Geographical distribution of KG 4:2 Ship/Forward Looking Deer. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.



Fig. 24. Geographical distribution of KG 4:3 Cockerels/Ship. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.

KG 5 Face/Backward Looking Animal (Fig. 25) has quite a characteristic distribution pattern. Outside the map, a few specimens are found in Poland, Ukraine(?) and England, while they are otherwise concentrated in southern, western and central Jutland. Here they only appear as coins (and a few fragmented), both as single finds, but also as small losses of 5-13 coins, such as Roager, Fæsted, Lønborggård and Ribe. When the pennies leave West and South Jutland, the majority are transformed into coin-pendants, particularly prominent in the

graves at Birka. Another striking fact is that the only three eastern finds where the pennies still appear as coins are all large hack silver hoards from the first part of the 10th century: Terslev (TPQ 940-) and Grisebjerggård (TPQ 942/43) on Zealand and "Halland" (TPQ 939/40) in Sweden. The coins thus left the coin-using area in western Denmark at some point and were then used as metal in a weight economy, presumably without an intermediate use as coins, as suggested by the lack of single finds of unconverted pennies in these parts of Scandinavia.

KG 6 Face/Backward Looking Animal (Fig. 26) show basically the same distribution pattern as KG 5, i.e. pennies in Jutland, now also South Schleswig. Outside this area, finds are rare and only a single coin from the Mälär area, far from its origin in southwest Jutland, has been converted into a coin-pendant. The use of Danish coins as coin-pendants within the Danish realm thus ceases before the introduction of KG 6, around 900 at the earliest. On Zealand, the type only appears in three large hack silver hoards, Sejerø (TPQ 953-) and again Grisebjerggård and Terslev.

KG 6 has not been found in Ribe, while there is a single one in Haithabu (subject to uncertain identification).

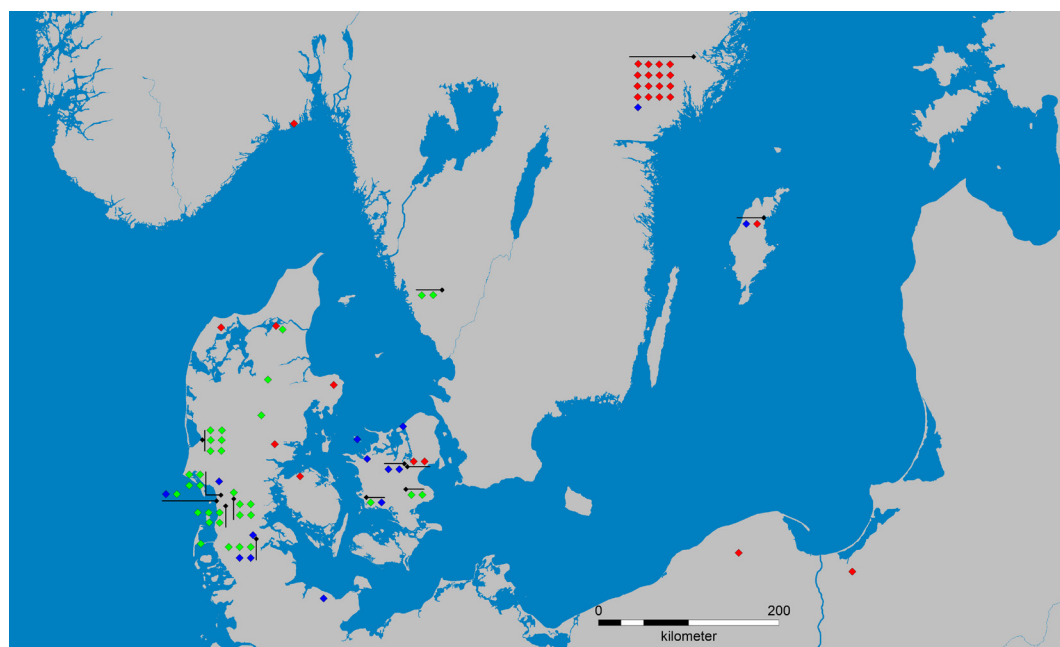


Fig. 25. Geographical distribution of KG 5 Face/Backward Looking Animal. Green: coin, Red: jewelry, Blue: fragment.

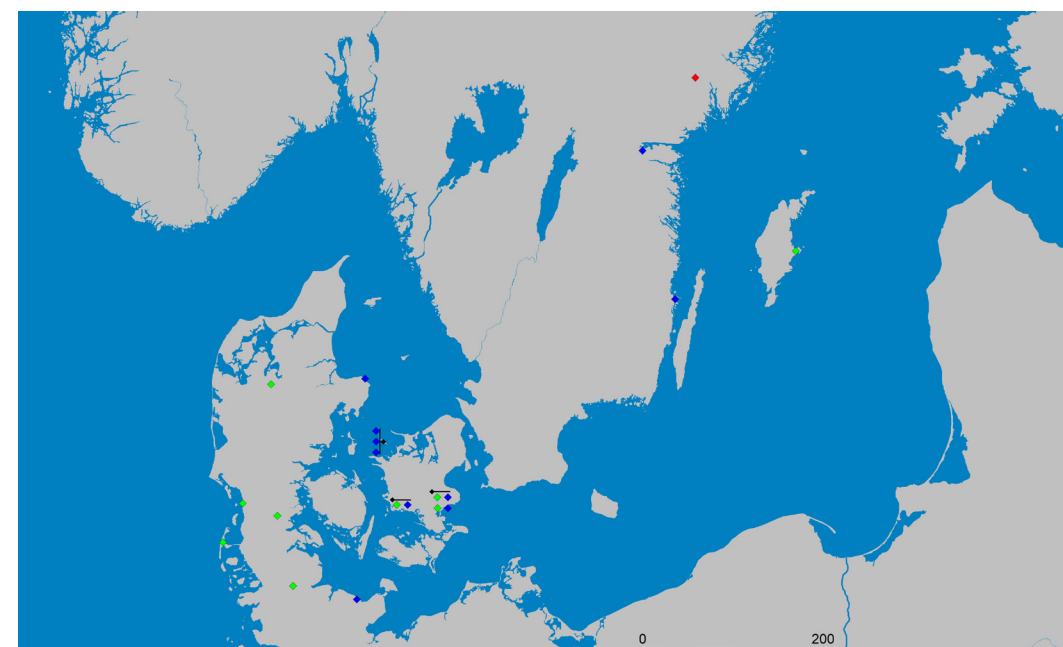


Fig. 26. Geographical distribution of KG 6 Face/Backward Looking Animal. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.

A number of coins, due to fragmentation, poor preservation or because they are inside on a coin stack, cannot be precisely identified within the KG 4:1, KG 5 or KG 6 groups (Fig. 27). Unsurprisingly, the pennies that have not been transformed into jewelry or are fragmented are found exclusively in South and West Jutland, with the exception of a single coin from the mixed coin stack from Frejlev.



Fig. 27. Geographical distribution of uncertainly identified coins within KG 4:1, KG 5 and KG 6. Green: coin, Red: coin-pendant/demonetized, Blue: fragment.

Summary of the economic hinterland of Ribe and Haithabu

Comparing the Ribe pennies (KG 4:1, KG 4:2, KG 5 and KG 6) with the Haithabu pennies (KG 3:1, KG 3:2, KG 3:4 and KG 4:3) and the more uncertain ones (KG 3:3 and KG 3:5), a clear and convincing picture emerges (Fig. 28 and 29). The non-demonetized pennies from Ribe and Haithabu are mutually exclusive on a line that largely coincides with the border between Denmark and Germany – with the limitation of the statement being the relatively few sites in northern Germany.

Only a couple of finds contrast with this picture. A single KG 3:4 Carolus/Ship from Okholm, close to Ribe (coin), and the discovery of three tightly folded pennies of the types KG 3:1 and KG 3:4 from Yderik in West Jutland. And vice versa – a single Ribe KG 6 penny from the harbour of Haithabu. The two coin-using Viking towns thus each had their own economic hinterland; around Ribe we can expand the area from just the town and its immediate hinterland (Moesgaard 2007, 117) to include the whole of West and South Jutland and probably extend it down along the islands in the Wadden Sea (cf. KG 5 and KG 6 on Sylt), while Haithabu's monetary hinterland included the area south of the current border. Haithabu's economic hinterland, which Wiechmann (1996, 2007) was able to demonstrate for Haithabu in the 10th century with the KG 7-9 pennies, can now be extended backwards in time to include large parts of the 9th century. In the 900s, KG 7-9 dominated around Haithabu, while the situation further north is not clarified in this paper, as KG 7-9 is not included in the analysis.

Outside the coin-using zones around Haithabu and Ribe, the vast majority of the finds are demonetized, typically by being

turned into coin-pendants. However, this does not apply to KG 6, which is only known as coin-pendant in a single find from Näsby in the Mälars area. At the late date when KG 6 was produced and circulated, the practice of turning Danish money into jewelry within the Danish kingdom had been abandoned. KG 4 and KG 5 Ribe coin-pendants dominates the finds on Funen and in eastern and northern Jutland, while they are the only ones found in Norway. Coin-pendants made from Haithabu pennies, both KG 3 and KG 4:3, are significantly fewer in the west, where they are limited to East Funen and northeastern Jutland. On Zealand, however, there is a mixture of KG 3, KG 4 and KG 5, and in Sweden there is an almost equal distribution between the few pennies and many coin-pendants from Ribe and Haithabu.

It is important to note that this paper only takes into account one single coin group, the Danish pennies from the 800s. In order to get the full picture and assess the Danish pennies against and in relation to foreign coins, it is necessary to include finds of Carolingian and English coins, and from the later part of the period increasingly also Arabic coins. There is no up-to-date overview of these coin groups from the Danish area, but in a 20-30 km radius around Ribe there are eight known Carolingian coins. Three of them date from c. 768-820 and were probably lost in the sceatta period before the pennies were minted, while the remaining five may be contemporary with the Ribe KG 4 or KG 5. Dirhams also appear in and around Ribe, some 90 pieces are known, mainly fragments, both as single finds and in a few cases in smaller hoards, probably from the 900s. An overall assessment of the monetization process thus requires an expanded data base, which has not been possible with this overview of the KG 3 to KG 6 coins.

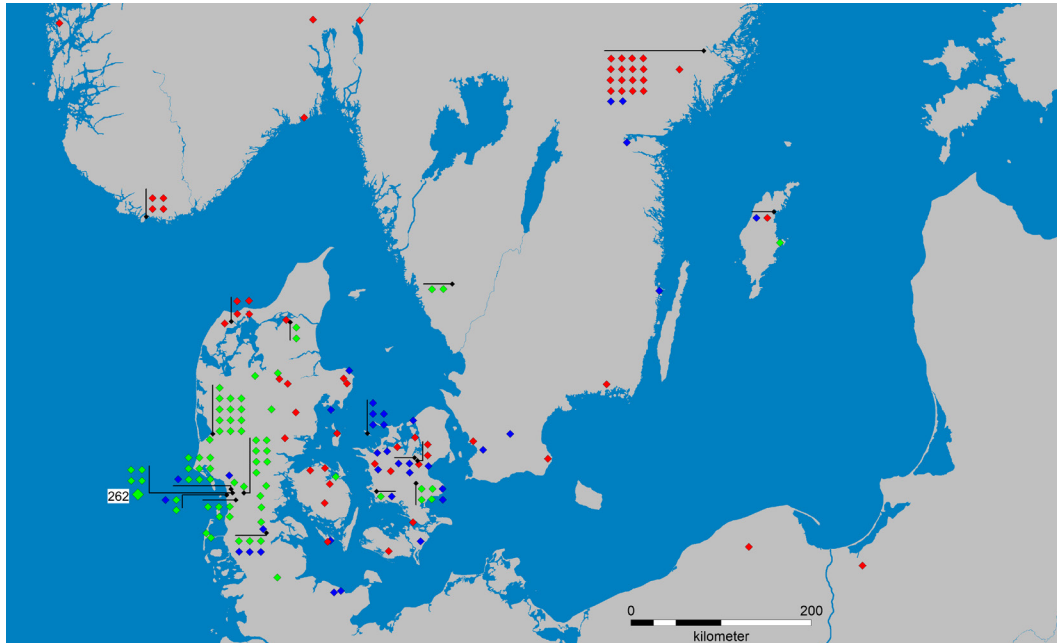


Fig. 28. Geographical distribution of Ribe coins (KG 4:1, 4:2, 5 and 6). Green: coin, Red: coin-pendant/demonetized, Blue: fragment.

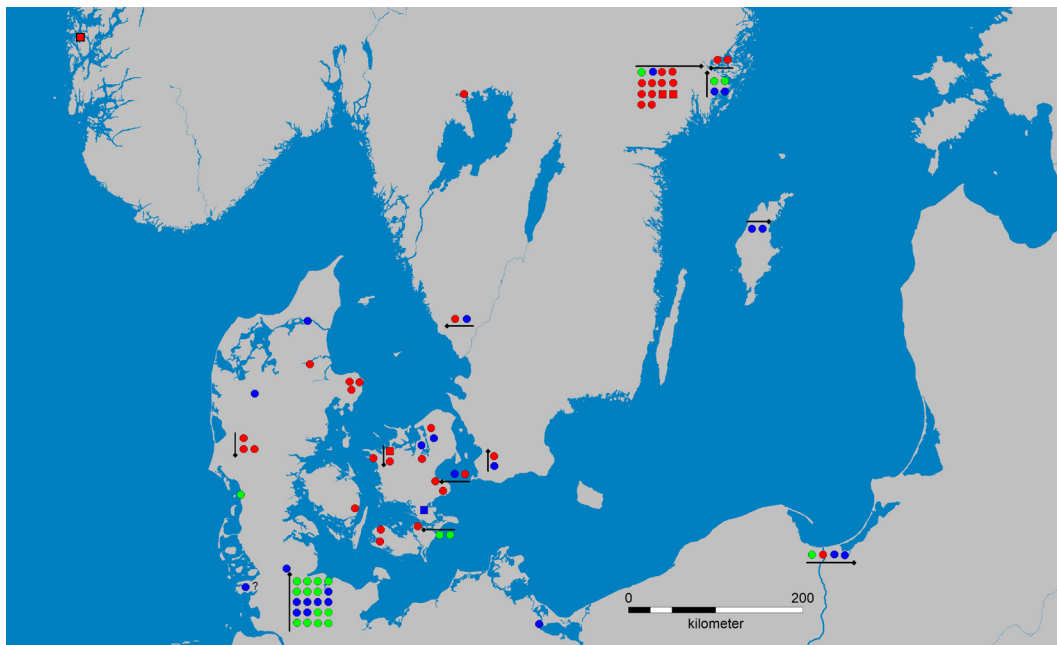


Fig. 29. Geographical distribution of Haithabu coins (KG 3:1-5, 4:3). Green: coin, Red: coin-pendant/demonetized, Blue: fragment. Square: KG 3:3 and KG 3:5.

Demonetization and coin-pendants

A large proportion of the surviving pennies are demonetized, so they can no longer be perceived as coins used for regular payment by number. The number of demonetized coins is probably even higher, as many finds are fragmented and therefore it cannot be determined whether they have been demonetized. Even if the coin loses its nominal value, they naturally still have a silver value and may very well later again be included in a weight economy. There are many examples of demonetized coins in both buried jewellery sets and hack silver hoards, including several 9th century pennies where the function as coin-pendant must have been replaced by the value of the silver weight (e.g. Cat 38 Lerchenborg; Cat 135 Näsby and Cat 63 Spilling II). Most recently, Audy (2018) has dealt with Viking Age burial coins from Sweden and Norway and therefore only a few features will be highlighted here to complement this foundational and detailed work (Fig. 30).

The pennies from the burials at Birka almost all share the common feature of only one hole, in which a pierced loop is often still visible, or there are traces of one having been there. This makes it possible to examine the position of the hole depending on the orientation of the motif (Audy 2018, 113ff). The majority of coins from Denmark, on the other hand, have no preserved loop, and often there is more than one hole. The lack of a loop usually makes it easier to observe the hole itself and often also from which side it has been pierced. It also shows whether the hole is circular and made with a small awl, possibly punched out, or whether it is triangular and therefore probably made with the outer tip of a knife. Loops are found only on a small number of Danish pennies, and the reason for their absence in many

cases may be due to the fact that these are predominantly detector-found coins, where the pendant has deteriorated more in the agitated plow soil than when preserved in situ in an archaeological site (grave, pit house, etc.). In the case of more than one hole, two or three holes may be placed very close or far apart. In the latter case, they may be sewing holes, or the coin may have been part of a more complicated setup. It is also possible that several holes, whether placed close together or scattered around the edge, are traces of repeated transformations into jewellery over a longer period of time. A small group of coins have also received special treatment in addition to the hole itself (with a possible loop). They are either carefully or carelessly folded into a small rectangle or triangle, hiding one side of the coin. There is also an example of a coin being folded so that it forms a semicircle and perhaps continued to function together with the hanging hole. Furthermore, a single coin is first provided with two closely spaced holes and presumably secondary to the holes, rolled into a cylindrical shape, like a small hollow, tubular bead. Finally, a single coin is fitted with nine studs, and although the actual suspension is missing, it is undoubtedly a coin that has been transformed into a coin-pendant with a complicated iconography (Gardela 2022).

In one case, three pennies from Yderik in West Jutland have been bent into a small package and squeezed tightly together. It is likely that they were then used by weight, or perhaps more likely that they were on their way to the crucible for remelting.

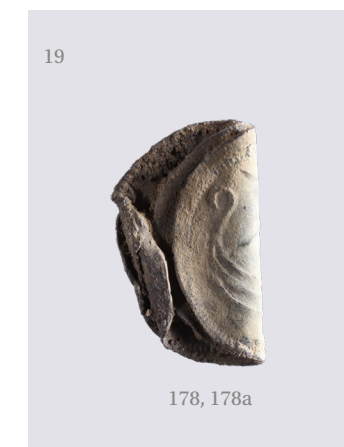
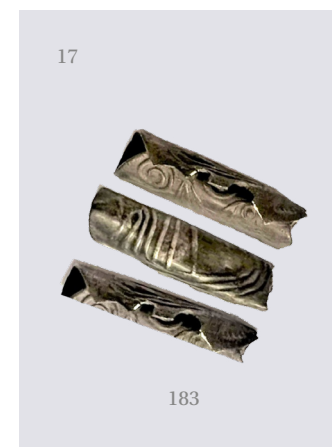
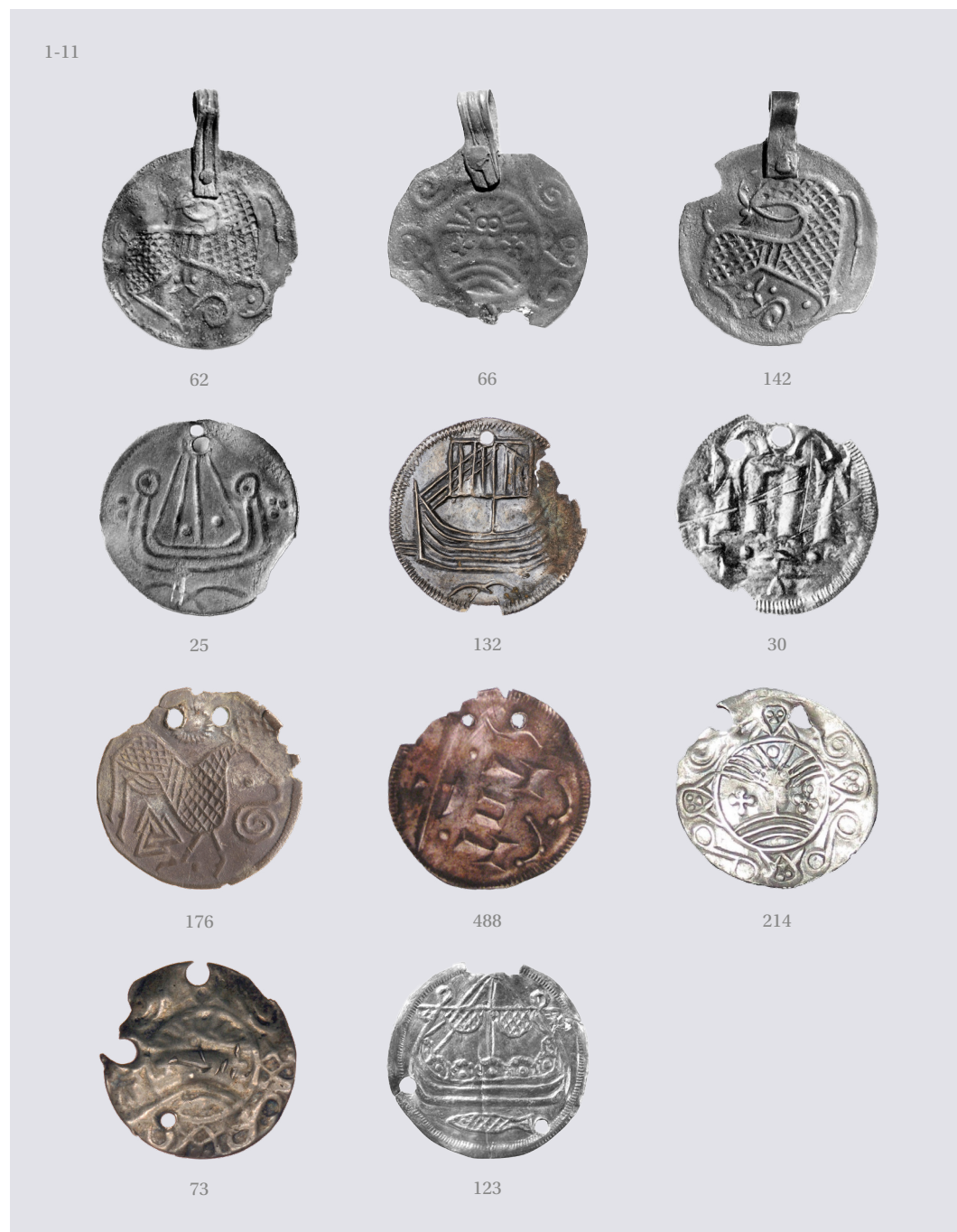


Fig. 30.

Different types of transformation into coin-pendant. 1-11: One or more perforations at the edge, possibly with loop. 12-16: Perforation and folding. 17: Perforations and rolling up. 18: (Perforation?) and studs. 19: Several coins bent and clamped together. Numbers at coins refer to the Catalog.

The pennies of the Danish kingdom

There has been a long tradition of referring to the coins of the 800s as Nordic or Scandinavian (Malmer 1966, 2007, 2023; Metcalf 1996; Moesgaard 2007). Lately, however, Moesgaard has argued that the Ribe and Hedeby coins from the 9th-10th centuries should rightly be referred to as Danish and not Nordic (Moesgaard 2022, 89). However, none of the mentioned authors name the mint master. Who was behind the coinage? The coins themselves are anonymous, they do not say who, where or when.

There is no longer any basis for using the broad geographical term to describe the place of origin. The conclusion of the above analysis is that they were minted within the framework of the Danish kingdom, in its two most important trading towns, Ribe and Haithabu. This took place in a Danish kingdom that stretched from the Eider in the south, including present-day Denmark, Scania, Halland and Blekinge, as well as Viken around the Oslo Fjord (Roesdahl 2023, 33ff).

For parts of the 800s, Danish royal power was strong and well-established. Godfrey and the sons of Godfrey stood strong against the mighty neighbour to the south, the Carolingian Empire. Not surprisingly, there were dynastic challenges at times. Upon Godfrey's death in 810, different royal lines fought for power, ending in the exile of Harald Klak at Charlemagne's court and his later return with his own fiefdom or as co-king for a period in the 820s.

The kingdom needed a solid income, and the Frankish imperial annals indicate that Godfrey had previously received taxes from the Abodrites and moved the merchants from Reric (Gross Strömkendorff) to Haithabu. A significant part of the king's earnings probably came from controlling the trading

towns and the turnover of goods, as well as issuing monopoly coins for use in a managed local currency. It is significant that we can now document with increasing certainty that both cities minted their own pennies. Not the same types, but rather pennies that were each markedly different in appearance. Godfrey died in 810, which is too early for him to be the mint master behind the minting of pennies in Haithabu and pennies / halfpennies in Ribe. This must belong to the period under Horik I and perhaps Harald Klak and continued under the following, sometimes only vaguely illuminated kings.

The distribution of finds, the number of dies, the sporadic dating of lost/deposited coins all show that the coinage in the two cities was neither episodic nor insignificant. The coinage seems to be continuous from the start c.820/30 onwards. In Haithabu, coinage continues throughout the 900s, first with Malmer's KG 7-9, and later Malmer's KG 10-12 (Cross Coinage) attributed to Harald Bluetooth around 975/80 (Moesgaard 2015, 46ff). In Ribe, the minting of KG 6 ceases at some point towards the middle of the 10th century and resumes with completely different coin types under Canute the Great in the early 11th century. Overall, the KG 3-KG 6 issues were of considerable size. Preliminary die studies of the KG 4:1 Face/Forward Looking Deer show that they were produced in the 100,000s. There is no reason why the same should also not be the case with several of the main types within KG 3, and especially KG 5-6.

The Danish royal authority, regardless of who was in control of one or both mints, clearly had the necessary power and control, as well as the organizational capabilities to implement and maintain relatively large-scale mints over long periods of time and enforce managed local currencies.

Closing

The significant increase in the number of finds over the last 10-15 years, especially in Denmark, has contributed to a better understanding of the coinage from the 800s. This has created an improved basis for attributing specific coin types to either Ribe or Haithabu. The affiliation of the rare types remains uncertain, but the current data points to Haithabu as the place of origin. While a monetary hinterland for Ribe is quite clear, it is less clear for Haithabu in the 800s. Here it is conceivable that intensive metal detecting in southern Schleswig over several years will probably contribute several single finds and perhaps small coin stacks, similar to the find picture around Ribe. Southern Sweden also appears weak, but here too we can expect a find pattern like Zealand, for example, if metal detecting took place to the same extent as in Denmark.

Ribe and Haithabu minted in parallel throughout the 800s. The exact relationship between the different coin types from the two mints, or the internal development of Haithabu, is still unclear. Did the coinage start at the same time in the two towns, or are there small chronological shifts? In Ribe, the change from Wodan/Monster-sceattas to pennies is quite spectacular: on the one hand, the weight of the penny (KG 4:1 Face/Forward Looking Deer) is maintained at 1 gram, but the halfpenny (KG 4:2 Ship/Forward Looking Deer) of c. 0.5 grams is a significant innovation in Danish monetary history, even though it is a relatively short period. The material is still too sparse to assess the weight of the earliest coinage in Haithabu – probably KG 3:1 Carolus/DorSTAT. Did Haithabu use a different weight standard than Ribe – or do the very few coins weighing around 1 gram suggest that it was the same in the two cities? The first penny/halfpenny minted in Ribe

quickly disappears from circulation when the KG 5 Face/Backward Looking Animal is introduced. KG 4:1 and 4:2 have not yet been found with KG 5 pennies, and the two types are not included in the large hack silver hoards from c. 870-950.

In Ribe, a managed local currency was maintained for more than 200 years. The development of the Ribe coins from Wodan/Monster-Sceattas via KG 4:1/4:2 continuing with KG 5 and finally KG 6 is quite clear and extended towards the middle the 10th century. At Haithabu the picture is not so clear. There are arguments for a managed local currency – but the many main types and the placement of KG 3:1 Carolus/DorZTAT to the second part of the 800s complicates the picture. Regardless of the specific development, the numerous dies in both the Ribe and Haithabu coinage show that the output was extensive. Based on die studies, KG 4:1 Face/Forward Looking Deer was produced in the 100,000s, and there is little doubt that the same was true for most of the other main types within KG 3 and KG 5-6.

The metal detector, the Danish Danefæ legislation and the generally good cooperation between museums and detector users have led to a massive increase in material that has made the above interpretations possible. The finds will undoubtedly continue to contribute to an understanding of Viking Age monetary history. At the time of writing (early spring 2025), thus the four most recent coins were found: Catalog 520-523.

Appendix

In July 2025, a new KG 4:1 Face/Forward Looking Deer was found. The coin was discovered by metal detecting the topsoil at Nordjyske Museer's excavation at Grønhøjgård (Vaarst), a little south of



Fig. 31.

KG 4:1 penny from Grønhøjgård (Vaarst) and KG 5 penny from Birka, Burial 508, made with the same die on the obverse. Photo: Grønhøjgård: Nordjyske Museer; Birka Burial 508 after Malmer 2023. Numbers refer to Catalog.

Aalborg. It was discovered so late that it has not been possible to incorporate it fully into this work (Cat. 525). The reverse is made with a previously unknown die, which is a new variety, DE1ab. On the new coin, the snake in front of the deer is coiled from the outside in, so that the snake's neck/head lies over its own body and another ring symbol is added above the back. This type of snake has not previously been seen on a KG 4:1 penny but is known from a few dies from the associated halfpenny, KG 4:2 Ship/Forward Looking Deer. The obverse stamp belongs to variety F3a1. The die was previously known from only one coin, a KG 5 Face/Backward Looking Animal from Birka, Grave 508 (Cat. 58; Malmer 2023 72.1110). KG 4:1 Face/Forward Looking Deer and KG 5 Face/Backward Looking Animal are thus brought into close relation (Fig. 31), and it must be assumed that the start of the minting of KG

5 took place in immediate continuation of the latest minting of KG 4:1.

Acknowledgment

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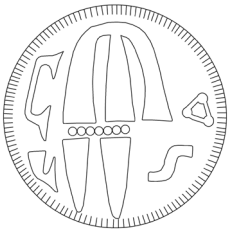
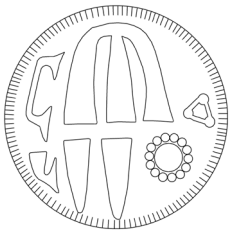
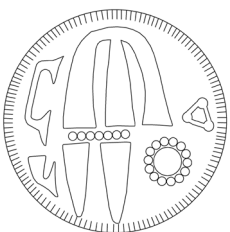

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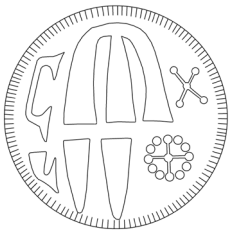
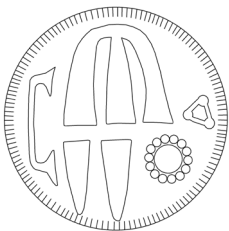
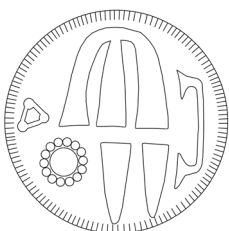
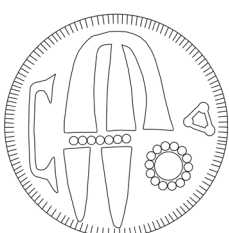
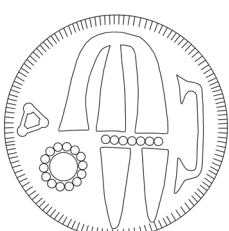
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Table 2.


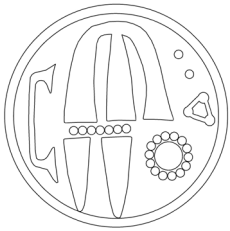
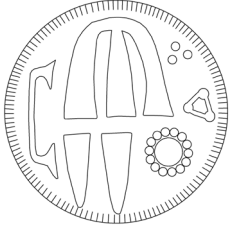
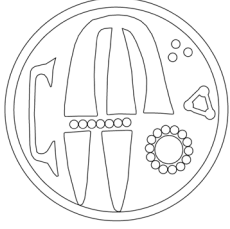
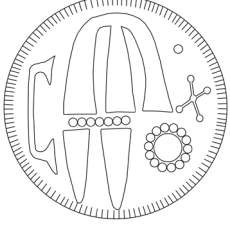
Catalog of varieties. To a certain extent, these are stylized designs that are not necessarily completely identical to a specific coin.

Varieties	Number of dies		Number of coins
KG 3 Carolus	Corrupted Carolus inscription in two lines CARO/LUS. Like the model, KG 2, AR is always written together. Some letters are distorted in different ways or replaced by elements. In addition to the letters themselves, a number of elements appear: triangle, rosette, dots, triskele, triquetra, string of beads.		
	CA1	2	2
	String of beads and triangle.		
Carlu	Combined with a selection of elements: rosette, triangle, dots, triskele or triquetra.		
	CB1	1	1
	Rosette and triangle.		
	CB2	6	7
	Rosette, triangle and string of beads.		
	CB3	2	2
	Triquetra, triskele, three dots and string of beads. Both dense decorated border or smooth edge.		

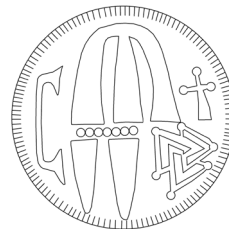
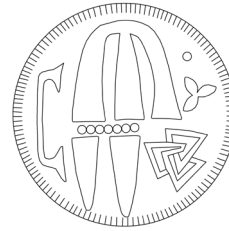
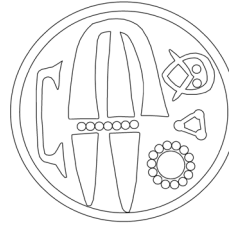
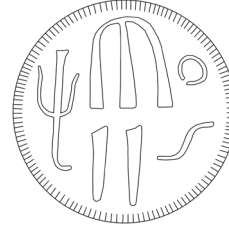
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Varieties	Number of dies		Number of coins
	CB4	1	1
	Rosette with cross and large X.		
Caru	C is not aligned with AR but can be interpreted as a contraction of C and L, so that is still reads CARLU.		
	CC1	7	7
	Rosette and triangle.		
	CC1a	2	2
	Mirrored.		
	CC2	9	12
	Rosette, triangle and string of beads.		
	CC2a	2	2
	Mirrored.		



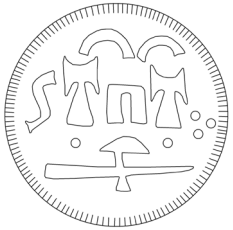
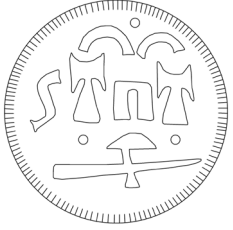
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Varieties		Number of dies	Number of coins
	CC3	6	6
	Rosette, triangle, one dot and string of beads. Smooth edge.		
	CC4	3	4
	Rosette, triangle, two dots and string of beads. Smooth edge.		
	CC5	1	1
	Rosette, triangle, three dots.		
	CC6	1	1
	Rosette, triangle, three dots and string of beads. Smooth edge.		
	CC7	1	1
	Rosette, large X, one dot and string of beads.		

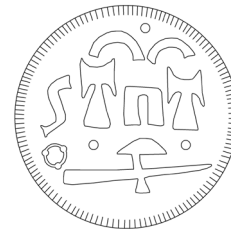
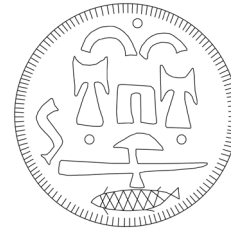



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Varieties		Number of dies	Number of coins
	CC8	1	1
	Triquetra, latin cross and string of beads. Smooth edge?		
	CC9	3	3
	Triquetra, triskele, one dot and string of beads.		
	CC10	2	3
	Rosette, triangle, mask and string of beads. Smooth edge.		
Arous	Malmer (2023) reads the inscription AROUS and describe the figure to the left as a "birdlike figure". It may also be seen as a joined C and L, with C rotated 90 degrees and combined with a large L. This leaves the inscription CAROLUS without any other elements.		
	CD1	1	1





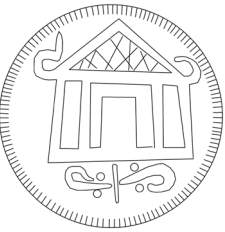
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Varieties	Number of dies		Number of coins
Aru	Malmer (2023) reads the inscription ARU. Similar to above, the figure on the left can be seen as a joined C and L, making the inscription CARLU.		
	CE1	1	1
	Cross-in-circle, crossed cross and string of beads. (ned med of)		
KG 3:1 Dorstat	Corrupted Dorstad inscription in two lines DOR / STAT and always an axe with two dots at bottom. D and R are written as arcs and O can be a dot or omitted. S can be inverted to Z and location moves. When STAT, S is aligned with TAT, while Z is partially below TAT when ZTAT. There are only few elements: ring, dot and fish.		
Stat			
	DS1a	3	3
	O is left out in DOR.		
	DS1b	1	1
	O is left out in DOR , three dots to the right.		
	DS1c	1	1
	O is a small dot in DOR.		

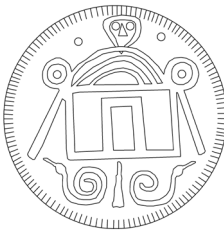
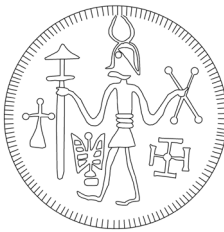
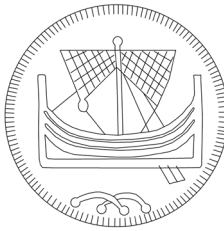
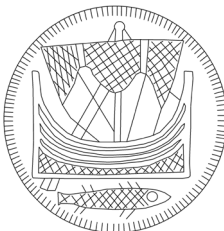
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Varieties	Number of dies		Number of coins
	DS1d	1	2
	O is a small dot in DOR. Circle to the lower left.		
	DS1e	1	1
	O is a small dot in DOR. Fish below axe. S is not aligned with TAT.		
Ztat			
	DZ1a	1	5
	O in DOR is a small circle. Smooth edge.		
	DZ1b	7	11
	O is a small dot in DOR. Both with dense decorated border or smooth edge.		
	DZ1c	2	2
	O is a small dot in DOR. Fish at the bottom. Both with dense decorated border or smooth edge.		

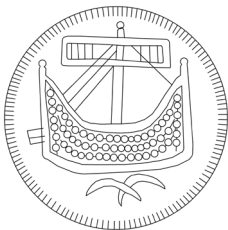
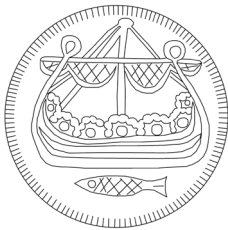
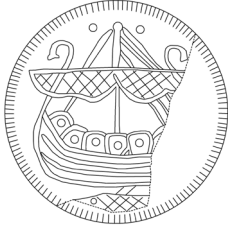
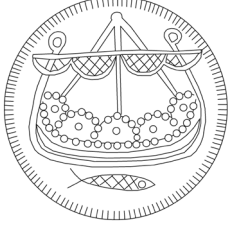
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Varieties	Number of dies		Number of coins
KG 3:2 House	House seen from the gable end, with sloping support posts and shaded rood surface. The gable ends are dragon heads. Coiled snakes at the bottom, usually a small mask on the roof ridge.		
	H1a	1	3
	Mask at the roof ridge surrounded by triskeles. The roof arches.		
	H1b	1	1
	Mask at the roof ridge surrounded by three dots. The roof arches.		
	H1c	2	2
	Blank field on each side of the mask. The roof arches.		
	H2a	2	2
	Triangular roof, with a triangle on top. Blank field between triangle and coiled snakes on the gable ends. Coiled snakes, crossing, at the bottom.		
	H2b	1	1
	Vertical support posts. Empty roof at the top? Snakes in U-form at the bottom.		


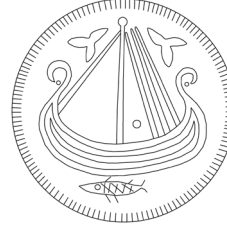


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Varieties	Number of dies		Number of coins
	H3a	1	1
	Curved roof made of several arches. Gable snake replaced by dot-circle. Mask (or triangle?) on the roof top surrounded by dots. The head of the snakes point way from each other.		
KG 3:3 Man	Striding man, left, holding X and sword. Equal-armed cross, latin cross and butterfly-figure in the field.		
	M1	2	2
KG 3:4, 4:2 and KG 4:3 Ships	The main motif is a ship with mast, sail and rigging, often indicating the direction of travel. Some varieties show a rudder. Below the ship are waves (arches) or a fish. Only variety S4-S6 have additional elements added.		
Variant S1	Ship with vertical bows. The sail is shaded and only slightly roped.		
	S1a	1	1
	Ship to the left. Waves.		
	S1b	1	1
	Ship to the right. Fish in the direction of travel.		

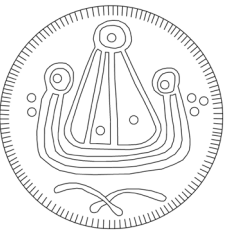


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Varieties	Number of dies		Number of coins
Variant S2	Ship with vertical bows. Narrow, rectangular sail. Hull either planks or beaded wire. Large differences between the individual dies. Direction of travel, right, usually with rudder. Waves.		
	S2a	6	9
Variant S3	Ship with curved bows that end high in a ring. Along the rail are shields, usually consisting of beads. The sail is shaded and roped in four arcs. Fish at the bottom.		
	S3a	10	12
	Ship to the right. Shields are beaded, varying numbers. Fish below can be in both directions, i.e. also against the direction of travel.		
	S3b	1	1
	Ship to the left. Fish in the direction of travel.		
	S3c	2	2
	Skib med rigging that does not indicate direction of travel. Fish to the right.		





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Varieties	Number of dies		Number of coins
	S3d	1	1
	Ship to the right, without shields along the rail. The sail is roped in arches without shading. The mast is a string of beads. Fish in the direction of travel.		
Variant S4	Ship with curved bows ending high in a ring. Mast with rigging indicating direction of travel. No sail. Fish below in the direction of travel. Triskele on each side of the mast.		
	S4a	2	2
Variant S5	Ship with curved bows that end high in dragon heads. Mast with rigging indicating the direction of travel. No sail. Fish below in the direction of travel. Coiled snakes or three dots on each side of the mast.		
	S5a	2	2
	Ship to the right. Rudder. Coiled snake on each side of the mast. Fish below in the direction of travel.		
	S5b	1	1
	Ship to the left. Three dots on each side of the mast and a dot on each side of the mast inside the rigging. Fish below in the direction of travel.		






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Varieties	Number of dies Number of coins		
Variant S6	Significant stylized ship made of two parallel lines. Curved bows ending high in a circle-dot. Mast ending in a circle-dot, with rigging indicating direction of travel. Waves below.		
	S6a	2	2
KG 4:3 Cockelrels	Two cocherels facing each other, trampling two stretched snakes.		
	B1	2	5
	Triskele behind each cockerel. Small dot at the top.		
	B2	2	3
	Triskele replaced by three small dots. Circle-dot at the top.		






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Varieties	Number of dies Number of coins		
KG 4:1 and KG 5 Face	Face with circular eyes, three curved lines of beard and four strands of hair (eventually three or five). Next to the face on each side a small straight-armed cross ending in dots. All framed in a ring. Outside this, four small masks with mustaches, sometimes marked mouth. Always placed at 12, 3, 6 and 9 o'clock. Between the masks coiled snakes, closed S- og 8-figures in various combinations and sometimes inverted. The snakes usually has clearly marked eyes and mouth.		
	F1a	14	89
	Dot above the face. Snakes at the bottom, closed S at the top. The face is clearly marked. On some dies the face reaches down to the beard, while on others it is interrupted at the bottom so that only the nose touches the beard.		
	F1aa	6	43
	As F1a, but with a dot at the hairlines, close to the head.		
	F1b	12	140
	Dot above the face. Snakes at the top, closed S at the bottom. The face is clearly marked. On some dies the face reaches down to the beard, while on others it is interrupted at the bottom so that only the nose touches the beard.		
	F1ba	1	1
	As F1b, but with a dot at the hairlines, close to the head.		





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Varieties		Number of dies	Number of coins
	F1bb	1	1
	As F1ba. Dots on closed S.		
	F2a	1	6
	Dot above the face. Dots at the hairlines, close to the head. Four snakes.		
	F2b	1	7
	Dot above the face, snakes to the left, closed S to the right. Five hair strokes. Only the nose touches the beard.		
	F2ba	2	2
	As F2b, four hair strokes with a dot.		
	F2c	1	1
	Dot above the head, snakes to the right, closed S to the left. Only the nose touches the beard.		





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Varieties		Number of dies	Number of coins
	F2d	1	1
	Dot above the face, snakes to the left, closed S to the right. The face reaches all the way down to the beard.		
	F3a	2	2
	Dot below the beard. Snakes at the top, closed S at the bottom. Face reduced to a triangle, only the bridge of the nose reaches the beard.		
	F3a1	3	4
	As F3a, dot above the face, snakes at the bottom, closed S at top.		
	F3b	10	13
	Snakes at the top, closed S at the bottom. Face reduced to a triangle, only the bridge of the nose reaches the beard. With few exceptions, smooth edge.		
	F3c	10	20
	Snakes at the top, 8-figure and closed S at the bottom. Face reduced to a triangle, only the bridge of the nose reaches the beard. Smooth edge.		





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Varieties		Number of dies	Number of coins
	F3d	10	17
	Often with no spaces between hairlines at the top. Crosses on each side of the face are usually just dots, and both location and number vary. Eyes are usually close or attached to the beard, i.e. no face or nose. Almost always 8-figure, not closed S. Different placements of snakes and other figures. Small mask arranged as normal. Smooth edge.		
	F3e	1	1
	The style similar to F1/F2. Four hair, dot over head and four beard strokes. Snakes at the bottom, 8-figure at the top. Crosses on each side of the face dissolved into four dots. Smooth edge. Fragment.		
KG 6 Face	Face with eyes directly above beard with no face or nose. Hair regular, with spaces at the top. Identifying difference to the face on KG 4 and KG 5: Snake at the top, closed S at bottom. Snakes consist of a circle with a dot from which a line emerges. Always closed S, formed by two circles with a clear center dot, circles connected by a line. Small masks do not touch the circle around the face and are often placed crooked on the center motif. Several KG 6 are half-bracteates, i.e. the opposite sides imprint is partially seen in negative.		
	F4a	7	8
	Regular hair, cross next to the face. Smooth edge.		
	F4b	1	2
	Dot above the face, dot above the cheek crosses. Smooth edge.		





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Varieties		Number of dies	Number of coins
	F4c	1	1
	Cross above the face and at the cheeks. Smooth edge.		
	F4d	1	1
	Cross above the face, crosses at the cheeks dissolved into dots. Snakes at the bottom, closed S at top. Smooth edge.		
	F4e	1	1
	Three dots above the face. Fragment. Smooth edge.		
KG 4:1 Forward Looking Deer	Forward Looking Deer to the right. Presumably stalking with kicking forelegs. Marked muzzle, eye and ear. The deer is biting a coiled snake. The snake is most often coiled from the center outwards, both clockwise and counterclockwise. The snake's eyes and mouth are marked. The deer has distinctive, cross-hatched antlers. The animal's body is also cross-hatched, with the waist marked as two or three transverse lines. The animal has four legs, the forelegs outlined as lines, while both hind legs are marked. The rear hind leg can either be part of the body or separated by a line. Filling of the rear hind leg varies between shading, V or arc lines. Generally no tail, but often a notch is visible. Rosette above the animal's back, triquetra below the animal.		
	DE1a	28	129
	Spiral or hook in the fore body. The spiral is located in an empty space, while the hook can be fully or partially embedded in the shading.		






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Varieties		Number of dies	Number of coins
	DE1ab	1	1
	Deer without ear, antler detached from head. Snake coiled from the outside in, with the snakes neck lying over the body. Additional ring symbol with four dots above the back.		
	DE1b	30	161
	Fore body cross-hatched, no spiral or hook.		
KG 4:2 Forward Looking Deer	As above, but the antlers are often more naturalistic. Except for a single die, the animal always has a spiral or a hook in the fore body. Above the back usually a mask. Under the belly either a triquetra or coiled snake. The snake in front of the deer may be coiled from the outside in, with the snakes neck lying over the body.		
	DE2a	3	5
	Mask and coiled snake.		
	DE2b	2	4
	Mask and triquetra.		

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Varieties		Number of dies	Number of coins
	DE2ba	1	1
	Mask and triquetra. The deer without spiral/hook.		
	DE2c	1	1
	Mask. A dot below the deer.		
	DE2d	1	1
	Mask, triskele.		
	DE2e	1	1
	Deviant style. More naturalistic antlers, triskele over back, empty under belly.		
KG 3:5, KG 5, KG 6 Backvard Looking Animal	Animal facing right, head turned backwards over the back. Muzzle often close to the back. Under the neck a hanging arch. On KG 3:5 and KG 5 the animal has a marked muzzle, eye and ear. The animal's body is cross-hatched and with the waist marked as two or three transverse lines. The animal on KG 6 has no marked eye or muzzle. On KG 5 and KG 6 there may be small antlers to a limited extent: one line: ear, several lines (also) antlers. The animal has a tail and shows only one foreleg and one hind leg. Empty field between back and face. Under the belly snake and triskele with varying numbers of dots.		

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Varieties		Number of dies	Number of coins
	DE3a	3	4
	Coiled snake, three dots and dot at the foreleg.		
	DE3a1	2	7
	Rough style, the animal takes up most of the surface. Triskele under the belly with or without dot over back. Smooth edge.		
	DE3b	3	3
	Clear antlers in front of the ear. Snake under the belly, triskele with varying numbers of dots and a dot at the foreleg.		
	DE3c	25	45
	Snake, triskele and dot at foreleg. Few dies with dense decorated border, otherwise smooth edge.		
	DE3d	1	3
	Snake and triskele. No dot at the foreleg. Smooth edge.		

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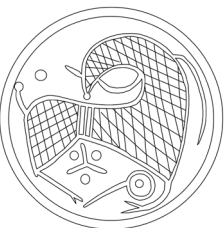

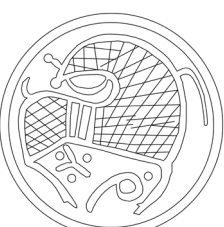

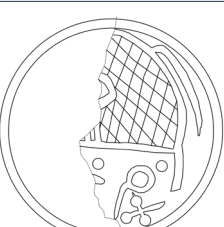
Varieties		Number of dies	Number of coins
KG 6 Animal	Several KG 6 are half-bracteates, i.e. the opposite sides imprint is partially seen in negative.		
	DE4a	5	6
	Snake-figure (circle with dot) and triskele. With or without dot over back. Smooth edge.		
	DE4b	2	3
	Antlers, snake-figure, triskele and dot at foreleg. Smooth edge.		
	DE4c	2	3
	Snake-figure, triskele and dot at foreleg. Smooth edge.		
	DE4d	1	3
	Antlers, snake-figure and X. Foreleg with toes. Smooth edge.		
	DE4e	1	1
	Probably triskele with dots, snake-figure, dot at foreleg and latin cross with dots. Smooth edge. Fragment.		

Table 3.

Catalog 1-153 is without illustrations.
See Malmer 2023

Coin type	Catalog number
KG 3:1	2, 17, 21, 32, 36, 37, 39, 41, 47, 48, 50-53, 155, 162, 167, 493, 494, 514
KG 3:1 DorSTAT	1, 11, 20, 29, 44, 163, 178a, 488, 510
KG 3:1 DorZTAT	7, 8, 12-16, 30, 31, 33-35, 38, 40, 49, 140, 141, 159, 194, 492, 511, 519, 523
KG 3:2	3-6, 18, 23, 124, 137-139, 164, 175, 507
KG 3:3	45, 46
KG 3:4	9, 10, 19, 22, 24-28, 53, (111), 177, 178, 193,
KG 3:5	42, 43, 160, 524
KG 4:1	56, 57, 154, 158, 161, 166, 170-172, 174, 176, 184, 185-192, 212-215, 217-263, 265-365, 367-405, 407, 408, 410-484, 515, 518, 520, 522, 525
KG 4:2	114-117, 119, 123-127, 180, 181, 264, 366, 406, 409, 487, 512, 521
KG 4:3	(111), 118, 129-133, 182, 183
KG 5	58-82, 112, 113, 120-122, 128, 142-153, 156, 157a-g, 168, 169, 173, 196, 197-202, 205, 207a-b, 207d-g, 208a-e, 209-211, 216, 489, 491, 495, 502, 506, 508, 513, 516, 517
KG 6	83-102, 104, 134, 135, 165, 490, 496, 499, 505
KG 5 or KG 6	103, 105-109, 136, 195, 204, 485, 497, 501
KG 4:1 or KG 5	207c
KG 4:1 or KG 5 or KG 6	110, 207h-m

Catalog

DIME:
Digitale Metaldetektorfund
(Digital Metal Detector Finds)
www.metaldetektorfund.dk

FP:
Find Protocol (at KMMS)

KG:
Combination Group

KMMS:
Den Kongelige Mønt- og Medaillesamling,
Nationalmuseet, København

LUHM:
Lunds Universitets Historiska Museet

UIO:
Universitetet i Oslo

Site number:
Reference to the Danish national database
www.kulturarv.dk/fundogfortidsminder

Catalog 1-153 is without illustrations. See Malmer 2023



- 1** Birka, Burial 526, KG 3:1 Carolus/Dorstat, variety CA1/DS1d, Malmer 10.1015
- 2** Lindholm Høje, KG 3:1 Carolus/Dorstat, variety CC*/D*, Malmer 11.1013
- 3** Haithabu, Harbour, KG 3:2 Carolus/House, variety CB2/H2b, Malmer 12.1056
- 4** Haithabu, Harbour, KG 3:2 Carolus/House, variety CB2/H1c, Malmer 13.1052
- 5** Haithabu, Harbour, KG 3:2 Carolus/House, variety CB2/H1b, Malmer 14.1053
- 6** Haithabu, Harbour, KG 3:2 Carolus/House, variety C*/H1c, Malmer 17.1051
- 7** Haithabu, KG 3:1 Carolus/Dorstat, variety CB3/DZ1c, smooth edge, Malmer 18.1029
- 8** Helgö, Sweden, Burial 12, KG 3:1 Carolus/Dorstat, variety CB3/DZ1c, dense decorated border, Malmer 19.1030
- 9** Flokerudstorp, Sweden, KG 3:4 Carolus/Ship, variety CC2/S1b, Malmer 20.1070
- 10** Okholm, Site number 190411-29, KG 3:4 Carolus/Ship, variety CC2/S4a, Malmer 21.1069
- 11** Söderby, KG 3:1 Carolus/Dorstat, variety CC2/DS1c, Malmer 22.1014
- 12** Private collection, KG 3:1 Carolus/Dorstat, variety CC2/DZ1a, Malmer 23.1017
- 13** Private collection (Haithabu?), KG 3:1 Carolus/Dorstat, variety CC2/DZ1a, Malmer 24.1018
- 14** = 54 Museum collection Berlin, KG 3:1 Carolus/Dorstat, variety CC2/DZ1a, Malmer 25.1019
- 15** Haithabu, KG 3:1 Carolus/Dorstat, variety CC2/DZ1a, Malmer 26.1020. Weichmann 2007, p. 262, no. 65. Hilberg 2014, p.178, culture layer, dated to second half 9th century.
- 16** Haithabu, Burial 56/904, KG 3:1 Carolus/Dorstat, variety CC*/DZ*, Malmer 27.1021
- 17** Birka, Burial 168, KG 3:1 Carolus/Dorstat, variety CC2/D*, Malmer 28.1032
- 18** Söderby, Burial 31, KG 3:2 Carolus/House, variety C*/H1-2, Malmer 2023 places the coin under CARU with rosette, triangle and string of beads. However, the fragmentation means that it can not be confirmed if the test is CARLU or CARU, Malmer 29.1054
- 19** Birka, Burial 526, KG 3:4 Carolus/Ship, variety CC2a/S2a, Malmer 30.1080
- 20** Sannagård, Burial 195, KG 3:1 Carolus/Dorstat, variety CC1/DS1b, Malmer 31.1010
- 21** Sannagård, Burial 195, KG 3:1 Carolus/Dorstat, variety CC2/D*, Malmer 32.1011
- 22** Birka, Burial 526, KG 3:4 Carolus/Ship, variety CC1/S2a, Malmer 33.1079
- 23** Tissø, KG 3:2 Carolus/House, variety CC1/H2a, Malmer 34.1055
- 24** Birka, Burial 526, KG 3:4 Carolus/Ship, variety CC1/S6a, Malmer 35.1083
- 25** Hollenæsgård, Site number 070501-15, KG 3:4 Carolus/Ship, variety CC1/S6a, Malmer 36.1082
- 26** Uppåkra, Sweden, KG 3:4 Carolus/Ship, variety CC1/S2a, LUHM MK 25676, Malmer 37.1081
- 27** Birka, Burial 526, KG 3:4 Carolus/Ship, variety CC1a/S2a, Malmer 38.1073
- 28** Gudme, KG 3:4 Carolus/Ship, variety CC1a/S1*, Malmer 39.1071
- 29** Birka, Burial 526, KG 3:1 Carolus/Dorstat, variety CC2/DS*, Malmer mentions no piercing, while Audy 2018: Loop, riveted, Malmer 40.1012
- 30** Janów Pomorski (Truso), KG 3:1 Carolus/Dorstat, variety CC7/DZ*, Malmer 41.1016
- 31** Museum collection KMMS, KG 3:1 Carolus/Dorstat, variety CC3/DZ1b, Malmer 42.1022
- 32** Haithabu, KG 3:1 Carolus/Dorstat, variety CC3/D*, Malmer 43.1033. Weichmann 2007, p. 262, no. 63. Hilberg 2014, p.178, culture layer, dated to second half 9th century.
- 33** Museum collection Lund, KG 3:1 Carolus/Dorstat, variety CC3/DZ1b, Malmer 44.1023
- 34** =55 Private collection (from Haithabu?), KG 3:1 Carolus/Dorstat, variety CC3/DZ1b, Malmer 54.1024 who considers it the same coin as Malmer 67.1045
- 35** Spillings II, Sweden, KG 3:1 Carolus/Dorstat, variety CC4/Dz1b, smooth edge, Malmer 47.1036
- 36** Spillings II, Sweden, KG 3:1 Carolus/Dorstat, variety CC4/D*, smooth edge, Malmer 48.1037
- 37** Haithabu, KG 3:1 Carolus/Dorstat, variety CC2-4/D*, Malmer 49.1035
- 38** Lerchenborg, KG 3:1 Carolus/Dorstat, variety CC10/DZ1b, smooth edge, Malmer 50.1026
- 39** Birka, Hovgården, Burial 9/20 (Audy 2018: Burial 9), KG 3:1 Carolus/Dorstat, variety CC10/D* but probably ZTAT and probably smooth edge, Malmer 51.1031
- 40** Haithabu, Chamber burial I, KG 3:1 Carolus/Dorstat, variety CC10/DZ1*, smooth edge, Malmer 52.1027
- 41** Haithabu, Chamber burial III, Carolus/Dorstat, variety CC*/D*, smooth edge (?), formentlig ZTAT da S ikke ses til venstre for TAT, Malmer 53.1034
- 42** Birka, Hovgården, Burial 9/20 (Audy 2018: Burial 9), KG 3:5 Carolus/Backward-looking animal, variety CC9/DE3a, Malmer 54.1124
- 43** Birka, Burial 780, KG 3:5 Carolus/Backward-looking animal, variety CC9/DE3a, Malmer 55.1125
- 44** Gudme, KG 3:1 Carolus/Dorstat, variety CC8/DS1e, Malmer 56.1028
- 45** Museum collection, München, KG 3:3 Carolus/Man, variety CD1/M1, Malmer 57.1047
- 46** Tissø, KG 3:3 Carolus/Man, variety CE1/M1, Malmer 58.1048

- 47** Haithabu, Hoard, KG 3:1 Carolus/Dorstad, variety C*/D*, Malmer 59.1038, Hilberg 2014, s. 177
- 48** Haithabu, Hoard, KG 3:1 Carolus/Dorstad, variety C*/D*, Malmer 60.1040, Hilberg 2014, s. 177
- 49** Uppåkra, Sweden, KG 3:1 Carolus/Dorstad, variety C*/DZ*, Malmer 61.1039
- 50** Haithabu, Chamber burial III, KG 3:1 Carolus/Dorstad, variety C*/D*, Malmer 62.1041
- 51** Vossberg, Germany, KG 3:1 Carolus/Dorstad, variety C*/D*, Malmer 63.1042
- 52** Haithabu, Chamber burial I, KG 3:1 Carolus/Dorstad, variety CC*/D*, Malmer 64.1043
- 53** Eiderstedt, Germany, KG 3:4 Carolus Skib (?). Lost coin, variety C*/D*, Malmer 65.1084
- 54** – see Cat. 14.
- 55** – see Cat. 34.
- 56** "Skåne", Sweden, KG 4:1 Face/Forward Looking Deer, variety F1a/DE1b, Moesgaard 2018, no. 1, KMMS PB 726, Malmer 70.1099
- 57** Uppåkra, Sweden, KG 4:1 Face/Forward Looking Deer, variety F1a/DE1a, Moesgaard 2018, no. 2, Malmer 71.1100
- 58** Birka, Burial 508, KG 5 Face/Backward Looking Animal, variety F3a1/DE3b, Malmer 72.1110
- 59** Birka, Burial 306A, KG 5 Face/Backward Looking Animal, variety F3a1/DE3c, Malmer 73.1111
- 60** Sejrby, Sejerø, Site number 030607-, KG 5 Face/Backward Looking Animal, variety F3*/DE3b, Malmer 74.1139. In Malmer 2023 the reverse is illustrated as part of 1143, while the coin illustrated as 1139, is not identified, and are omitted from this Catalog.
- 61** Birka, Burial 508, KG 5 Face/Backward Looking Animal, variety F3a/DE3c, Malmer 75.1112
- 62** Birka, Burial 184, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 77.1123
- 63** Spillings II, Sweden, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 78.1119
- 64** Birka, Burial 860B, KG 5 Face/Backward Looking Animal, variety F3b/DE3c, Malmer 80.1113
- 65** Birka, Burial 860B, KG 5 Face/Backward Looking Animal, variety F3b/DE3*, Malmer 82.1131
- 66** Birka, Burial 963, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 84.1128
- 67** Ribe, Rosenallé, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 85.1135
- 68** Kaupang, Norway, KG 5 Face/Backward Looking Animal, variety F3*/DE3c, Malmer 86.1130
- 69** Birka, Burial 954, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 88.1134
- 70** Birka, Burial 968, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 90.1117
- 71** Giekau, Germany, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 91.1140
- 72** Janów Pomorski (Truso), KG 5 Face/Backward Looking Animal, variety F3e/DE3b, Malmer 92.1133
- 73** Lupawa/Slupsk, Poland, KG 5 Face/Backward Looking Animal, variety F3b/DE3c, Malmer 95.1118
- 74** Birka, Burial 639?, KG 5 Face/Backward Looking Animal, variety F3*/DE3-4*, Malmer 97.1126
- 75** Birka, Burial 639?, KG 5 Face/Backward Looking Animal, variety F2-3*/*, Malmer 98.1141
- 76** Okholm, KG 5 Face/Backward Looking Animal, variety F3*/DE3*, ASR 583x57, Malmer 99.1129
- 77** Alt-Archum, Germany, KG 5 Face/Backward Looking Animal, variety F3*/DE3c, Malmer 100.1127
- 78** Spillings II, Sweden, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, Malmer 102.1145
- 79** Gniezno, Poland, KG 5 Face/Backward Looking Animal, variety F*/DE3a1, Malmer 103.1122
- 80** Cuerdale?, England, KG 5 Face/Backward Looking Animal, variety F3*/DE3*, Malmer 104.1142
- 81** Grisebjerggård, Site number 040301-109, KG 5 Face/Backward Looking Animal, variety F*/DE3-4, KMMS FP 12314.1079, Malmer 105.1143. Malmer 2023 illustrates three fragments as 1143, only two are this coin, while the third is 1139.
- 82** Ribe, Ribelund, Site number 190409-63, KG 5 Face/Backward Looking Animal, variety F3*/DE3*, ASR 926x53, Malmer 106.1144, Feveile 2006, p. 300, no. 2.
- 83** "Westerland", Sylt, Germany, KG 6 Face/Backward Looking Animal, variety F4a/DE4a, Malmer 110.1155
- 84** Gniezno, Poland, KG 6 Face/Backward Looking Animal, variety F4*/DE4*, Malmer 111.1156
- 85** Terslev, Site number 040217-13, KG 6 Face/Backward Looking Animal, variety F4b/DE4a, some half-bracteate strike, Malmer 112.1153
- 86** Grisebjerggård, Site number 040301-109, KG 6 Face/Backward Looking Animal, variety F4a/DE4c, KMMS FP 12314.1081, Malmer 113.1159
- 87** Terslev, Site number 040217-13, KG 6 Face/Backward Looking Animal, variety F4b/DE4a, half-bracteate strike, Malmer 114.1154
- 88** Rommunds, Sweden, KG 6 Face/Backward Looking Animal, variety F4d/DE4b, Malmer 115.1150

- 89** Gniezno, Poland, KG 6 Face/Backward Looking Animal, variety F4*/DE4b-c, half-bracteate strike, Malmer 117.1152
- 90** Terslev, Site number 040217-13, KG 6 Face/Backward Looking Animal, variety F4e/DE4e, half-bracteate strike, Malmer 118.1161
- 91** Waterneverstorf I, Germany, KG 6 Face/Backward Looking Animal, variety F4a/DE4d, half-bracteate strike, Malmer 119.1158
- 92** Okholm, Stednr 190411-90, KG 6 Face/Backward Looking Animal, variety F4*/DE4*, Malmer 120.1163
- 93** Træhede, Site number 200402-219, KG 6 Face/Backward Looking Animal, variety F4a/DE4d, half-bracteate strike, Malmer 121.1157
- 94** Grisebjerggård, Site number 040301-109, KG 6 Face/Backward Looking Animal, variety F4*/DE4*, half-bracteate strike, Malmer 118.1161
- 95** Sejrby, Sejerø, Site number 030607-, KG 6 Face/Backward Looking Animal, variety, F4*/DE4*, half-bracteate strike, Malmer 123.1164
- 96** Sejrby, Sejerø, Site number 030607-, KG 6 Face/Backward Looking Animal, variety, F4*/DE4a, Malmer 124.1168
- 97** Sejrby, Sejerø, Site number 030607-, KG 6 Face/Backward Looking Animal, variety, F4*/DE4*, Malmer 123.1164
- 98** Smedby, Sweden, KG 6 Face/Backward Looking Animal, variety, F4*/DE4*, Malmer 126.1162
- 99** Gjerrild Klint, Site number 140106-4, KG 6 Face/Backward Looking Animal, variety, F4*/DE4c, Malmer 127.1167
- 100** Slubbemåla (Käppevik), Sweden, KG 6 Face/Backward Looking Animal, variety F4a/DE4d, Malmer 128.1170
- 101** Museum collection KMMS, KG 6 Face/Backward Looking Animal, variety F4*/DE3-4*, Malmer 129.1169
- 102** Terslev, Site number 040217-13, KG 6 Face/Backward Looking Animal, variety F4*/DE4a, Malmer 130.1166
- 103** Coppergate, York, KG 5/6 Face/Backward Looking Animal, variety F3-4*/DE3-4*, Malmer 140.1183
- 104** Sejrby, Sejrø, 030607-, KG 6 Face/Backward Looking Animal, variety F4*/DE3-4*, Malmer 141.1182
- 105** Gniezno, Poland, KG 5/6 Face/Backward Looking Animal, variety F4*/DE3-4*, Malmer 142.1180
- 106** Pomorsko, Poland, KG 5/6 Face/Backward Looking Animal, variety F3-4*/DE3-4*, Malmer 143.1181
- 107** Ribe, Posthuset, KG 5/6 Face/Backward Looking Animal, variety F*/*, Malmer 145.1185, Feveile 2006, p. 296, no. 55.
- 108** Ribe, Posthuset, KG 5/6 Face/Backward Looking Animal, variety F*/DE*, Malmer 148.1187, Feveile 2006, p. 298, no. 60.
- 109** Ribe, Posthuset, KG 5/6 Face/Backward Looking Animal, variety */*, Malmer 148.1187, Feveile 2006, p. 298, no. 61.
- 110** Ribe, Sct. Nicolajgade 14, KG 4-6 Face/Deer-animal, variety */*, Malmer 149.1188, Feveile 2006, p. 305, no. 8.
- 111** Birka, Burial 526, KG 3:4/4:3? (Carolus?)/Ship, variety */S*, Malmer 160.1072. Only a sketch of the ship reminding of variety S2a exists. The sketch has a fish below the ship, which is otherwise not seen on variety S2a. Variety S2a is also available in combination with cocherels, i.e. KG 4:3.
- 112** Gl. Lejre, Site number 020601-, KG 5 Face/Backward Looking Animal, variety F2-3*/DE3*, Malmer 166.1194
- 113** Okholm, Site number 190411-150, KG 5 Face/Backward Looking Animal, variety F3*/DE3*, Malmer 167.1195
- 114** Spangereid, Norway, KG 4:2 Ship/Forward Looking Deer, variety S3a/DE2d, imprint in metal foil, preserved at KMMS, Malmer 1063.1095
- 115** Tissø, KG 4:2 Ship/Forward Looking Deer, Variety S3a/DE2a, Malmer 1065.1097
- 116** Spangereid, Norway, KG 4:2 Ship/Forward Looking Deer, Variety S3*/DE2*, imprint in metal foil, preserved at KMMS, Malmer 1067.1091
- 117** Birka, Burial 526, KG 4:2 Ship/Forward Looking Deer, Variety S3d/DE2e, Malmer 1068.1090
- 118** Museum collection, Vikingskibshallen Roskilde, KG 4:3 Cocherels/Ship, variety B1/S5a, Malmer 1085.1107, Ploug 2012.
- 119** Johannishus, Sweden, KG 4:2 Ship/Forward Looking Deer, Variety S3a/DE2b, Malmer 1060.1092. Audy 2018: Broken suspension.
- 120** Ribe, Posthuset, KG 5 Face/Backward Looking Animal, Variety */DE*, Malmer 108.1132, Feveile 2006, p. 297, no. 57.
- 121** Ribe, Posthuset, KG 5/6 Face/Backward Looking Animal, Variety */DE*, Malmer 144.1184, Feveile 2006, p. 297, no. 59.
- 122** Grisebjerggård, Site number 040301-109, KG 5 Face/Backward Looking Animal, Variety F3c/DE3a1, Malmer 101.1116:2
- 123** Järrestad, Sweden, KG 4:2 Ship/Forward Looking Deer, Variety S3a/DE2b, Malmer 1061:1.1093:3
- 124** Spangereid, Norway, KG 4:2 Ship/Forward Looking Deer, Variety S3a/DE2b, imprint in metal foil, preserved at KMMS, Malmer 1061:2.1093:2
- 125** (same coin as 179) Spangereid, Norway KG 4:2 Ship/Forward Looking Deer, Variety S3a/DE2ba, imprint in metal foil, preserved at KMMS, Malmer 1062.1094
- 126** Löddeköpinge, Sweden, KG 4:2 Ship/Forward Looking Deer, Variety S3a/DE2b, Malmer 1064.1093:1

- 127** Kislaya, Smolensk, Rusland. KG 4:2 Ship/Forward Looking Deer, Variety S3c/DE2a, Malmer 1066.1096
- 128** Ribe Posthuset, KG 5 Face/Backward Looking Animal, Variety F*/*, Malmer 107.1196, Feveile 2006, p.297 no. 58.
- 129** Helgö, Sweden, Burial 14, KG 4:3 Cocherels/Ship, Variety B2/S2a, Malmer 1074.1106:1
- 130** Helgö, Sweden, Burial 14, KG 4:3 Cocherels/Ship, Variety B2/S2a, Malmer 1075.1106:2
- 131** Birka, Burial 526, KG 4:3 Cocherels/Ship, Variety B2/S2a, Malmer 1076.1105:1
- 132** Birka, Burial 646, KG 4:3 Cocherels/Ship, Variety B2/S2a, Malmer 1077.1105:2
- 133** Helgö, Sweden, KG 4:3 Cocherels/Ship, Variety B2/S2a, Malmer 1078.1105:3
- 134** Museum collection SHM/KMK Stockholm, KG 6 Face/Backward Looking Animal, Variety F4a/DE4b, clear half-bracteate strike, Malmer 116:1.1151:1
- 135** Näsby, Sweden, KG 6 Face/Backward Looking Animal, Variety F4a/DE4b, Half-bracteate strike, Malmer 116:2.1151:2
- 136** Ribe, Posthuset, KG 5/6 Face/Backward Looking Animal, Variety */DE*, Malmer 147.1197 Malmer depicts the visible side as the face (147), but it is the deer which is faintly visible, cf. Feveile 2006, p. 297, nr. 56.
- 137** Haithabu, Harbour, KG 3:2 Carolus/Houss, Variety CB2/H1a, Malmer 15.1050:1
- 138** Haithabu Harbour, KG 3:2 Carolus/House, Variety CB2/H1a, Malmer 16:1.1050:2
- 139** Birka, Burial 646, KG 3:2 Carolus/House, Variety CB2/H1a, Malmer 16:2.1050:3
- 140** Haithabu, Pithouse 13, KG 3:1 Carolus/Dorstat, Variety CC4/DZ1b, Malmer 46:1.1025.1
- 141** Schuby, Germany, KG 3:1 Carolus/Dorstat, Variety CC4/DZ1b, Malmer 46:2.1025.2
- 142** Birka, Burial 184, KG 5 Face/Backward Looking Animal, Variety F3a/DE3c, Malmer 76.1114:1
- 143** Birka, Burial 184, KG 5 Face/Backward Looking Animal, Variety F3c/DE3c, Malmer 79.1115:1
- 144** Birka, Burial 860B, KG 5 Face/Backward Looking Animal, Variety F3c/DE3c, Malmer 81.1115:2
- 145** Birka, Burial 943, KG 5 Face/Backward Looking Animal, Variety F3c/DE3c, Malmer 83.1114:2
- 146** Birka, Burial 184, KG 5 Face/Backward Looking Animal, Variety F3d/DE3c, Malmer 87:1.1136:1
- 147** Lakenheath, England, KG 5 Face/Backward Looking Animal, Variety F3d/DE3c, Malmer 87:2.1136:2
- 148** "Halland", Sweden, KG 5 Face/Backward Looking Animal, Variety F3d/DE3a1, Malmer 89:1.1121:2
- 149** Terslev, Site number 040217-13, KG 5 Face/Backward Looking Animal, Variety F3d/DE3a1, Malmer 89:2.1120
- 150** Terslev, Site number 040217-13, KG 5 Face/Backward Looking Animal, Variety F3d/DE3a1, Malmer 93.1121:1
- 151** "Halland", Sweden, KG 5 Face/Backward Looking Animal, Variety F3d/DE3c, Malmer 94:1.1137
- 152** Curedale?, England, KG 5 Face/Backward Looking Animal, Variety F3d/DE3c, Malmer 94:2.1138
- 153** Birka, Burial 835 KG 5 Face/Backward Looking Animal, Variety F3c/DE3a1, Malmer 96.1116:1

154 Favrbjerghus, Site number 020110-41, KG 4:1 Face/Forward Looking Deer, Variety F1a/DE1a, Moesgaard 2018, no. 6, KMMS FP 15364.1, ROM 3450x1. Photo: Nationalmuseet, Sean Weston.

155 Fjelsted, Site number 140706-345, KG 3:1 Carolus/Dorstat, Variety C*/D*, mirrored L beside AR?, pierced, fragment, KMMS FP 14555.2. Photo: Nationalmuseet, Sean Weston.

156 Foulum Vest, Site number 131208-93, KG 5 Face/Backward Looking Animal, variety F3b/DE3c, KMMS FP 12007.1, VSM 10010x9. Photo: Nationalmuseet, Sean Weston.

157a Fæsted Harreby, Site number 200107-93. KG 5 Face/Backward Looking Animal, variety F3b/DE3*, KMMS FP 17368 coin 1, HBV 1498. Feveile et al 2025.

157b Fæsted Harreby, Site number 200107-93. KG 5 Face/Backward Looking Animal, variety F*/DE*, KMMS FP 17368 coin 2, HBV 1498. Feveile et al 2025.

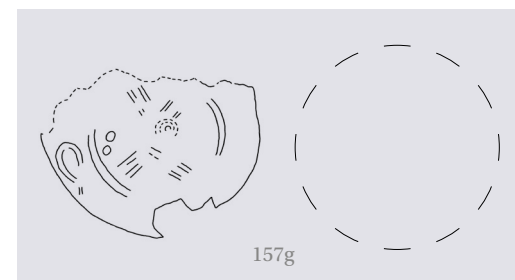
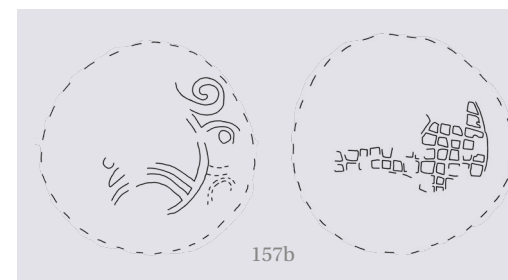
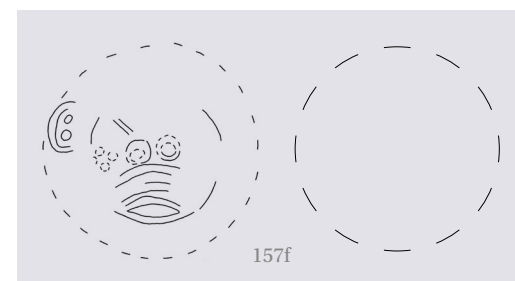
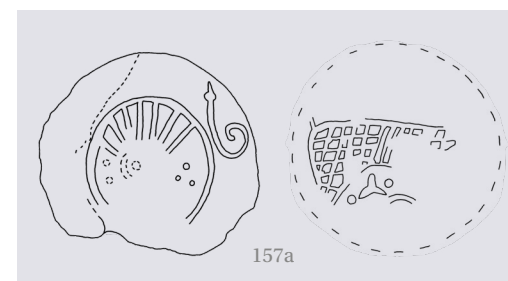
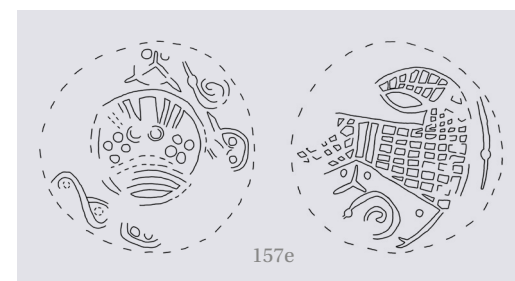
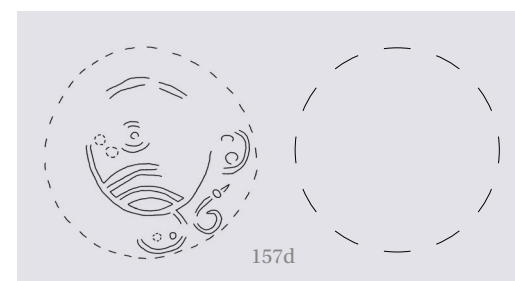
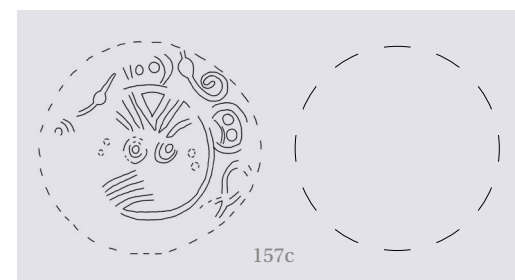
157c Fæsted Harreby, Site number 200107-93. KG 5 Face/Backward Looking Animal, variety F3d/*, KMMS FP 17368 coin 3, HBV 1498. Feveile et al 2025.

157d Fæsted Harreby, Site number 200107-93. KG 5 Face/Backward Looking Animal, variety F3*/*, KMMS FP 17368 coin 4, HBV 1498. Feveile et al 2025.

157e Fæsted Harreby, Site number 200107-93. KG 5 Face/Backward Looking Animal, variety F3b/DE3c, KMMS FP 17368 coin 5, HBV 1498. Feveile et al 2025.

157f Fæsted Harreby, Site number 200107-93. KG 5/6 Face/Backward Looking Animal, variety F3d/*, KMMS FP 17368 coin 6, HBV 1498. Feveile et al 2025.

157g Fæsted Harreby, Site number 200107-93. KG 5/6 Face/Backward Looking Animal, variety F3-4*/*, KMMS FP 17368 coin 7, HBV 1498. Feveile et al 2025.



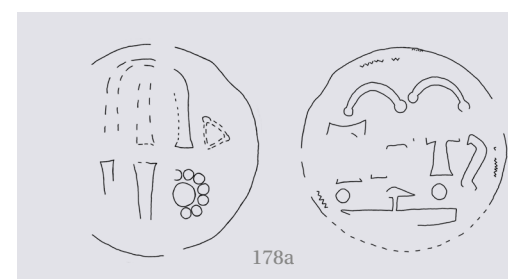
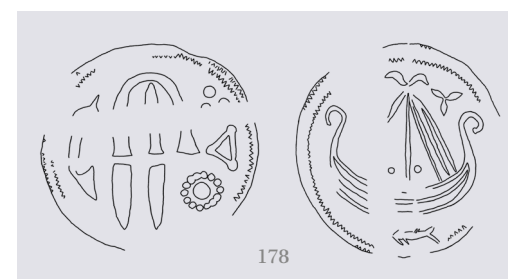
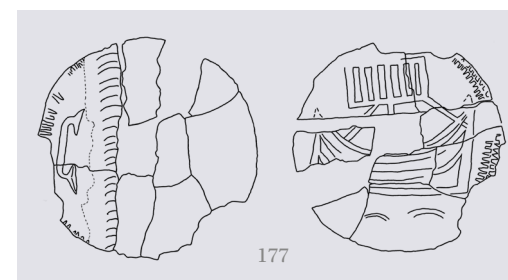
- 158** Gl. Holeby III, Site number 070309-40. KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, Moesgaard 2018, no. 8, KMMS FP 13117.1. Photo: Nationalmuseet, Sean Weston.
- 159** Gl. Lejre, Site number 020601-118. KG 3:1 Carolus/Dorstat, variety C*/DZ1b, pierced close to the border and closely folded into a triangle, KMMS FP 13118.2, ROM 641/85 x op1591. Photo: Tobias Bondesson.
- 160** Hastrup By, Site number 050202-90, KG 3:5 Carolus/Backward-looking animal, variety CC9/DE3a, KMMS FP 15658.1. Photo: Nationalmuseet, Sean Weston.
- 161** Hillerslev II, Site number 110202-94. KG 4:1 Face/Forward Looking Deer, variety F1a/DE1a, Moesgaard 2018, no. 10, KMMS FP 16576.2, THY 6177x1060. Photo: Nationalmuseet, Rasmus Holst Nielsen.
- 162** Kastanjehøj, Site number 050612-80, KG 3:1 Carolus/Dorstat, variety CC1/D*, KMMS FP 13381.1, KØM 2040x570, Photo: Nationalmuseet, Sean Weston.
- 163** Kastanjehøj, Site number 050612-80, KG 3:1 Carolus/Dorstat, variety CA1/DS1d, KMMS FP 13521.1, KØM 2040x276. Photo: Nationalmuseet, Sean Weston.
- 164** Toftum Næs (Kærgård), Site number 130110-132, KG 3:2 Carolus/House, variety CB2/H2a, KMMS FP 11396.3, VSM 9682x557. Photo: Nationalmuseet, Sean Weston.
- 165** Toftum Næs (Kærgård), Site number 130110-132, KG 6 Face/Backward Looking Animal, variety F4b/DE4a, KMMS FP 11396.4, VSM 9682x358. Photo: Nationalmuseet, Sean Weston.
- 166** Landerslev, Site number 010203-143, KG 4:1 Face/Forward Looking Deer, variety F1bb/DE1b, Moesgaard 2018, no. 3, KMMS FP 8654.1, MFG 406/07x186. Photo: Thorbjørn Stellander.
- 167** Lærkenfryd, Site number 010306-1, KG 3:1 Carolus/Dorstat, Variety CD-CE/D*, dots above axe replaced with rings, KMMS FP 8073.3, MFG 32/90. Uncertain placement of the small fragment. Photo: Nationalmuseet, Sean Weston.



- 168** Melby Vest, Site number 010505-156, KG 5 Face/Backward Looking Animal, variety F3b/DE3c, KMMS FP 16155.1, MNS 50438x16, DIME 26788. Photo: Nationalmuseet, Sean Weston.
- 169** Nørholm, Site number 120508-70, KG 5 Face/Backward Looking Animal, variety F2d/DE3c, KMMS FP 10818.2, ÅHM 6309 K040x1. Photo: Nationalmuseet, Sean Weston.
- 170** Pugholmgård Nord, Site number 080501-40, KG 4:1 Face/Forward Looking Deer, variety F1a-DE1a, pierced close to the border, KMMS FP 14977.1, OBM 9696x21. Photo: Museum Odense.
- 171** Rossvang, Site number 170708-89, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1a, edge damage, probably not pierced. Moesgaard 2018, no. 5, KMMS FP 14955.1, MKH 1943x1. Photo: Nationalmuseet, Sean Weston.
- 172** Stavns Syd, Site number 030504-104, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1a, pierced close to the border, Moesgaard 2018 no 12, KMMS FP 14562.1, FHM 5783x1. Photo: Moesgård Fotolab.
- 173** Sønder Hygum, Site number 200107-286, KG 5 Face Backward Looking Animal, variety F3b/DE3c, KMMS FP 17166.1, HBV 1786x10. Photo: Museet på Sønderskov.
- 174** Veng II, Site number 160210-83, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1*, pierced with two holes, and closely folded into a rectangular package, KMMS FP 12236.1, SBM 1379x24. Photo: Nationalmuseet, Sean Weston.
- 175** Vindeby, Site number 070413-36, KG 3:2 Carolus/House, variety CC*/H1*, pierced close to the border, the letter C is placed low, probably CARU, KMMS FP 15995.1, MLF 2206x84. Photo: Nationalmuseet, Sean Weston.
- 176** Viskum Hovedgård, Site number 131211-61, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, pierced with two tight-fitting holes close to the border, Moesgaard 2018, no. 4, KMMS FP 9533.2, VSM 9747. Photo: Nationalmuseet, Niels J.E. Andersen.



- 177** Yderik, Site number 190805-119, KG 3:4 Carolus/Ship, variety C*/S2*, folded close around cat. 178 and 178a, KMMS FP 16659, VAM 1614x194 Coin 1, Feveile et al. 2025.
- 178** Yderik, Site number 190805-119, KG 3:4 Carolus/Ship, variety CC5/S4a, folded close between cat. 177 and 178a, KMMS FP 16659, VAM 1614x194 Coin 2, Feveile et al. 2025.
- 178a** Yderik, Site number 190805-119, KG 3:1 Carolus/Dorstat, variety CB-CC/DS1a, uncertain whether the reverse is mirrored, folded close inside cat. 178 and 178a, KMMS FP 16659, VAM 1614x194 Coin 3, Feveile et al 2025.
- 179** (same coin as 125) Spangereid, KG 4:2 Ship/Forward Looking Deer, variety S3*/DE2*, small fragment preserved at UIO, Unimus M151406 C19368UN. Photo: Unimus.no.
- 180** Øster Vandet, Site number 110213-56(?), KG 4:2 Ship/Forward Looking Deer, variety S3*/DE2*, pierced, DIME 121404, THY 5045x969, Photo: Nationalmuseet, Sean Weston.
- 181** Helgenæs, KG 4:2 Ship/Forward Looking Deer, variety S3*/DE2a, MOE 1100x243884, DIME 243884. Photo: Frantz Lundby.
- 182** Strøby-Toftegård, Site number 050612-74, KG 4:3 Cocherels/Ship, variety B1/S5b, probably pierced close to the border, KØM 1699x1382. Photo: Museum Sydøstdanmark.
- 183** Bakkegården Robstrup, Site number 140104-50, KG 4:3 Cocherels/Ship, variety B1/S5a, pierced with two tight-fitting holes close to the border and rolled up into a cylinder, MOE 1100x213728, DIME 213728, Photo: Yaroslav Churuta.
- 184** Gl. Lejre, Site number 020601-, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, ROM 3577x681. Photo: Roskilde Museum, Cille Krause.
- 185** Rønge Hule, Site number 130712-33, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, pierced close to the border, FHM 5360, DIME 70796. Photo: Brian Christensen.



186 Hillerslev II, Site number 110202-94, KG 4:1 Face/Forward Looking Deer, variety F1aa/DE1a, pierced close to the border, nitterest, THY 6177x2688, DIME 165029, Photo: Peder Laursen.

187 Klintholm 5, Pit house, Site number 220201-174, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1a, HAM 6319x65b. Photo: Museum Sønderjylland – Arkæologi Haderslev.

188 Marke, Site number 030707-290, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, MVE 3127x426, DIME 187169. Photo: Ole Harpøth.

189 Revn, Site number 140213-, KG 4:1 Face/Forward Looking Deer, variety F1a/DE1a, pierced close to the border, MOE 1100x192829, DIME 192829. Photo: Betina Toft Würtz.

190 Munke Bjerby, Site number 040108-, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, pierced close to the border, (DIME 38953 ?). Photo: www.metaldetektorfund.dk.

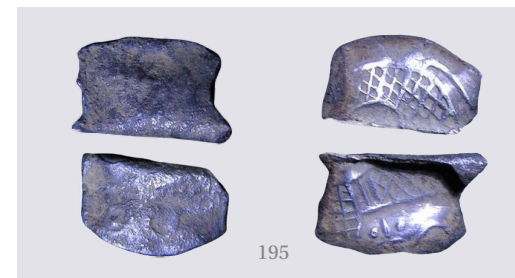
191 Herslev, Site number 030204-136, KG 4:1 Face/Forward Looking Deer, variety F2b/DE1a, MVE 3081x3031, DIME 210190. Photo: Museum Vestsjælland.

192 Hillerslev II, Site number 110202-94, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, THY 6177, DIME 225952. Photo: Per Kyndi.

193 Gundslev, Stednummer 070103-86. KG 3:4 Carolus/Ship, variety CC2a/S1a, pierced close to the border, MLF 2897, Photo: Christian Sveigaard.

194 Frøslev Vest, Site number 050601-17, KG 3:1 Carolus/Dorstat, variety CC2/DZ1b, pierced close to the border, distinct bend (caused by plowing?), KNV00294x443, DIME 44490. Photo: Jesper Lanther.

195 Havsmarken, Site number 090704-168/171, KG 5/6 Face/Backward Looking Animal, variety F*/DE3-4* Photo: Steen Agersø.



- 196** Bjerndrup II, Site number 220107-207, KG 5 Face/Backward Looking Animal, variety F3d/DE3c, HAM 6166x3b. Photo: Museum Sønderjylland - Arkæologi Haderslev.
- 197** Bjerndrup I, hoard with coins, hack silver and ingots, total of 224 pieces. Danish (KG 5 og KG 7), carolingian, arabic and english coins, TPQ 910/111. Brøgger & Hartvig 2021.
- 197** Bjerndrup I, Site number 220107-201, KG 5 Face/Backward Looking Animal, variety F3*/DE3c, HAM 5980x3. Photo: Museum Sønderjylland - Arkæologi Haderslev.
- 198** Bjerndrup I, Site number 220107-201, KG 5 Face/Backward Looking Animal, variety F3d/DE3c, HAM 5980x4. Photo: Museum Sønderjylland - Arkæologi Haderslev.
- 199** Bjerndrup I, Site number 220107-201, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, HAM 5980x5. Photo: Museum Sønderjylland - Arkæologi Haderslev.
- 200** Bjerndrup I, Site number 220107-201, KG 5 Face/Backward Looking Animal, variety F3d/DE3c, HAM 5980x81. Photo: Museum Sønderjylland - Arkæologi Haderslev.
- 201** Bjerndrup I, Site number 220107-201, KG 5 Face/Backward Looking Animal, variety F3d/DE3c, HAM 5980x182. Photo: Museum Sønderjylland - Arkæologi Haderslev.
- 202** Bjerndrup I, Site number 220107-201, KG 5 Face/Backward Looking Animal, variety F*/DE3-4*, HAM 5980x242. Photo: Museum Sønderjylland - Arkæologi Haderslev.
- 203** Deleted
- 204** Hørbygård, Site number 030705-96, KG 5/6 Face/Backward Looking Animal, variety */DE3-4*, MHO 1079x80, DIME 36474. Photo: www.metaldetektorfund.dk and Museum Vestsjælland.
- 205** Skærvad, Site number 140105-200, KG 5 Face/Backward Looking Animal, variety F3c/*, pierced close to the border, tightly folded, MOE 1100x97989, DIME 97989, Photo: Betina Toft Würtz.
- 206** Bregninge, Site number 030603-341, KG 5 Face/Backward Looking animal, variety F3b/DE3c, MVE 3291, DIME 157173. Photo: www.metaldetektorfund.dk



207 Lønborggård, Site number 180605-107, **a-m** ARV 86x50, DIME 207908. Small stack of 13 closely corroded coins. Feveile et al 2025.

207a coin 1, KG 5 Face/Backward Looking Animal, variety */(DE3d).

207b coin 4, KG 5 Face/Backward Looking Animal, variety */DE3-4*.

207c coin 6, KG 4-5 Face/Deer-animal, variety F1-3*/*.

207d coin 8, KG 5 Face/Backward Looking Animal, variety */DE3c.

207e coin 9, KG 5 Face/Backward Looking Animal, variety F3d/DE3*.

207f coin 10, KG 5 Face/Backward Looking Animal, variety */DE3*.

207g coin 13, KG 5 Face/Backward Looking Animal, variety */DE3c.

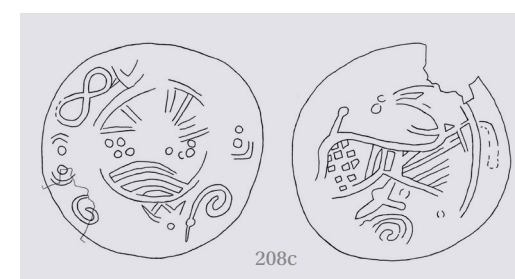
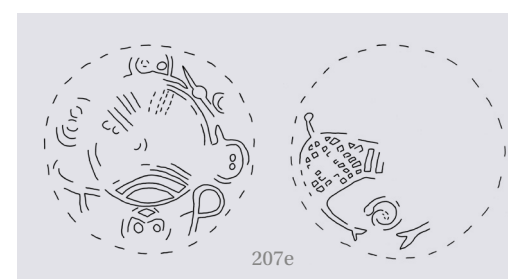
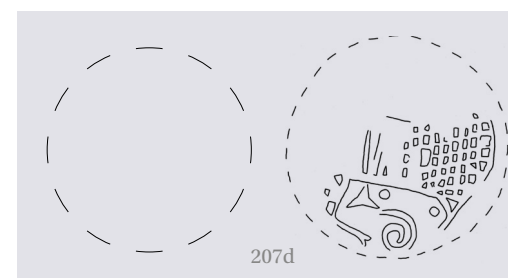
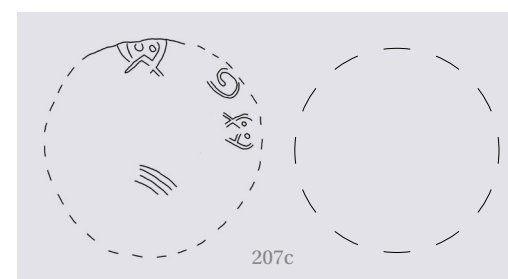
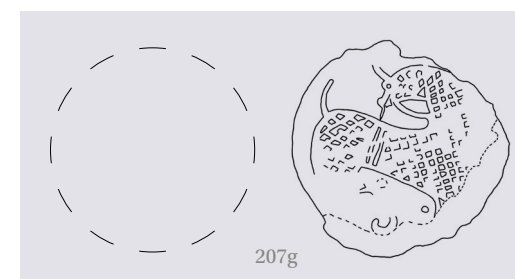
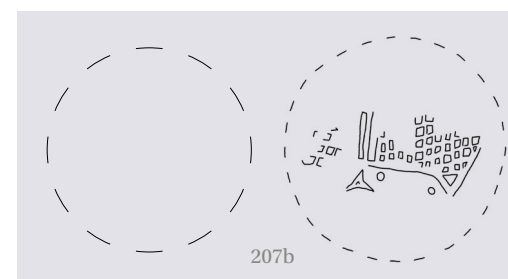
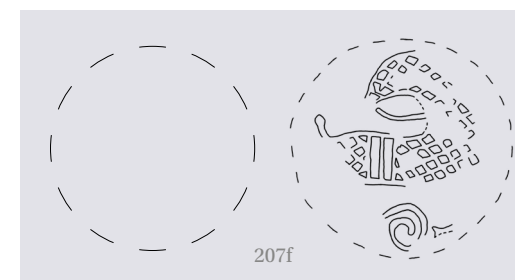
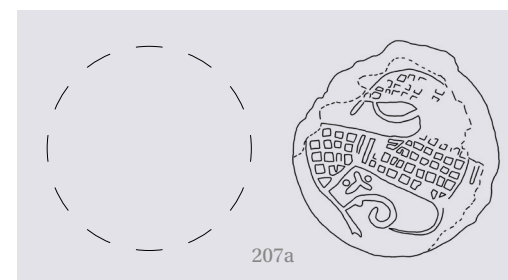
207 coin 2, 3, 5, 7, 11, 12 KG 4-6 Ansigt/hjort-h-m dyr.

208 Roager Kirke, Site number 210106-82, **a-e** ASR 1991x30, DIME 219655. Small stack of five coins corroded together. Feveile et al 2025.

208a coin 1, KG 5 Face/Backward Looking Animal, variety F3d/DE3c.

208b coin 2, KG 5 Face/Backward Looking Animal, variety F3b/DE3d.

208c coin 3, KG 5 Face/Backward Looking Animal, variety */DE3c.



208d coin 4, KG 5 Face/Backward Looking Animal, variety /DE3*.

208e coin 5, KG 5 Face/Backward Looking Animal, variety F3c/DE3c.

209 Hillerslev, Site number 110202-, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, pierced close to the border, distincy bend, DIME 223262. Photo: Robert Pedersen.

210 Gl. Lejre, Site number 020601-, KG 5 Face/Backward Looking Animal, variety F3a1/DE3c, ROM 3577x682. Photo: Roskilde Museum, Cille Krause.

211 Nidogård, Site number 020510-33, KG 5 Face/Backward Looking Animal, variety F3*/DE3*, KØM 1626x85, DIME 189433. Photo: Tim Hansen.

212 Munkebo Bakke, Site number 080109-155, KG.

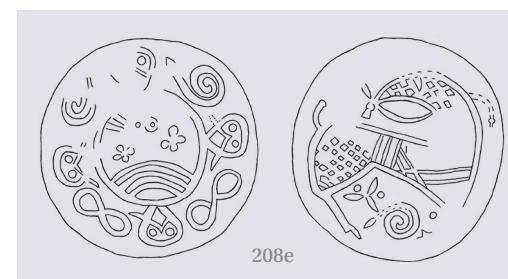
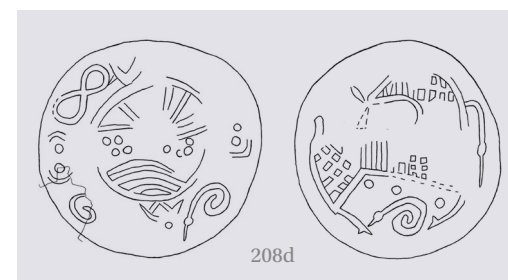
Ansigt/Fremadskuende dyr, variety F1b/DE1b, Moesgaard 2018, no. 7, ØFM 732x18. Photo: Østfyns Museer.

213 Masnedø, Site number 050213-, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, Moesgaard 2018, no. 9. Photo: Lars Christensen.

214 Hole, Norway, Burial, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1b, to tætstillede perforeringer ved kant, Moesgård 2018, no.11, Unimus M150566. Photo: Moesgaard 2018.


215 Sørum, Norway, KG 4:1 Face/Forward Looking Deer, variety F1a/DE1b, pierced close to the border, Moesgaard 2018, no. 13, Unimus M150176. Photo: Unimus.no, Anne Skogsfjord.

216 Bramming Nygård, Site number 190201-106, KG 5 Face/Backward Looking Animal, variety F3b/DE3d, SJM 949x142, DIME 183030. Photo: <http://sol.musvest.dk> (search SJM 949 x142) Museum Vest.



217- Damhus, Site number 190409-209, SJM
482 810x1-x266. Hoard with 266 coins: 262
KG 4:1 Face/Forward Looking Deer
and four KG 4:2 Ship/Forward Looking
Deer. The hoard in general Feveile
2021, especially KG 4:2 Feveile in press.
Photo: <http://sol.musvest.dk> (search
SJM 810). Photo: Museum Vest.

KG 4:1 Face/Forward Looking Deer.



Variety	
Fla/DEI*:	
357 x141	 357
Fla/DEIa:	
217 x1, 219 x3, 225 x9, 227 x11, 230 x14, 236 x20, 238 x22, 239 x23, 250 x34, 254 x38, x255 x39, 256 x40, 263 x47, 270 x54, 272 x56, 274 x58, 276 x60, 293 x77, 301 x85, 302 x86, 309 x93, 313 x97, 314 x98, 318 x102, 319 x103, 323 x107, 324 x108, 325 x109, 332 x116, 336 x120, 339 x123, 342 x126, 343 x127, 359 x143, 368 x152, 369 x153, 379 x163, 380 x164, 383 x167, 384 x168, 385 x169, 402 x186, 408 x192, 417 x201, 419 x203, 420 x204, 429 x213, 430 x214, 432 x216, 440 x224, 441 x225, 449 x233, 456 x240, 458 x242, 462 x246, 471 x255, 472 x256	
 217	 236
 238	 263
 383	

Variety	
F1a/DE1b:	
234 x18, 235 x19, 257 x41, 297 x81, 308 x92, 330 x114, 334 x118, 335 x119, 349 x133, 350 x134, 351 x135, 358 x142, 365 x149, 367 x151, 373 x157, 375 x159, 378 x162, 392 x176, 415 x199, 424 x208, 427 x211, 433 x217, 437 x221, 448 x232, 461 x245, 478 x262	
 <p>234</p>	 <p>257</p>
 <p>334</p>	 <p>335</p>
F1b/DE1a:	
226 x10, 231 x15, 233 x17, 240 x24, 242 x26, 253 x37, 275 x59, 292 x76, 306 x90, 322 x106, 345 x129, 352 x136, 353 x137, 364 x148, 389 x173, 394 x178, 399 x183, 401 x185, 404 x188, 414 x198, 428 x212, 444 x228, 475 x259, 481 x265	
 <p>231</p>	 <p>240</p>
 <p>353</p>	

Variety	
F1b/DE1b:	
218 x2, 221 x5, 222 x6, 223 x7, 228 x12, 229 x13, 232 x16, 237 x21, 241 x25, 243 x27, 245 x29, 249 x33, 252 x36, 258 x42, 259 x43, 262 x46, 266 x50, 268 x52, 271 x55, 273 x57, 279 x63, 280 x64, 281 x65, 282 x66, 285 x69, 287 x71, 289 x73, 290 x74, 291 x75, 295 x79, 296 x80, 300 x84, 303 x87, 304 x88, 307 x91, 311 x95, 312 x96, 315 x99, 317 x101, 320 x104, 321 x105, 326 x110, 327 x111, 333 x117, 338 x122, 344 x128, 347 x131, 348 x132, 354 x138, 355 x139, 356 x140, 361 x145, 362 x146, 363 x147, 370 x154, 371 x155, 374 x158, 376 x160, 377 x161, 381 x165, 388 x172, 391 x175, 396 x180, 398 x182, 400 x184, 410 x194, 411 x195, 412 x196, 413 x197, 416 x200, 418 x202, 421 x205, 423 x207, 425 x209, 426 x210, 434 x218, 435 x219, 439 x223, 442 x226, 443 x227, 445 x229, 446 x230, 447 x231, 450 x234, 452 x236, 453 x237, 455 x239, 459 x243, 460 x244, 463 x247, 464 x248, 465 x249, 467 x251, 468 x252, 469 x253, 470 x254, 474 x258, 476 x260, 479 x263, 480 x264, 482 x266	
 <p>223</p>	 <p>232</p>
 <p>243</p>	 <p>377</p>
 <p>425</p>	 <p>467</p>

Variety	
Flaa/DE1a:	
224 x8, 260 x44, 265 x49, 267 x51, 284 x68, 298 x82, 299 x83, 316 x100, 328 x112, 329 x113, 340 x124, 346 x130, 382 x166, 387 x171, 390 x174, 395 x179, 403 x187, 405 x189, 407 x191, 431 x215, 457 x241, 473 x257	
 <p>224</p>	 <p>284</p>
 <p>387</p>	
Flaa/DE1b:	
244 x28, 247 x31, 248 x32, 261 x45, 277 x61, 286 x70, 288 x72, 305 x89, 310 x94, 331 x115, 337 x121, 386 x170, 436 x220, 438 x222	
 <p>244</p>	 <p>247</p>
 <p>288</p>	 <p>436</p>

F1ba/DE1a:	
454 x238	 <p>454</p>
F2a/DE1a:	
220 x4, 246 x30, 278 x62, 360 x144, 466 x250, 477 x261	 <p>220</p>
F2b/DE1a:	
269 x53, 283 x67, 341 x125, 372 x156, 393 x177, 451 x235	 <p>393</p>

Variety	
F2ba/DE1a:	
251 x35, 397 x181	 397
F2c/DE1b:	
422 x206	 206

264 x48, KG 4:2 Ship/Forward Looking Deer, variety S3c/DE2a.

366 x150, KG 4:2 Ship/Forward Looking Deer, variety S3a/DE2c.

406 x190, KG 4:2 Ship/Forward Looking Deer, variety S3b/DE2d.

409 x193, KG 4:2 Ship/Forward Looking Deer, variety S3a/DE2a.



483 Nybøllegård Nordvest, Site number 090411-87, KG 4:1 Face/Forward Looking Deer, variety Flaa/DE1a, pierced close to the border with two tightly spaced holes, OBM 5587x346. Photo: Museum Odense.

484 Kalvehave Syd, Site number 090704-169, KG 4:1 Face/Forward Looking Deer, variety Flaa/DE1a, LMR 15409, DIME 232175. Photo: Steen Agerød.

485 Horreby, Site number 070204-, KG 5/6 Face/Backward Looking Animal, variety F3-4*/DE3-4*, DIME 234463. Foto. Ole Harpøth.

486 Deleted.

487 Skumsnes, Norway, Burial (together with Cat. 524), KG 4:2 Ship/Forward Looking Deer, variety S3a/DE2d. Feveile 2025. Photo: Universitetsmuseet i Bergen.

488 Gammeljord 2, Albøge, Site number 140201-129, KG 3:1 Carolus/Dorstat, variety CB1/DS1a. Probably metal detector find, not reported to the National Museum in Copenhagen, but instead sold via a coin dealer as “found in Germany” (Moesgaard pers. 2023). Photo: Ukendt.

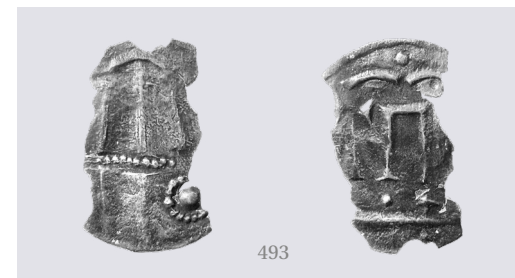
489 Grisebjerggård, Site number 040301-109, KG 5 Face/Backward Looking Animal, variety F3*/DE3*, Ikke i Malmer, KMMS FP 12314.1080, AMK 1993 015x0810a. Photo: Nationalmuseet, Sean Weston.

490 "Schlesien VII", Poland, KG 6 Face/Backward Looking Animal, variety F4*/DE3-4* (men i link 22 med Kat 104 Sejerø), Bogucki et al. 2013, Schlesien, fund 102, Taf. XXXII, nr 102:1809. Photo: Bogucki et al. 2013.

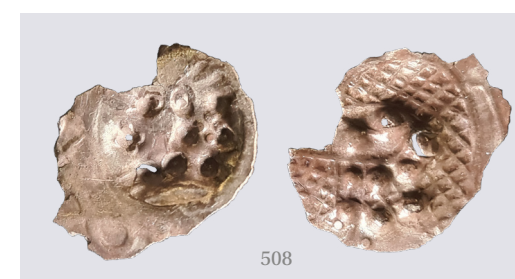
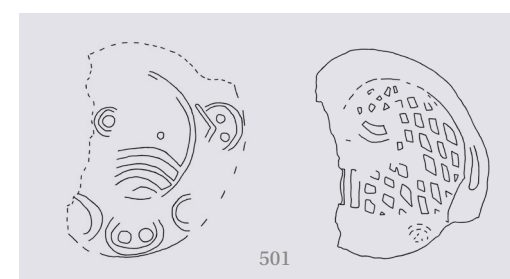
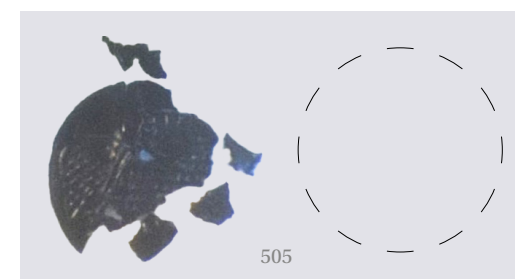
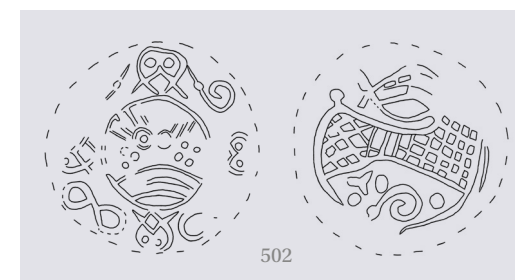
491 Dalszewo/Piaski Wielkie, Poland, KG 5 Face/Backward Looking Animal, variety F3d/DE3a1, Bogucki et al. 2016b, Pommern, fund 29, Taf. XVIII, nr 29:880. Photo: Bogucki et al. 2013.

492 Janów Pomorski (Truso), Poland, KG 3:1 Carolus/Dorstat, variety CC6/DZ*, smooth edge, Bogucki et al. 2016a, Ermland, Taf. VIII, nr 19A:980. Photo: Bogucki et al. 2016a.

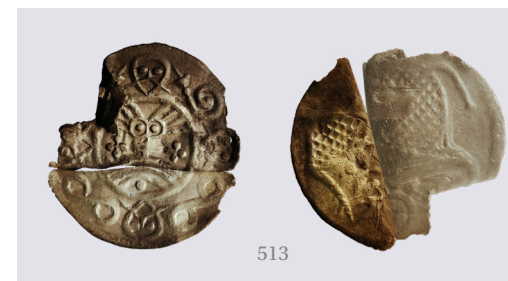
493 Janów Pomorski (Truso), Poland, KG 3:1 Carolus/Dorstat, variety C*/D*, smooth edge, Bogucki et al. 2016a, Ermland, Taf. VIII, nr 19A:981. Photo: Bogucki et al. 2016a.



- 494** Janów Pomorski (Truso), Poland, KG 3:1 Carolus/Dorstat, variety C*/D*, smooth edge, Bogucki et al. 2016a, Ermland, Taf. VIII, nr 19A:982. Photo: Bogucki et al. 2016a.
- 495** Sejlgård IV, 130303-312, KG 5 Face/Backward Looking Animal, variety F3b/DE3c, SIM 5656x5, DIME 238547. Photo: Tony Bülow.
- 496** Ukendt, KG 6 Face/Backward Looking Animal, variety F4a/DE4c, solgt på Gorny & Mosch, Auktion 234, lot 4691, 8. oktober 2015. Photo: Gorny & Mosch.
- 497** Ukendt, KG 5/6 Face/Backward Looking Animal, variety F*/DE3-4*, for sale on ebay, information from Michael W. Christensen. Photo: ebay.
- 498** Deleted.
- 499** Obra II, Poland, KG 6 Face/Backward Looking Animal, variety F4*/DE4*, Bogucki et al 2017. Grosspolen, Fund 165 Obra II (Nowa Obra / Obra Nowa), uden foto.
- 500** Deleted.
- 501-** Frejlev, Site number 120504-34, ÅHM
- 502** 6460 K9. Stack of six coins corroded tight together, two KG 5-6 and four KG 7-8. Feveile et al 2025.
- 501** mønt 6, KG 5/6 Face/Backward Looking Animal, variety F*/DE3-4*.
- 502** mønt 2, KG 5 Face/Backward Looking Animal, variety F3c/DE3c.
- 503-** Deleted.
- 504**
- 505** Haithabu, Harbour, KG 6, variety F3-4/DE4*, from excavation 1979, V.Hilberg, presentation October 2023, presented as KG 6. Recently there has been doubt about the exact identification, so it could also be a KG 5 (Hilberg pers. dec. 2024). Photo from powerpoint.
- 506** Lviv Oblast, Ukraine, KG 5 Face/Backward Looking Animal, variety F3b/DE3d, pierced close to the border, auction.violity.com, 26. february 2016. Photo: auction.violity.com.
- 507** Findholmgård, Site number 010504-88, KG 3:2 Carolus/House, variety CA*/H3a, pierced close to the border, KMMS FP 15433.1, MNS 50141x406. Photo: Nationalmuseet.
- 508** Kalks Møllevej, Site number 170405-45, KG 5 Face/Backward Looking Animal, coin-pendant with nine studs, suspension is missing, VKH8527x248071, DIME 248071. Photo: VejleMuseerne.
- 509** Deleted.



- 510** Ørum By, Site number 140119-318, KG 3:1 Carolus/Dorstat, variety CB4/DS1a, pierced close to the border, MOE 1100x190413, DIME 190413. Photo: Christian H.B. Jensen.
- 511** Gåbense (Gl. Skovridergård), Site number 070107-24, KG 3:1 Carolus/Dorstat, variety CC2/Dz1a, smooth edge, probably part of ploughed out hoard, KMMS FP 7483.1. Ref. cat. 523. Photo: Nationalmuseet, Sean Weston.
- 512** Åsum, Stapudevej, Site number 080811-139, KG 4:2 Ship/Forward Looking Deer, variety S3a/DE2*, pierced close to the border, unevenly folded to a small package. Stray find at excavation of Viking Age burial site, OBM 16301x204. Photo: Museum Odense.
- 513** Bakkeby, Site number 080608-106, KG 5 Face/Backward Looking Animal, variety F3a/DE3c, pierced close to the border, OBM 12170x34. Photo: Familien Andersen.
- 514** Gerlev, Site number 010203-, KG 3:1 Carolus/Dorstat, variety CC2-4/D*, DIME 281609. Photo: Ivan S. Sørensen.
- 515** Hemmet, Site number 180602-25, KG 4:1 Face/Forward Looking Deer, variety F1a/DE1a, ARV 94x100, DIME 284836. Photo: Viggo Kristensen.
- 516** Foldager I, Site number 020402-49, KG 5 Face/Backward Looking Animal, variety F3b/DE3c, pierced close to the border, ROM 2265_opx86, Christensen, T. 2015, s.235, fig. 15.10. Photo: Moesgård Fotolab.
- 517** Foldager I, Site number 020402-49, KG 5 Face/Backward Looking Animal, variety F3c/DE3c, pierced close to the border, corrosion visible, ROM 2265_A358x1, Andresen, M. & T. Christensen 2005, s.195. Photo: Roskilde Museum.
- 518** Adelvej, Lundsæk, Site number 200206-246, KG 4:1 Face/Forward Looking Deer, variety F1a/DE1b, HAM 1111x3617, DIME 297498. Photo: Museum Sønderjylland – Arkæologi Haderslev.
- 519** Haithabu, KG 3:1 Carolus/Dorstad, variety CC3/DZ1b, Schloss Gottorp Hb 2003/838, Hilberg & Kalmring 2024, figur 13, no. 4. Photo: Hilberg & Kalmring 2024.



520 Jernvedlund, Site number 190205-107, KG 4:1 Face/Forward Looking Deer, variety F1a/DE1b, SJM 1289x7, DIME 317733. Photo: Museum Vest.

521 Revn, Site number 140213-, KG 4:2 Ship/Forward Looking Deer, variety S3a/DE2*, pierced close to the border, MOE 1100x319803, DIME 319803. Photo: Betina Toft Würtz.

522 Pilegård, Aversi, Site number 050701-23, KG 4:1 Face/Forward Looking Deer, variety F1b/DE1a, pierced close to the border with two closely spaced round holes, KNV 1175, DIME 324131. Photo: Jannie Løk Jensen.

523 Gåbense (Gl. Skovridergård), Site number 070107-24, KG 3:1 Carolus/Dorstat, variety CC3/DZ1a, smooth edge on obverse, dense border decoration on reverse, probably part of ploughed out hoard, Photo: Constantin Birkedal.

524 Skumsnes, Norway, Burial (together with Cat. 487), KG 3:5 Carolus/Backward Looking Animal, variety CC9/DE3a. Pierced close to the border. Photo: Universitetsmuseet i Bergen.

525 Grønhøjgård (Vaarst), Site number 120104-91, KG 4:1 Face Forward Looking Deer, variety F3a1/DE1ab, pierced close to the border. Stray find from topsoil at excavation of 3-6th century settlement, ÅHM 8346x1350, Photo: Nordjyske Museer.





BY MÅRSK OG GEEST



Vindeby, Cat. 175,
KG 3:2 Carolus/House



Viskum Hovedgård, Cat. 176,
KG 4:1 Face/Forward Looking Deer



Gundslev, Cat. 193, KG 3:4 Carolus/Ship



Damhus, Cat. 264, KG 4:2 Ship/Forward Looking Deer