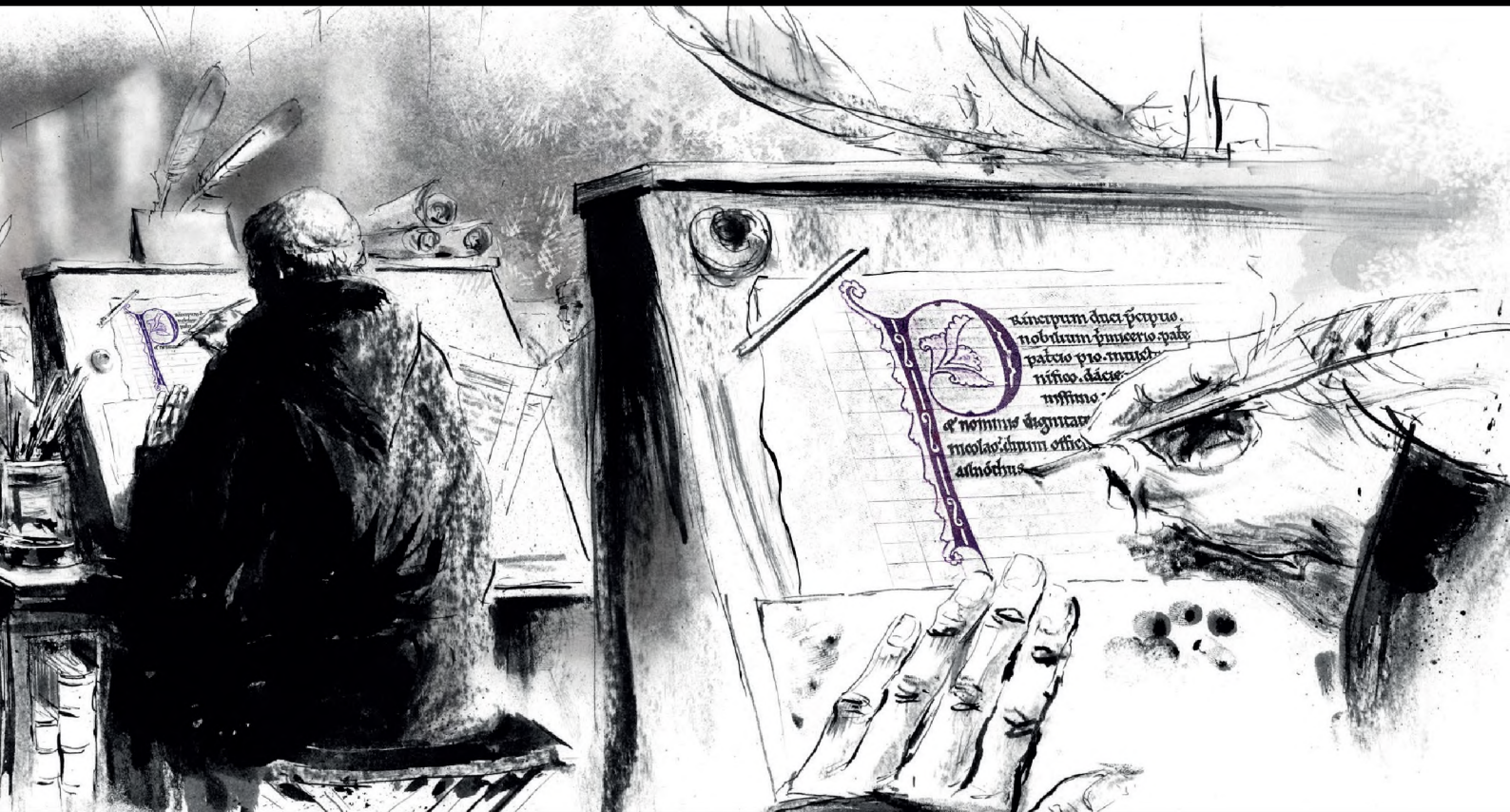


Royal Blood

The Passion of St Cnut, King and Martyr

Translation and perspectives



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Coin from the reign of Cnut IV. Minted in Slagelse. Photo courtesy of Museum Odense.

Cnut the Holy's popular coin National currency or votive offering?

by Thomas Guntzelnick Poulsen

Introduction

The late eleventh century in Denmark was a period of unrest and upheaval between the Viking Age and the Middle Ages. The country changed mentally and physically to such an extent that a person living at the start of the century, would probably not have been able to recognise the country a century later. The numerous changes also encompassed the country's monetary system. Coins had been minted in Denmark since the eighth century, but the Danish coins circulated alongside a large number of foreign coins and were primarily used according to their weight rather than their face value. This changed in the second half of the eleventh century as Danish coins began to dominate the coin circulation.

As we know, all beginnings are difficult, and it was one thing to exclude foreign coins from circulation but something else entirely to convince the general public to accept the new royal monopoly on coins. Thus, the widespread use of coins for everyday transactions still lay more than 100 years into the future (Poulsen 2023). There are several reasons for this, amongst others it is not certain that the Crown had the capacity in the beginning to implement the use of coins for everyday usage. Traces of such use, in the form of single-found coins, are scarce. A few coin types from the late eleventh and early twelfth century seem, however, to have been particularly popular, and especially one Scanian coin type from the reign of Cnut the Holy stands out significantly from its contemporaries. It has been found in a very large number, and its find distribution pattern differs significantly from other coins of the period. This suggests that this coin may have had a different use than just as currency. The article proposes that this other function might have been as a pilgrim badge for Cnut the Holy.

Svend Estridsen's coin reform

The most important prerequisite that enabled the Crown to administer and regulate the circulation of coins in Denmark was its monopoly on coinage. Dating of the existence of this monopoly needs to be based on coin finds as it is not mentioned in contemporary written records.

Already with Harald Bluetooth's 'cross' coin from Haithabu (Hedeby) (ca. 975-985), Denmark was on its way to a national currency (Moesgaard 2015a). At the same time, the amount of minted silver in hoards surpassed that

of non-minted silver – such as ingots and jewellery (von Heine 2004: 72). This was despite the fact that royal control of the circulating coinage was still limited, and foreign coins continued to be well-represented in the hoards from that time. However, single-found coins from several towns indicates that a certain degree of monopoly had been introduced in these areas (von Heine 2004: 156).

Not before the second half of the eleventh century did the number of Danish coins supersede foreign coins in hoards. This development coincided with several other changes, such as a decrease in the number of different motifs on the coins, meaningful and legible inscriptions, as well as a general reduction in the diameter of the coins (Poulsen 2016: 118). These changes were initially interpreted as an actual coinage reform, attributed to Harald Hen (Erslev 1875: 181), but later research suggested that the reform of the Danish monetary system took place somewhat earlier, during the reign of Svend Estridsen (Rasmussen 1957: 248). This theory is widely accepted today, given that the most significant reduction in the number of foreign coins discovered in hoards is from the second half of Svend Estridsen's reign (Moesgaard 2018: 208).¹ Svend Estridsen's runic coins from the same period may be connected to these changes because the runes made them easier to distinguish from the foreign coins and also provided a distinct national expression (Jensen 1995: 19-20 and 82-84). A similar development occurred at the same time in Norway, where Harald III managed to supplant foreign coins and implement a monopoly on coinage (Gullbekk 2003: 30, 63). The development could be seen as a more general Nordic phenomenon, which occurred at the same time as an overall extension of royal power – such as the implementation of fines and peace bargains, authority over forests and waters, as well as, in a more indirect way, the introduction of feudalism (Andrén 1985: 78).

The Crown benefitted from its monopoly on the circulating coin because other currencies had to be exchanged for the royal coin, which, like today, wasn't a free service. Greater control over the coinage resulted in increased profits from currency exchange. A significant additional income could be gained with the implementation of *renovatio monetæ*, by which new coins were issued at varying intervals, and the country's population had to exchange existing currency for this new coin while incurring a fee. In early medieval society, when fixed taxes were still not introduced, the revenue from *renovatio monetæ* was a significant part of the royal income.

Exactly when an efficient *renovatio monetae* system was first implemented in Denmark has divided numismatists and historians alike since the topic was first addressed. Like many other occurrences, it is only mentioned in written records much later, so indications of its beginning must be looked for in the coin finds themselves.

An efficient *renovatio monetae* system is most easily identified in the form of a "pure hoard", in other words, a hoard with just one kind of coin. This does, however, represent an ideal situation. Instead, most often, one coin type will completely dominate the hoard. The period's small number of hoards makes it challenging to determine the extent of *renovatio monetae* during the period in question. As mentioned, the subject has been widely debated, but regarding medieval Denmark, it seems that *renovatio monetae* was implemented in Scania and Jutland during the reign of Cnut the Holy. On Zealand, on the other hand, there is insufficient evidence to prove that *renovatio monetae* was implemented before the early twelfth century (Poulsen 2023: 70; Moesgaard 2019).

In practice, the system probably functioned as a gradual exchange within a short span of time. The administrative system of the time was far from refined enough to be able to exchange all the country's coinage simultaneously. An essential prerequisite for a successful exchange was that the Crown needed to have enough silver available for the production of new coins to commence. When older coins were exchanged, they could be melted down and included in the production of new coins. In this way, it would have benefitted the Crown that the coins were exchanged gradually. To give the population sufficient incitement to exchange their outdated coins, the Crown probably required taxes and charges to be paid in new currency. This presumption is supported in later written sources that mention amounts to be paid in "new coinage" (Grinder-Hansen 2000: 69-70, 238; Moesgaard 2018: 221).

Renovation monetae was not, however, always well-received by the public. As mentioned, it was introduced to Zealand later than in Jutland and Scania, but it also seems that people in Jutland were exceedingly enraged when Cnut the Holy tried to implement *renovatio monetae* to finance his planned invasion of England (Poulsen 2019: 56-57). Aelnoth's *Gesta Swenomagni* describes how Cnut's royal "ombudsmen and bailiffs inflated the value of the mark and gave an *øre* almost the same value as an *ørtug* (Albrechtsen 1984: 58). A medieval *ørtug* should have been worth three *øre*. The passage is included as part of the grievances about Cnut's reign. It shows that the population was very aware that *renovatio monetae* and weight reduction were extra taxes imposed by the king.²

Regional coinage

The production of Denmark's coins through the

Middle Ages was spread across several regional areas. These areas were Scania (including Bornholm), Zealand, and Jutland (including Funen). Jutland was additionally divided into smaller areas: Northern Jutland, Southern Jutland, and the Ribe area. The process of implementing a regional coinage system progressed at slightly different paces in the individual regions. Still, it seemed to have been completed by the late eleventh century and early twelfth century (Jensen 1996; Poulsen 2023: 55).

To implement a regional coinage system, it was important that the coins showed a clear regional affiliation through motif and/or inscription. Some early attempts at this can be seen during the reign of Svend Estridsen, and it becomes evident during the reign of his successor, Harald Hen, with the implementation of coin types SK1 and SJ1 in Scania and Zealand, respectively (Poulsen 2016: 174). The inscriptions on the coins indicate where they were minted, and the motifs made the coins easily recognisable for non-literate people. Both motifs, but especially that on the SJ1, were used on several coin types in the late eleventh century. This practice continued but gradually declined until around the mid-twelfth century, when there was no longer much difference in how the regions were visually represented (Poulsen 2023: 111). This development can be interpreted as an expression of a much greater acceptance of and trust in the royal coin in the population.

It is thought that the placement of the royal mints was linked to the country's administrative divisions into separate regions. This division of the country into various administrative regions, with their own laws and thingsteads (local courts), has its roots far back in time. Linking the production of coins with the country's administrative system also connects the minting of coins to the royal power base and economy and associated royal interests (Andrén 1983: 43). It has been suggested that in Norway, there was a similar association with the royal presence in the form of a royal estate and the placement of mints in all the known minting towns (Ramberg 2017: 159). The connection between the royal administrative system and the mints



Figure 1: Harald Hen's earliest coins – SK1 from Scania and SJ1 from Zealand.

meant that regional coinage, in several instances, has been regarded as an administrative tool, and it has often been suggested that coins had to be exchanged when travelling between regions (Moesgaard 2008: 147). It is, however, still uncertain what the exact reason was for the placement of the mints, and the earliest reference to regional coinage is found in Archbishop Absalon's will from 1201 (*Diplomatarium Danicum* rk. I vol. 4, no. 32). Because, as in the case of the monopoly on coinage, there is no mention of the implementation of regional coinage in the written records, coin finds give the most accurate picture of the extent to which coins circulated in their region of origin and whether there was an actual law enforced interregional coin exchange.

	Scania	Zealand	Jutland
Scanian types	30	7	7
Zealandic types	2	8	1
Jutlandic types	0	0	4
Total	32	15	12

Figure 2: Single found coins from 1074-1103, categorised according to the region of origin and provenance in absolute numbers and percentage. (Poulsen 2016).

The circumstances surrounding the accidental loss of individual coins and the deposition of hoards are very different; therefore, hoards are not included in Figure 2. As shown in the geographical distribution of single coin finds from 1074-1103, the regional coin types overwhelmingly dominate the find material of their region of origin. There are very few coin finds from this period in Danish history, so the numbers should be treated with some reservations, especially regarding the data from Jutland, which is particularly scant. Compared with the larger and more statistically robust material covering the period 1074-1234, the same tendencies are apparent, although the material from 1074-1234 shows even more clearly how the regional coin types dominate in their place of origin. That is, however, to be expected, as the period 1074-1103 constitutes the earliest part of the implementation of regional coinage. Even so, the material suggest that regional coinage was well-established and functional at the close of the eleventh century.

	Scania	Zealand	Jutland
Scanian types	356 (89%)	17 (6%)	2 (1%)
Zealandic types	38 (9%)	258 (88%)	28 (9%)
Jutlandic types	7 (2%)	17 (6%)	289 (90%)
Total	401	292	319

Figure 3: Single-found coins from the period 1074-1234 categorised according to the region of origin and provenance in absolute numbers and percentages. (Poulsen 2023 55 figure 8)

A similar picture appears when looking at the distribution of Danish coin types in coin hoards. Figure 4 shows

that the contents of the hoards are also dominated by coin types that originated in the region where the hoard was deposited. Zealand, however, stands out from the other two regions due to the Egelev Hoard from Falster. The Egelev Hoard comprises a very large number of coin types, of which a significant number originate in Scania, as well as a very large number of several older coin types. The Egelev Hoard is currently an exception, even though the Holsteinborg Hoard, found on South Zealand, shares many of the same features. Unfortunately, the full contents of the Holsteinborg Hoard are unknown, as it was sold after discovery (Poulsen 2016: 123-124). From what is known about the hoard, it is apparent that coins from Lund and older coin types were also a large part of its composition. In this way, these two hoards indicate that older and non-Zealandic coins circulated on Zealand in the late eleventh century. It is still too early to draw a radical conclusion, but, as mentioned earlier, the hoards also indicate that *renovatio monetæ* was successfully implemented on Zealand later than in Jutland and Scania (Moesgaard 2019).

Figures 2 and 3 show that regional coinage was established in the late eleventh century. It is also apparent that the system was not yet as well-established as later in the twelfth and early thirteenth century. Furthermore, it is evident that there was some degree of circulation of coins outside their region of origin both in the late eleventh century and in later periods. However, it would be an overreach to argue, based on the evidence from the finds, that regional divisions included a prohibition on using coins outside their respective regions. The population would just have had to have considered the costs of the exchange rate (Grinder-Hansen 2000: 239). What it does show is that regional coins, to a prevailing degree, dominated the circulating coinage in their region of origin.

The explanation for why significantly different motifs and various administrative laws for coin exchange were at all utilised should again be looked for in the connection between the royal administrative system and the mints. When mixed hoards with large shares of foreign coins are found even late in this period in both Blekinge and Bornholm, it is a clear indication that these regions were still not closely connected to the royal administrative system, among other things, by not having their own mint (von Heine 2004: 151-152). This shows that the mints were an essential part of the royal administration, and their function was not only of a practical nature.

Everyday circulation in the late eleventh century

As established above, regional coinage, the royal monopoly on coinage, and *renovatio monetæ* were, by and large, implemented by the close of the eleventh century. But how did the general public receive all this? A successful implementation of the royal administrative initiatives was not

Dated	Find	Region	Number of Danish types	Number of regional types	Share of regional coins %
1074	Löddeköpinge	Scania	?	1	?
1082	Holsteinborg	Zealand	4	2	?
1082	Skt. Laurentius	Scania	1	1	100%
1085	Danelund	Jutland	4	3	98%
1085	Jegstrup	Jutland	1	1	100%
1085	Øster Bjerregrav	Jutland	1	1	100%
1089	Fuglie Kyrka	Scania	1	1	100%
1090	Egelev	Zealand	19	9	38%
1095	Skt. Mårten Lund	Scania	2	2	100%
1100	Lund	Scania	1	1	100%
1100	Lundby Krat	Jutland	4	1	92%

Figure 4: Known coin hoards deposited in the period 1074-1103. The table shows the number of Danish coin types contained in the hoards, the number of coin types that originate in the region in which the hoard was buried, and the percentage of the hoard's Danish coins that originate from the region in which the hoard was buried.

synonymous with increased use of coins, as the initiatives themselves did not influence the activity level. An increase in activity required the support of the public, expressed through an increase in the use of coins in more and more transactions. The extent of this can be determined in several ways, but the method used here is the coin loss frequency as a measure of coin usage since that method can easily be applied to the material without many extra considerations or calculations (Rigold 1977; Blackburn 1989). The loss frequency is calculated by dividing the number of coin finds by the estimated circulation time of the coin. This accounts for the fact that coins which have circulated for a long time will also have a higher number of losses.

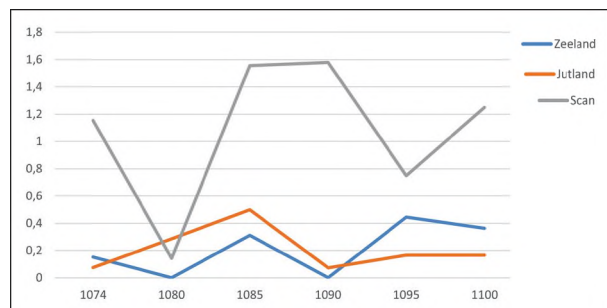


Figure 5: Coin loss rate for each region in Denmark calculated in 5-year periods. The data used for Figure 5 is presented in Appendix 1.

Ideally, the loss frequency for each coin type ought to be calculated individually but as mentioned, Denmark was divided into three regions, each with its own coin, which makes it difficult to compare the regions directly, particularly because a varying number of coin types were minted by each king in each region. Instead, the period from 1074-1103 has been divided into five-year intervals. With intervals this short, the individual coin finds can be ascribed more easily to each timespan. The number of finds, estimated circulation time, and loss frequency for each in-

dividual coin type from the researched periods are listed in Appendix 1.

As mentioned previously, this was a period with notably few single-found coins, and the loss frequency analysis should, therefore, be regarded with caution. Even so, the analysis shows that the loss frequency for the Scanian coins is significantly higher than for the Jutlandic and Zealandic coins. The geographical distribution of single-found coins in Figure 2 shows that the Scanian coin types mostly circulated in Scania. This means that a higher loss frequency of Scanian coins cannot be explained by Scanian coins having a larger circulation area but instead indicates that the level of monetisation in Scania was higher than in the rest of Denmark. Consistent with this, the loss frequency analysis also shows that the activity level varied considerably in all three regions. This could indicate that certain coin types had a longer circulation time than suggested by the hoard finds. As mentioned above, the hoards suggest that Cnut the Holy managed to implement *renovatio monetae* in Scania and Jutland. However, the large variation in loss frequency shows that the implementation was not necessarily entirely consistent and that some coin types continued circulating in ordinary everyday transactions after new types were introduced.

A particularly popular coin

Especially from the reign of Cnut the Holy, there are coin types with a very high loss frequency. This is true for all three regions, but especially for Scania. There is one particular coin type that stands out and deserves closer inspection: Cnut the Holy's Scania type SK3. This coin type is found in 14 copies, which is an extraordinarily high number for this period. It constitutes almost a quarter of the combined single finds for the entire period 1074-1103. A coin from the reign of Olaf Hunger also has a high loss frequency: SK4.2 from Lund, but this high loss frequency

is just as much due to the coin's short circulation time (far shorter than that of Cnut the Holy's SK3 coin), as its high number of coin finds.



Figure 6: SK3.a from Lund, dated 1082-1084. This coin was also minted in Tommarp, Borgeby and Nordby (The latter is an unknown town name).

The coin's motifs are relatively simple. On the obverse is a central cross surrounded by four small arches and the inscription CNVT REX DANOR, or a variation of this. The reverse also has a central cross and an inscription of the moneyer's name and the town where it was minted. The coin was minted in several Scanian towns: Lund (L or a variation), Tommarp (TV), Borgeby (BVRHI), and Nordby (NORPI). The vast majority, however, were from Lund, and there are no known provenance-determined coins from any of the other three minting towns. A very large number of moneyers are associated with this coin type. At least 42 are known, even taking into consideration the different spellings of the same name, but this is based solely on examples where provenance has been determined, and from published materials (Poulsen 2016: 160-162). No die studies have been conducted on this coin type, but the number of known moneyers alone indicates that the coin was struck in very large numbers.

The SK3 coin type stands out not just because of the large number of single-found coins and a high loss frequency. It is also distinct because of the distribution of coin finds. As mentioned, the coins from this period circulated mainly within their region of origin. SK3, however, is also found outside of Scania. In fact, half of the single-found coins are from Jutland and Zealand, which makes it remarkably different from the other Scanian coins.

During the reign of Cnut the Holy, there are cautious signs of an attempt at a short-term unified coinage between Scania and Zealand in the form of the popular Zealandic SJ1 series and the Scanian SK2 type (Poulsen 2016: 160). There are several signs that Cnut the Holy may have wanted to put an end to regional coinage. Generally, it seems that Cnut the Holy had a significant interest in the monetary system and the possibilities it offered the Crown

(Poulsen 2019: 58). The distribution of SK3, however, follows a different pattern: it was a solely Scanian coin that appears to have enjoyed nationwide popularity.

As previously mentioned, there are very few coin finds from this period, and consequently it can be difficult to argue with precision about the distribution of the individual coin types. Looking at the overall find distribution of the late eleventh century, it is obvious that the majority of single-found coins are found in rural areas. This pattern, however, is under transformation, as the proportion of coin finds from urban areas (apart from occasional deviations during the reign of King Niels and the civil war period in the mid-twelfth century) increases as the Crown gradually success in concentrating coin-based transactions in the towns (Poulsen 2023: 106-107).

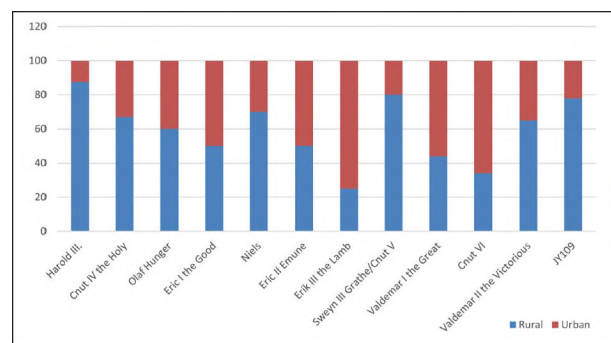


Figure 7: The distribution of single-found coins in percentage split between find categories rural and urban for the whole of Denmark in the period 1074-1241, categorised according to king and the coin type JY109 which circulated from 1234-1250 (Poulsen 2023: 107 figure 29).

Figure 7 shows that the SK3 coin circulated during a period when the majority of coin transactions occurred outside of towns. Consequently, the majority of single-found coins should also come from rural areas. This, however, is not the case, except for in Scania, where five of the seven single-found coins were discovered in rural areas and only two came from urban areas. Nationwide 67% of Cnut the Holy's single-found coins are from rural areas, which corresponds to the distribution of finds of SK3 in Scania.

In the rest of the country, the distribution of finds of SK3 is very different. On Zealand, there are two finds from urban areas, while an older third find is simply attributed to the island of Møn. From Jutland, all four finds are from urban areas - one from Ribe and three from Odense. While considering the small number of finds, it seems that SK3 was used in its region of origin like other coins of the time, but that it had a different function outside of Scania.

To explain what this function may have been, it is helpful to take a closer look at the circumstances of the individual coin finds (see Appendix 2). As mentioned, one of the

Zealandic finds is an old find from Møn (FP3386). Another was discovered with a metal detector in Tårnby, outside of Korsør (FP3987), and the last one came from the garden of St Mary's Hospital in Roskilde (FP1942). This coin is part of a larger collection of coins that were found individually by a gardener. Even though the sites where the last two coins were found are relatively well-documented, both coins were found in disturbed secondary deposits without any connection to other medieval contexts but the larger context of the medieval market town in which they were found. Therefore, none of the three Zealandic coin finds can help explain SK3's finds distribution pattern.

The Jutlandic finds are significantly more informative, as all four coins were found during archaeological excavations. The coin from Ribe comes from the Lindegården ASR 13 excavation. The site was a burial ground in the Viking Age but was a residential area in the late eleventh century, and the SK3 coin was found in a pit located south of the ditches that surrounded the graveyard. The pit is dated stratigraphically to the time around or just before 1100. One could, therefore, be led to believe that the coin was accidentally lost as part of the ordinary transaction in the town, but this is not the case. Before the coin was lost, it had been turned into a brooch. This is extremely interesting as it clearly shows that the coin had changed function - from monetary to ornamental.



Figure 8: Scanian SK3 coin found in a pit at the Lindegården ASR 13 excavation, X482.

The remaining three coins were all found in an excavation conducted by Museum Odense in the area between St Cnut's Cathedral and the Odense Town Hall (OBM 9785). The coins were found in a small trench just north of the now-demolished St Cnut's chapel, built in 1466 (Johannsen and Johannsen 1990: 134). The coins are, unfortunately without context as they were found in the heaps of earth from the trench with a metal detector.

The trench covered parts of the cemetery, and nine graves were registered in the small trench. There were no dated finds in the graves. The arm position was evenly distributed between positions A and B, but since this dating

method is very uncertain, it has not been possible to prove a connection between the coins and the graves. The very broad dating period for arm position A is especially problematic (Hyldgård 2016: 75). The only thing that can be known for sure is that the coins were found in a cemetery.

The location where they were found could suggest that the coins were deposited in a grave or were in some way part of a religious rite. This means that they no longer had a monetary function but instead should be regarded as religious objects. These kinds of coins are broadly described as votive coins (Grinder-Hansen 2000: 162). It can be difficult to precisely determine what makes a coin a votive coin, but coins that have been deposited in graves are unquestionably in this category (Blackburn 1989: 17). There are, of course, numerous examples of coins found in graveyards that aren't necessarily from a grave (Moesgaard 2006a: 238). Even so, there is a substantial probability that the coins were part of a ritual act, as votive coins, and it is quite possible that they, like the coin brooch from Ribe, had been demonetised.

While the three Zealandic coin finds did not provide more information about the SK3 coin's deviating find distribution pattern, the Jutlandic finds were more useful, as these coins had all clearly been demonetised. This, of course, is most obvious with the coin brooch from Ribe. The coins from Odense cannot with the same certainty be proven to have been demonetised, as they were found with a metal detector without a clear context and should be considered stray finds. Even so, the location of the find is extremely striking, particularly when considering that it is where Cnut the Holy was enshrined, and where worship of the Danish royal saint was centralised.

Altogether, there is much to suggest that the deviating find distribution pattern of the Scanian SK3 coin in Western Denmark indicates that the coins were no longer considered monetary objects, but rather votive coins likely associated with the worship of the royal saint, Cnut. The coin finds from Odense play a very important role here and it is therefore worth looking closer at this excavation to see if it can further support the hypothesis.

St Cnut's Graveyard

The archaeological excavation mentioned above took place in two campaigns in Odense in 1998, in the area between St Cnut's Cathedral and the Town Hall (OBM 9784 and OBM 9785). The excavation primarily uncovered traces from the area's ecclesiastical institutions, since the graveyards of both St Alban and St Cnut churches covered the excavated area. St Alban's Church is the oldest of the two and is in the most recent research dated 978-1055 (Haase 2022: 31-39). The murder of Cnut the Holy took place in the successor to this early wooden church. St Cnut's Cathedral is first mentioned in 1139 (*Diplomatarium Danicum* rk. I vol.

3, no. 77), but Cnut the Holy's remains were moved to the crypt as early as 1095 (Albrectsen 1984: 97-98.). The first church was built of travertine, as revealed in the archaeological excavations in the surrounding area, in the form of thick layers of travertine rubble. The current Gothic church was constructed after the previous church burnt down in 1247 (Johannsen and Johannsen 1990: 134).

Despite the three coins being stray finds, their context can still tell us something about how they were used. The graveyard of St Cnut's Cathedral, where the coins were found, was also quite likely used for other purposes (Christensen 2019).³ It distinguishes itself in several ways from the neighbouring graveyard of St Alban, even though the two are located right next to each other. For example, the burial density in St Cnut's graveyard is less than half that of St Alban's (Christensen 1999: 88). A previous explanation for this was that St Cnut's graveyard was a more exclusive area reserved for important people. But it could also be that the graveyard had other functions; for example, that it was used for ceremonies related to the worship of St Cnut (Johannsen & Johannsen 2001: 38). This suggestion is further supported by the fact that St Cnut's graveyard was extended in the late Middle Ages. In contrast, St Alban's graveyard was reduced in size (Christensen 2019: 98), despite – as already mentioned – that there were only half as many people buried at St Cnut's graveyard.

We know very little from the written records of how the anniversary of St Cnut's death or the enshrining of his remains were commemorated (Jexlev 1986). St Cnut was, however, a very popular saint, and his grave attracted large numbers of people. Much of the worship and processions must have taken place outside of the church in the graveyard, and it can be assumed that this has influenced the artefacts found in excavations. Since the excavation where the coins were found covered both St Alban and St Cnut's graveyards, the find material from the excavation is well suited to investigate whether the two graveyards did, in fact, have different functions.

To determine this, the head of excavation, Jacob Tue Christensen, studied pottery found in the two graveyards. His analysis shows that the amount of pottery in St Alban's graveyard was significantly greater around the boundary of the graveyard than near the church. At St Cnut's graveyard, on the other hand, the amount was consistent over the entire graveyard. The pottery's high degree of fragmentation shows that it was deposited directly on the graveyard and not first left on a rubbish heap. The proportion of cooking pots, tableware, and imported pottery was uniform at St Alban's graveyard and the part of St Cnut's graveyard that lay closest to the cathedral. On the boundary of St Cnut's graveyard, closest to the main entrance, the amount of tableware increased significantly.⁴

The pottery analysis supports the assumption that the graveyard at St Cnut's Cathedral was used differently

compared to the graveyard at St Alban's Church and possibly to a greater degree around the main entrance. These conclusions are extremely interesting in the interpretation of the three coins found close to the chancel of St Cnut's Cathedral. They increase the probability that artefacts from St Cnut's graveyard were used in ritual ceremonies and should, therefore, be looked at with fresh eyes. As mentioned earlier, coin finds from graveyards can generally be considered votive coins. Regarding the coins from St Cnut's graveyard, this is even more likely the case.

In total, 21 coins were found in the excavation (Appendix 3). The coin finds constitute a much smaller material than the pottery and are less suitable for a comparative distribution analysis. It is, however, worth examining how the coins are distributed across the two graveyards. Nine of the finds were from St Alban's. Two, however, were found by the graveyard wall, so it is unsure which graveyard they came from. Out of the nine coins, all except one could be identified or at least dated with certainty. The coins date from the eleventh to the sixteenth century. Most of them were Danish, and the two foreign coins registered came from periods when foreign coins circulated in Denmark. The coins are distributed relatively even across the 500-year period, which is the most noteworthy fact about the composition of the finds. Normally coins from the period around the late thirteenth century, the early fourteenth century, and the early fifteenth century are overrepresented in the find material, as coins from these periods were of low value and circulated in huge numbers (Märcher 2018: 288). These coins, therefore, also had a much higher loss frequency. Therefore, the composition of the finds further supports the assumption that coins found at the graveyard should not, or only with great reservations, be considered as monetary objects.

Twelve coins were found at St Cnut's graveyard, including the three SK3 coins. So, there was a larger number of coins found at St Cnut's graveyard, but with a timespan covering several hundred years, the difference should not be regarded as very significant. The coins date from the eleventh to the fourteenth century, with the youngest coin ascribed to the reign of Erik Menved, and all of the coins were Danish. Three of the coins could not be identified, and it is uncertain whether two of them were coins at all. Similar to the composition of coins from St Alban's graveyard, coins from the late twelfth century, the early fourteenth century, and the early fifteenth century were not overrepresented in the material.

When compared, the coin finds from the two graveyards resemble each other – if the three coins from Cnut the Holy are disregarded. The composition of coin finds from both graveyards is not what is usually expected to be found in an excavation in a medieval market town, and this indicates, as mentioned before, that the coins found at the two graveyards should not be considered monetary objects. The coin finds from St Cnut's graveyard stand out even more

due to the three Cnut the Holy's SK3 coins. Taking the period into account, this is an extremely high number, in that there are no other examples of coin finds from the period 1074-1103 with more than two examples found at the same locality, and even that would be extremely rare. The SK3 coins from St Cnut's graveyard could, of course, originate from a small hoard, but these sorts of items are only very seldomly deposited in graves. However, the phenomenon is not totally unheard of (Grinder-Hansen 1990: 152-155). With the material at hand, it is impossible to be certain.

A pilgrim badge for Cnut the Holy

As established above, it seems likely that the SK3's deviating finds distribution pattern in Western Denmark came about because the coins were demonetised and repurposed as votive coins in the worship of Cnut the Holy. Similarly, the excavations at St Cnut's graveyard indicate that the graveyard was not only used as a burial site but likely also as a location for rituals associated with the worship of saint Cnut.

Votive coins are often discovered in churches, where they are found in large numbers when church floors are removed during renovation. The coins were offered at altars or donation boxes, as finds distributions from well-documented church floor excavations have shown (Klackenberg 1992: 35-38). This phenomenon is especially common in the Nordic countries, which can be explained by the widespread use of wooden floors in these countries as opposed to the more dominant stone floors in the rest of Christian Europe. In churches with wooden floors, a dropped coin could easily disappear between the cracks (Rensbro 2021; Gullbekk 2015: 240). Even though thousands of coins have been found in Scandinavian churches, the phenomenon was not widespread in the early Middle Ages. Of the 9,760 coins found in Norwegian churches from 1130-1320, only 18 were from 1130-1170 (Gullbekk 2015: 235). In Denmark, 341 coins from 1074-1241 were found in churches (Poulsen 2016, catalogue and Poulsen 2023, catalogue: 150). Of these, only 24 were from before 1134, and only three were from before 1100. This indicates that coin offerings were not yet ubiquitous, and even though the so-called church-floor coins are a slightly different phenomenon to coins offered at a saint's grave, it shows that the phenomenon of votive coins was still far from established with the general public.

Even though the worship of Cnut as a saint is well known, a pilgrim badge has never been associated with Cnut's shrine in Odense, not in modern times either. Could it be that Cnut the Holy's Scanian coin fulfilled this role after his death? The connection between coins and the divine was, at any rate, not unknown in medieval times. Augustin described people as *nummus Dei* (God's coins) because we are created in God's image (Travaini 2018: 174). This example by no means stands alone, and many examples of similar connections exist, also within non-Christian contexts (Travaini 2018).

Pilgrim badges are found in large quantities, in part thanks to the increasing popularity of metal detectors. On the other hand, not much is known about the production of pilgrim badges. Seven moulds found in Ribe show that it was the location for a large production of, amongst other things, pilgrim souvenirs. Five of these moulds were found very close to each other in the western end of Stenbogade, close to the Cathedral Square, in deposits dated to the thirteenth century (Søvsø, Jensen, and Neiss 2015: 206). Two of the moulds from Ribe have been used to produce religious items. One of them was used to produce small ampoules, while the other was used to make a hollow ball with a puncture-hole pattern. The ball probably held something fragrant or was used as a bell. These types of balls are known from similar finds and contemporary illustrations (Søvsø, Jensen & Neiss 2015: 222-228).

The moulds found in Stenbogade in Ribe are somewhat younger than the Scanian SK3 coins. Another find site, a bronze workshop from the same timeframe as SK3 also discovered near the cathedral, on the other hand, is not. The coin broach made from the SK3 coin was found in the same excavation, although it was found in a different deposit slightly younger than the workshop. The workshop produced large quantities of the Christian broach types that are found in large numbers today with metal detectors. A similar workshop from the same period as the one in Ribe was found at the Budolfi Church in Aalborg, where some remains from coin production were also found. The finds underline the close relationship between the Crown, church, coin production, handcrafts, trade, and the beginnings of urbanisation in the early Middle Ages (Søvsø and Vrångmose 2020: 24-25).

The circumstances of Ribe Cathedral and the Budolfi Church, in many ways resemble that of St Cnut's Cathedral in Odense, in that the area around the cathedrals had several purposes. Unlike Ribe and Aalborg, no traces of metal workshops have been found at St Cnut's Cathedral, but both the pottery analysis and the number of graves signify that the graveyard at St Cnut's Cathedral served as more than just a burial ground (Christensen 2019).

The pilgrim badge moulds found at the Cathedral Square in Ribe and the broaches produced at the bronze workshops in Ribe and Aalborg are, however, quite different from the SK3 coins. The SK3 coins were initially struck as coins and only later transitioned to serving as religious objects. They are, in this way, substantially different from pilgrim badges and ornaments with Christian motifs. Even so, the secondary, non-monetary use of coins is a far from unknown phenomenon. There are numerous examples of coins that have been turned into ornaments, either as broaches – as in the case of the SK3 coin from the ASR 13 excavation in Ribe, or with the attachment of a lug or by making a simple hole so the coin can be used as a pendant. Several kinds of pilgrim badges, including some from Ribe, also greatly resemble coins.

Evidence of coin production was also found at the bronze workshop in Aalborg, in the form of flat bands of silver and coin blanks, as well as a coin of Cnut the Holy's JY4.b coinage from Aalborg. A dendrochronological dating to 1082 supports the dating of this coin find (Søvsø and Vrångmose 2020: 21). Traces of minting were also found in Lund, where a sheet of lead was found at the site of a goldsmith's workshop; the stamp of one of Svend Estridsen's coins had been tried on the sheet (Cinthio 1999: 45). The finds from Aalborg and Lund show with great certainty that the production of coins and jewellery were closely related, perhaps even two sides of the same coin. Therefore, the change of function from coin to religious object was not necessarily a significant shift.



Figure 9: Coin-resembling pilgrim badges from Ribe. Søvsø and Knudsen 2018: 151 figures 14j-14l.

Approximately 200 Carolingian coins have been found in Scandinavia, around half of them in Denmark (Moesgaard 2015b: 88). It would be easy to regard these coins as a result of the Viking raids in France in the second half of the ninth century. Most of the coins, however, are from 793-840, so chronologically, most of the Carolingian coin finds do not fit with the Viking raids. A large number of the registered Carolingian coins were used as pendants. This means they had been demonetised, and the large number has led to the suggestion that they were used for diplomatic exchanges, including baptismal gifts (Moesgaard 2004; 2006; 2013). More recent finds from the port of call, Havsmarken, on the island of Ærø have, however, shown that some of the coins must also have been used as currency. They came to Denmark as currency – either imported intentionally or through international trade. The proportion of coins that have been turned into jewellery is, however, still quite large, and most of them were also found at high-status locations (Moesgaard 2015b: 90-91).

Most of the Carolingian coin finds are from one type of coinage from the reign of Louis the Pious (814-840). The obverse shows a centred cross with the emperor's name inscribed along the edge. The reverse shows a building with a cross and the inscription *Christiana Religio* (the Christian

religion) around it. The identity of the building has been much debated, but the cross and the inscription more than suggest that it could be a church. It was in this period that Ansgar was a missionary in the Nordic countries while travelling with Harald Klak back to Denmark after his baptism in 826. This coin type's evident Christian expression, in the form of the cross, the (presumed) church, as well as reference to the Christian religion made it an extremely useful communication tool for Ansgar in his missionary work. An explanation for its overrepresentation in the find material could, therefore, very well be that it was a baptismal gift for newly converted Norsemen (Moesgaard 2004; 2006; 2013). The close connection between coins and baptisms is well-recognised and goes all the way back to early Christian times. Coins found in basins used for baptisms used to be interpreted as a direct payment for baptisms. New research, however, shows that they should be regarded as *art ex voto* – where the relationship between the worshipper and the divine is emphasised (Perassi 2018), a relationship in which the coin's monetary function is irrelevant or, at least, of little importance.

In several ways, Louis the Pious's *Christiana Religio* coinage follows a pattern resembling that of Cnut the Holy's SK3 coin from Lund. Both coin types are overrepresented, just as their find distribution patterns deviate. Regarding motifs, the *Christiana Religio* coin, as already discussed, is a likely marker of Christianity. The SK3, at first glance, seems to be the least likely candidate among Cnut's coins in that, as opposed to most of his other coins, it does not feature his portrait (Poulsen 2016: 131-134, 144-146, 159-162). On the other hand, there is a cross on both the front and back sides of the coin, thus reinforcing the Christian design. A cross, however, can also seem a bit anonymous, particularly when considering that pilgrim badges are often either designed as a picture of the relevant saint or clearly refer to a shrine through the design of the badge. In this way, it has been suggested that the motifs on the reverse of Olaf Hunger and Erik Ejegods' Scanian SK6 coins are portraits of Cnut and his brother Benedict. These coins should be considered a political campaign for the canonisation of Cnut (Poulsen 2016: 165-166). The round, coin-like brooch from Ribe, which is regarded as a pilgrim badge, however, has just a cross in the middle (see Figure 9).

A significant reason why exactly this type of Cnut the Holy's coins ended up as pilgrim badges is that, as mentioned above, numerous copies were made. Apart from being minted in four different towns in Scania, there are also many more known moneys than with any other of Cnut's coin types or with any other coin type from the period, for that matter. Without any detailed die study, it is difficult to determine the size of production of the SK3 coin accurately, but the number of known moneys alone shows that production was much larger than any of Cnut's other coins and also larger than those of his predecessor Harald Hen and his successor Olaf Hunger (Poulsen 2016: 157-165).

Based on Zealandic hoards, it has been suggested that some especially popular coin types, despite the implementation of *renovatio monetae* during the reign of Cnut the Holy, could have continued to circulate longer than others (Moesgaard 2019; Poulsen 2023: 116-117). It is quite likely that many more of these coin types may have circulated in Denmark in the late eleventh century and would, therefore, have been easily accessible in large numbers.

However, the large production of this type of coin is not the most significant reason to suggest that it was used as a pilgrim badge for Cnut the Holy. The most significant reasons are the coin type's deviating find distribution pattern and the discovery of three copies at St Cnut's graveyard. Similarly, from the reign of Olaf Hunger comes a Scanian coin type that has been found in large numbers and has a high loss frequency, but it has mostly been found in Scania. There is also no evidence to suggest that the coin has been found in large numbers in urban areas (Poulsen 2016: 163 and 210). This coin type just confirms that more coins were minted in Scania than in Western Denmark and that the monetising process was more advanced in Scania. It also confirms that, despite the generally large volume of coins, only Cnut the Holy's SK3 coin spread beyond Scania.

As suggested above, much more is known about pilgrim badges than about their production. This is also the case for coins, and with Cnut the Holy's SK3 the use as a pilgrim badge in particular. No traces have been found from the production of this coin, let alone in its function as a pilgrim token, and no poorly produced SK3 coins have been registered. Inferior coins would probably be interpreted as an attempt at counterfeit, but they could just as well suggest a secondary production connected to pilgrim badges.

The most obvious explanation of how a potential production of pilgrim badges took place could be that older, non-exchanged coins were used. This is the only explanation that the data can support. It is this subsequent use of SK3 that caused the deviating find distribution pattern.

Conclusion

So, how should Cnut the Holy's popular Scanian coin be interpreted? Was it a national coin – an early national currency that was able to cross the regional borders of contemporary coin circulation? There can, at any rate, be no doubt that Cnut entertained a great interest in the monetary system and that some of the motifs on coins produced during his reign could suggest a desire and attempt to create an interregional coin (Poulsen 2016: 160 and Poulsen 2019). The SK3 coin's distribution pattern also suggests that it was a coin with a nationwide circulation area, but it is essential to bear in mind that the find distribution pattern in the origin region of Scania substantially differs from the rest of the country. This difference is best explained by the

fact that the coin may have had different functions in Scania and Western Denmark. Presumably, there could also be some chronological differences with the finds, even though this can only be proven with the coin brooch found in Ribe.

An explanation for the coin's wide dispersal and deviating find distribution pattern could be that the coin has some connection to the worship of Cnut the Holy. A very compelling argument in this hypothesis is the large number of finds of SK3 coins at St Cnut's graveyard in Odense, as well as indications that the graveyard had a vital function connected to the worship of Cnut the Holy (Christensen 2019). The offering of coins at places of pilgrimage is a very well-described phenomenon. When pilgrims, after a gruelling and often dangerous journey, had reached their goal, they would, without a doubt, want to touch the saint's grave and strengthen their connection to the saint by offering something of themselves. Coins were perfect for this purpose, as they were small, durable, and carried a direct reference to the offeror by representing something from their region of origin (Travaini 2015: 215). This does not, however, seem to be entirely the case with the SK3 coin, as – apart from in Scania – it should then have been exclusively found at Cnut the Holy's graveyard in Odense. Unique to this coin type, on the contrary, is precisely its wide dispersal in Western Denmark, and that it is always found in urban environments in this region as opposed to the mostly rural environments in Scania.

Votive coins often have quite a low monetary value (Kelleher 2019: 77; Gullbeck 2015: 238; Ingvarsson 2010: 38). In the period examined in this article, just one denomination was used in Denmark, which makes it difficult to prove that more valuable coins were intentionally not used. Instead, it could be argued that the coin was demonetised and, therefore, of very little value. The Egelev Hoard, buried during the reign of Olaf Hunger, shows, however, that Cnut the Holy's coins, and especially the SK3 coin, continued to be regarded as objects of value after Cnut's death. Except for the SK3 coin find from Ribe, it is unclear when exactly the SK3 coin finds from Western Denmark were deposited. On the other hand, it is certain that the worship of Cnut the Holy began shortly after his death. Efforts to canonise Cnut probably started already during the reign of Olaf Hunger if the interpretation of the SK6 coin's reverse motif is correct (Poulsen 2016: 165-166). It is, at any rate, certain that he was canonised in 1100 and that his bones were placed in a shrine on the main altar in St Cnut's Cathedral (Johannsen & Johannsen 1990: 424). So, already very soon after Cnut's death, a cult of St Cnut emerged, to which the coins were connected. They were probably also still used as savings at the same time in other parts of the country.

This is, consequently, also why the possibility of the coin being used as a pilgrim badge has been suggested. It was not essential to choose a coin of low value, but it was important to choose an easily available coin. This is true for the SK3 coin which is evident both with the large number

of coin finds and high loss frequency rate as well as the evidence in hoard material of continued usage after the death of Cnut. As none of the coins, apart from the one from Ribe, show signs of being turned into ornaments or badges, it

is, naturally, difficult to prove with certainty that they were used as pilgrim tokens. The main proof that SK3 was used as a pilgrim token is, therefore, its wide dispersal combined with the deviating find distribution pattern.

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End notes

- For a more in-depth discussion of implementation of the royal monopoly on coinage, see Poulsen 2023: 59-64.
- A similar claim against King Cnut's tax collectors is put forward in other words in Passio II: '[they] plundered those things appointed for taxation. They determined to pay a lamb for a penny, a sheep for a shilling, and a cow for a shilling and threepence in the king's census/tax survey' (translation by Francis Young).
- Much of the paragraph below has been taken from Christensen 2019, after Christensen directed this author's attention to it.
- Kirstine Haase has raised questions about this interpretation (Haase 2022: 113), but Christensen stands by his conclusion.

Appendix 1

TGP no.	Circulation time	Number	Loss frequency
JY1.a-c	1074-1086	13	1
JY2	1080-1086	7	2
JY3	1080-1086	7	0
JY4.a-c		6	3
JY5		13,5	1
JY6		6	1
JY7.a-b		6	1
SJ1.1a-b	1074-1086	13	2
SJ2	1080-1086	7	0
SJ1.2a-d	1080-1095	16	5
SJ1.3a-c	1086-1110	15	0
SJ3.a-b	1095-1103	9	4
SJ4	1100-1110	11	4
SK1.1a-d	1074-1086	13	15
SK1.2	1080-1086	7	0
SK2	1080-1086	7	1
SK3.a-d	1082-1090	9	14
SK4.1	1084-1090	7	0
SK4.2		3,375	8
SK5.a		3,375	4
SK5.b		3,375	0
SK6.1		3,375	3
SK6.2		4	3
SK7		4	3
SK8		4	5
			12,59

Appendix 2

TGP	FP. Nr.	County	Location	Type of location	Find circumstances	Minter
SK03.a	MHM 8538:375	Scania	Bunkeflo Parish	Settlement	Excavation	
SK03.a	MHM 12538:242	Scania	Svennedal, Hyllie	Settlement	Excavation	GODWINE
SK03.a	LUHM 25680	Scania	Uppåkra	Settlement	Metal detecting	
SK03.a	LUHM 28114-818	Scania	Skt. Peter Klosterkirke	Church	Udgravning	
SK03.a	LUHM 9989	Scania	Fjelle Parish	Field	Excavation	
SK03.a	6042	Bornholm	Vester Marie	Settlement	Metal detecting	THVRGOT/THVRKIL
SK03.a	8750	Bornholm	Klemensker	Field	Metal detecting	
SK03.a	1942	Roskilde	Skt. Maria Hospital's garden	Town		DVRSTEIN
SK03.a	3987	Sorø	Tårnborgh	Town	Metal detecting	ULFKIL
SK03.a	3386	Præstø	Møn?			VLF
SK03.a	ASR 13 x482	Ribe	Lindegården	Town	Excavation	VNDI
SK03.a	9012	Odense	Skt. Knud Plads	Cemetery	Metal detecting	ALFFEIR
SK03.a	9012	Odense	Skt. Knud Plads	Cemetery	Metal detecting	GARFIN
SK03.a	9012	Odense	Skt. Knud Plads	Cemetery	Metal detecting	THURSTEIN

Appendix 3

FP no.	OBM no.	Object number	Date	King	Coin type	Cemetery	Context
6224	9784	244	1137-1146	Erik III Lam	TGP, SJ12	St. Alban's	Cultural layer (234)
6224	9784	43	1422-1422	Erik VII of Pomerania	Copper sterling	St. Alban's	Cultural layer (89)
6224	9784	195			1/2 coin, not determined	St. Alban's	Dirt layer between two clay floors
9012	9785	202	1000-tallet		German?	St. Alban's	Pit (516)
9012	9785	69	1104-1134	Niels?	TGP JY9a-b?, 1/2 coin	St. Alban's	In posthole below pavement (35)
9012	9785	2	1280-1310		Danish	St. Alban's	By cemetery wall (x=123,79; y=98,24; z=2,46)
9012	9785	1	1286-1319	Erik IV Menved	Schleswig, M8506	St. Alban's	By cemetery (x=123,76; y=98,18; z=2,47)
9012	9785	70	1422-1422	Erik VII of Pomerania	Copper sterling	St. Alban's	Stray find (x: 121,49 - y: 98,39 - z: 255)
9012	9785	224	1552-1552		Mecklenburg, half shilling	St. Alban's	Cultural layer (215)
6224	9784	639	1047-1074	Svend II Estridsen	Roskilde, Hbg. 38	St. Cnut's	Below pavement 515
6224	9784	1270	1175-1202	Valdemar I the Great/Cnut VI	TGP JY43.2	St. Cnut's	Metal detecting, eastern trench
6224	9784	777	1234-1241	Valdemar II Conqueror	TGP JY109.5?	St. Cnut's	Western part of mortar production pit (AC)
6224	9784	1211	1241-1334		13 th -14 th century Danish penny	St. Cnut's	Metal detecting, eastern trench
6224	9784	592			1/2 coin, not determined	St. Cnut's	Fill of grave G566
6224	9784	628			1/4 copper, possible coin	St. Cnut's	Fill of grave G593
6224	9784	682			Copper, possible coin	St. Cnut's	Cultural layer (523)
9012	9785	1005	1082-1084	Cnut IV the Holy	TGP SK3	St. Cnut's	Metal detecting, trench 6
9012	9785	1008	1082-1084	Cnut IV the Holy	TGP SK3	St. Cnut's	Metal detecting, trench 6
9012	9785	1017	1082-1084	Cnut IV the Holy	TGP SK3	St. Cnut's	Metal detecting, trench 6
9012	9785	1009	1280-1320		Danish	St. Cnut's	Metal detecting, trench 6
9012	9785	1015	1286-1319	Erik IV Menved	North Jutland, M8431	St. Cnut's	Metal detecting, trench 6