A Coin Out of the Ground

Routes of Contact between Anglo-Saxon England and Scandinavia, c. 990-1030

Peter Vernon Pederson

Master Thesis in Nordic Viking and Medieval Studies
60 Credits
Department of Linguistics and Scandinavian Studies
Faculty of Humanities

University of Oslo
November 2016
A Coin Out of the Ground:
Routes of Contact between Anglo-Saxon England and Scandinavia, c. 990-1030
Abstract

Archeological excavations in Scandinavian countries have uncovered hundreds of thousands of coins from across the early Medieval World. The ability to precisely date these coins to a time and place allows scholars to provide context to other physical items or written evidence. This thesis uses silver coins minted in Anglo-Saxon England to highlight connections to specific Scandinavian regions during the late-tenth and early-eleventh centuries. Distribution patterns of the coins cataloged for this thesis will be discussed in relation to chronological trends and patterns, peck mark studies, and discussing their distribution in Scandinavian hoards based on the results of die-studies.
Preface

I have strived to present as complete a picture as possible on the connections between Anglo-Saxon England and Scandinavia during the Late Viking Age. It has taken half a year longer than originally anticipated, but the final product is much more complete as a result. This thesis would not have been completed had it not been for the determined efforts of Svein H. Gullbekk, to whom I am indebted for allowing me to jump feet first into the deep end of the numismatic pool. I must also thank William Tam for his tireless work in editing this thesis and questioning many of my statements. Any mistakes that remain are my own.

Additional thanks must be given to Karl Gunnar Johansson, who listened and commiserated about the process, and my parents and friends for supporting me throughout my time in Norway.

This is dedicated to my grandfather, Bernt Severin Pederson, without whom I never would have come to Norway in pursuit of family roots and history; and my grandmother, Mary Elizabeth Gould, who always pushed me to continue my studies and better myself.
# Table of Contents

1. Introduction ........................................................................................................................ 1
   1.1 Aim .................................................................................................................................. 2
   1.2 Rational.......................................................................................................................... 3
      1.2.1 Hoards over Single Finds ..................................................................................... 4
   1.3 Historiography ............................................................................................................. 5
      1.3.1 How the coins have been cataloged ................................................................. 9
      1.3.2 Michael Metcalf’s Continuity and Change ..................................................... 11
   1.4 Methodology ............................................................................................................... 13
   1.5 Coin Types ................................................................................................................. 16
      1.5.1 Æthelred II .......................................................................................................... 16
         1.5.1.1 Crux .................................................................................................................. 17
         1.5.1.2 Long Cross ....................................................................................................... 17
      1.5.2 Cnut ..................................................................................................................... 17
         1.5.2.1 Quatrefoil ......................................................................................................... 18
         1.5.2.2 Pointed Helmet ................................................................................................. 18
   1.6 Mints .......................................................................................................................... 19
      1.6.1 London ............................................................................................................... 19
      1.6.2 English Mints ..................................................................................................... 20
         1.6.2.1 Canterbury ........................................................................................................ 20
         1.6.2.2 Exeter ............................................................................................................... 21
         1.6.2.3 Hastings ............................................................................................................. 21
         1.6.2.4 Winchester ....................................................................................................... 21
      1.6.3 Danelaw Mints ................................................................................................... 22
         1.6.3.1 Lincoln ............................................................................................................. 22
         1.6.3.2 Norwich ............................................................................................................ 22
         1.6.3.3 Stamford ......................................................................................................... 23
         1.6.3.4 York .................................................................................................................. 23
   1.7 Regions within Scandinavia ...................................................................................... 24
      1.7.1 Western Denmark ............................................................................................... 25
      1.7.2 Eastern Denmark ................................................................................................ 25
      1.7.3 Norway ............................................................................................................... 26
Figure 1.1: Mint locations in England................................................................. 24
Figure 2.1: Total numbers of Crux coins in each region..................................... 29
Figure 2.2: Total numbers of Crux type coins by mint across the regions......... 29
Figure 2.3: Numbers of Crux coins found in Scandinavia by mint area............. 32
Figure 2.4: Long cross coins found in Scandinavia by mint area...................... 33
Figure 2.5: Numbers of Long Cross coins found by mint across the five Scandinavian regions. ................................................................. 35
Figure 2.6: Quatrefoil coins found in Scandinavia as a portion of the total in each region..... 37
Figure 2.7: Total numbers of Quatrefoil coins across the Scandinavian regions by mint...... 38
Figure 2.8: A comparison of the combined output of the Danelaw and English mints against London for the Pointed Helmet coin type................................................................. 39
Figure 2.9: Pointed Helmet coins found in Scandinavia from the mint areas........ 40
Figure 2.10: Total numbers of Pointed Helmet coins by mint in the Scandinavian regions.... 41
Figure 2.11: Change in numbers of coins in Western Denmark across the four coin types. ... 43
Figure 2.12: Coin totals from the English mints in Western Denmark across the four coin types. ........................................................................................................................................ 45
Figure 2.13: Coin totals from the Danelaw mints in Western Denmark across the four coin types. ........................................................................................................................................ 46
Figure 2.14: Percentage share of the total numbers of coins for Eastern Denmark by mint area. ........................................................................................................................................ 48
Figure 2.15: Change in numbers of coins from the English mints across the coin types. ...... 49
Figure 2.16: Change in the coin totals from the Danelaw mints across the coin types.......... 50
Figure 2.17: Comparison of coin totals in Norway between mint areas for Æthelred and Cnut. ........................................................................................................................................ 52
Figure 2.18: Change in numbers of coins in Norway across the coin types based on mint area. ........................................................................................................................................ 53
Figure 2.19: Total numbers of coins from each mint in Norway across the coin types........ 54
Figure 2.20: Percentage share of the total number of coins on Gotland provided by the mints. ........................................................................................................................................ 56
Figures 2.21A – 2.21B: Percentages of the total provided by each mint area based on A) total coins for the Æthelred types, and B) total coins for the Cnut types................................. 56
Figure 2.22: Changes in coin totals from each mint area across the coin types............. 57
Figure 2.23: Total numbers of coins from each mint on Gotland across the coin types..... 59
Figure 2.24: Total number of coins from each mint area in Finland across the coin types. ... 60
Figure 2.25: Total numbers of coins from each mint in Finland......................................... 62
Figure 3.1: Total numbers of coins from the minting areas for both rulers................. 66
Figure 3.2: Total numbers of each coin type in Scandinavia by mint area.................... 70
Figure 3.3: Total numbers of coins found in Scandinavia in my material across the four coin types including all mints and regions. ................................................................. 73
Figure 3.4: Percentage share of the total number of coins from English mints in Scandinavia by coin type. ...................................................................................... 78
Figure 3.5: Percentage share of the total numbers of coins from Danelaw mints in Scandinavia by coin type. ...................................................................................... 83
Figure 3.6: London’s percentage share of the total numbers of coins for each type. ........... 84
Figure 4.1: Numbers of Pointed Helmet coins in Norway in my material.......................... 90
Figure 4.2: Distribution of Norwegian hoards cataloged for this thesis. ......................... 92
Figure 4.3: Numbers of coins in Norway from each mint across the four coin types......... 93
Figure 4.4: Total numbers of coins found on Gotland across the four coin types. .......... 95
Figure 4.5: Numbers of coins on Gotland from Æthelred and Cnut coin types based on mint. .................................................................................................................. 97
Figure 4.6: Numbers of coins in Western and Eastern Denmark by type......................... 112
Figure 4.7: Change in numbers of coins in Finland across the four types. ...................... 116
1 Introduction

This thesis will explore the routes of communication between Anglo-Saxon England and Scandinavia from the years 990 and 1030 based on coin evidence from hoards in found in Scandinavia. People, items, and ideas crossed vast distances during the early Middle Ages and these movements were the basis for communication between different cultures, societies, and parts of the world.¹ The majority of written sources from this time period focus on the individual, chronicling the travels of influential persons and illuminating the contacts they had with other regions. Yet, the movement of people does not solely define communications. Specific items also traveled and the movements of these items can be fixed to a particular point in time and space.² In this case, the specific item being studied is a silver coin.

During the Viking Age coins in England were minted with silver mostly obtained through trade. Silver was widely used across Europe, especially in the form of coins, and this form can be specifically used to elucidate the connection between England and Scandinavia during the time span in question. In the specific case of this paper, the focus is on the use of silver as coinage during the reigns of Æthelred II and Cnut the Great. Both men served as the king of England, but Cnut ruled a greater swath of territory including Denmark, Norway, and parts of Sweden. Coins minted during their reigns have been found in the tens of thousands across Scandinavia and make up large parts of hoards.³

My main question is: How are Anglo-Saxon England and different regions of Scandinavia connected between 990 and 1030, and more specifically the first and last decades of this period, c. 991 – c. 1003 and c. 1016 – c. 1028. Being able to date each coin type within the limits of years and attributed to specific mints in England and finds in Scandinavia is fundamental to this study. Regular recoinages in England provide a terminus ante quem⁴ for when coins of each type left England. Were certain nodes of trade and points of contact more important for communication with particular regions in England and Scandinavia than others?

---

² Ibid., 18.
⁴ This is the latest point at which a coin may have been minted.
This time period discussed is more precisely defined both chronologically and geographically than what is usually the case for similar studies based on archaeological and historical sources from this period. This precision is made possible by utilizing numismatic evidence in an archaeological context and historical sources taking an interdisciplinary approach.

At the same time, crucial to the economic agency of England and Scandinavia, Scandinavians were given large tributes from the king of England, Æthelred II. My investigation will center on two coins types each from the reigns of Æthelred and Cnut spanning roughly the first decade and the last decade of the time period in question. It must be stressed that the following paper is a historian’s interpretation of the data presented. Archeological and numismatic viewpoints will be considered, but ultimately all conclusions will be based in a historical milieu.

The material that has been cataloged for this thesis is extensive. The total number of coins in my material is 4021 with 1141 coins from Norwegian hoards, 933 coins from Gotlandic hoards, 897 from Danish hoards, 816 from Swedish hoards, and 234 coins from hoards in Finland. In order to ensure that all the coins were cataloged appropriately, twenty-six spreadsheets cover each region and mint across the coin types for a total of one hundred and four individual spreadsheets. Once the coins had been cataloged, another thirteen spreadsheets were used to collect the data into manageable chunks. It is from these spreadsheets that the graphs and percentage calculations were made. Throughout the thesis the phrase “my data” is used to refer to the data I have compiled after analyzing the coins I have cataloged. I use the phrase to specify that the conclusions are related to my findings, rather than other scholars, and to help the flow of prose.

1.1 Aim

The goal of this thesis is to investigate how Anglo-Saxon England and Scandinavia were connected between the years 990 and 1030 based on the coin material found in various regions throughout Scandinavia. The primary means of investigation is the distribution of coins in the Scandinavian hoards from the Viking Age and the ability to make precise attributions of numismatic evidence from Late Anglo-Saxon England. Additionally, the data collected herein will provide a starting point for determining the likelihood of a coin from a specific region or mint being buried within a particular region of Scandinavia. For example,
were coins from the Danelaw mints more likely to end up in hoards located in Norway and western Denmark than in Sweden or Gotland, or vice-versa? General groundwork on this particular issue was laid by Svein Gullbekk in his brief article “Hvordan kom angelsaksisk mynt til Skandiavia.” He theorized that coins from the Danelaw were more likely to end up in Norway and Western Denmark than in Eastern Denmark and Gotland.5

By utilizing the data cataloged for this thesis, I will determine the veracity of Gullbekk’s hypothesis: coins from specific mints have an increased likelihood of appearing in a particular region. This study will discuss a range of aspects related to the movement of coins from England to Scandinavia; chronological trends and patterns, peck mark studies to determine usage, and discussing their distribution in Scandinavian hoards based on the results of die-studies.

The coins cataloged for this thesis point toward the prominence of mints from the Danelaw over those from England across all of the Scandinavian regions. This preliminary impression indicates that the hypothesis is wrong in suggesting that regions, such as Gotland and Eastern Denmark, would have less Danelaw minted coins. Consideration will also be made as to how the hypothesis fits within the material cataloged for the four coin types as this could illuminate other patterns within the individual type components.

1.2 Rational

Coins are one of the few sources that can provide a detailed look into the connections between different areas during the Viking Age. Their story is not patently false or tinged with inaccuracies, but has room enough for interpretation. Their movement from the center to the periphery provides a valuable source of information to scholars who care to study this movement. Islamic dirhams, which have been found in the hundreds of thousands in Scandinavia, supply the name of the ruler, the mint, and the year the coin was struck. Anglo-Saxon coins do not have a year, but are emblazoned with the name of the king issuing the coin, the mint at which it was struck, and the name of the moneyer responsible for the minting of this particular coin type that is dateable to approximately six year periods. So a single coin found in a hoard along the coast of Norway can be traced back to a specific place and time in England, i.e. York circa 997 – 1003. The information that can be gleaned from these two

---

items, location and year, can help support the scant written evidence or supply context for other objects that might be found in the vicinity of the coin.

Anglo-Saxon coins were high-quality silver, with the value of the coin being guaranteed by the Crown. In Late Anglo-Saxon England the King’s coinage was used in all transactions within the realm. These coins moved along with the merchants because they were small, easily concealable, and contained value.\(^6\) It is difficult to know exactly where our single York coin stopped on its journey, the route it traveled, how many hands it passed through, or what kinds of transactions it which it was involved. Conclusions can be drawn based on other coins it may have been buried with or by discoveries of other York coins elsewhere in Scandinavia. The biography of a coin provides a clearer picture of how two places where connected than any written record or physical artifact. This is especially important as the written records for the time have questionable authenticity or were created many years after the actual period in question. Other physical artifacts such as cloth, wood, or silver may not have survived the many centuries separating their interment to their exhumation. Silver, while durable, is not particularly useful for tracing connections as there are typically no markers indicating where a particular piece of jewelry was crafted or dug up. Artistic styles could help narrow down a broad area from which it may have originated, but unlike coins, silver jewelry provides no clear date of production. A silver broach could have been crafted centuries before being buried, especially if it was a family heirloom. This was also the case with coins; in some instances coins struck in the 990’s are found in hoards buried in the first decade of the twelfth century. However, on average a coin is buried within a decade or two of it being minted.\(^7\) There are always exceptions.

\section*{1.2.1 Hoards over Single Finds}

I have chosen to use the coins found in hoards rather than single finds for two primary reasons. First, combing through the single finds goes beyond the scope of this thesis; second, hoard find locations and the contents of the find are better documented. Hoards contain coins that were collections of currency or wealth. The hoard material encompasses a great number of coins and thereby provides a better sample of material for the discussions undertaken, and they are, in general, considered representative of the coins in circulation locally or regionally,

\footnote{\(^6\) J. L. Bolton, \textit{Money in the Medieval English Economy, 973-1489} (Manchester and New York: Manchester University Press, 2012), 21.}

\footnote{\(^7\) Pers com Gullbekk}
or as examples of parcels of coins brought from other areas. Single finds, on the other hand, present an advantageous view of the active use of a particular currency. These losses would be indicative of a common area in which people were engaged in everyday economic transactions.

For our purposes the coins cataloged herein show how Scandinavian regions are connected to specific places in Anglo-Saxon England. Though the coins are the vectors through which the contact is viewed, this does not mean the coin traveled directly from point A to point B. Our example, the York coin, could have traveled to Northern Germany before passing through Denmark and onto Norway. This journey could be theorized from the peck marks on the coin as well as the composition of the hoard as a whole. Peck marks, bending, and die-links are the primary methods through which the journey of a coin can be deduced. The single finds do not provide the context needed to surmise what connections might have existed between the area it was found in and the place from which it originated. In sum, hoards of both statuses provide evidence for contacts between the area it was buried and the surrounding world.

1.3 Historiography

Coins are the evidentiary focus for this thesis and it is important to acknowledge the myriad works of scholars such as Kenneth Jonsson, Svein H. Gullbekk, Elina Screen, and Kolbjørn Skaara, but most especially Michael Blackburn and D. M. Metcalf. Both men have not only worked with coinage in the British Isles over the course of decades, producing a wealth of knowledge about coins and minting, but they have also studied the Anglo-Saxon coins in relation to Scandinavia. Metcalf has tackled the state of the English currency during the late Viking Age with zest. The incredibly dense, but intellectually rewarding, article “Some twentieth-century runes. Statistical analysis of the Viking-age hoards and the interpretation of wastage rates” examines the importation of coins into Scandinavia during the first half of the 1000’s based upon the Scandinavian hoard evidence. Metcalf employs the statistical data

---


provided by a close study of the coin material from both England and Scandinavia to support his suppositions on the state of the Anglo-Saxon currency during this time period.

The volume of mint output during the first half of the eleventh century was the centerpiece of the “Continuity and Change in English Monetary History c.973-1086” articles published in the early 1980’s, addressed in section 1.3.2 Michael Metcalf’s “Continuity and Change” below. His *Atlas of Anglo-Saxon and Norman Coin Finds, c.973-1068* includes an extensive list of questions he has answered over the course of many articles. Additionally, it gives a concise overview of the diverse coin types minted in England during the years in question as well as mints that created the coins. Metcalf’s articles covering the gelds of 991, 994, and especially 1018 turn once more to the coin material found in the Scandinavian hoards to clarify previous arguments. The two articles address lingering concerns on whether certain historical aspects surrounding these *gelds* should be believed. As the presence of the *gelds* form an extensive part of my own arguments, these two articles have been indispensable to clarifying my own position.

The inflow of coins to Scandinavia is the foundation upon which this thesis is built. The previously mentioned “Some twentieth-century runes…” article is a prime example of a study dedicated to discovering the routes by which Anglo-Saxon coins left England for Scandinavia. Metcalf’s thoughts about the inflow of Anglo-Saxon coins to the Scandinavian countries have supplied an initial idea of what patterns the cataloged coins might exhibit. Kenneth Jonsson has advanced the unique theory that the majority of Anglo-Saxon coins probably traveled through Germany before they ended up in Scandinavia, but lack of Anglo-Saxon coin evidence has led to others questioning the theory, especially Metcalf.

Gullbekk has also examined the routes by which coins would have entered Scandinavia. His study of peck marks on coins found in Norwegian hoards led to the conclusion that Anglo-Saxon coins with fewer peck marks likely came directly from England instead of passing through another region first. Additionally, his study, mentioned above, provides context for the importation of coins from locations in England to specific Scandinavian regions. Elina Screen’s preliminary study of the die-links among the Norwegian hoards gives additional

---

impetus to the idea that large groups of coins from England came directly to Norway. Both the peck marks and die-links contribute to my argument for how the coins arrived in Scandinavia.

The study of Anglo-Saxon coins in Viking Age Scandinavia rest upon a long tradition of scholarship beginning in the 19th century. The studies are numerous and varied, but the authorship of scholars such as Hans Hildebrand, Brita Malmer, Georg Galster, Kolbjørn Skaare, and Kenneth Jonsson deserves to be mentioned.

John Gillingham and M.K. Lawson instigated a spirited back and forth debate in the *English Historical Review* about the *danegelds* and *heregelds* issued in the tenth and eleventh centuries. Both men tied their evidence into the high numbers of coins found across Scandinavia and speculated as to their likely method of importation. Peter Sawyer, whose body of work is discussed below, has indicated that the substantial number of coins imported into Scandinavia is likely the result of the tribute and looting rather than product of sustained trade between the two regions. Much of Metcalf’s work has provided the debate over which was more influential, *danegeld* or trade, with an increasing amount of context. Despite Sawyer’s attribution that trade was insignificant, other scholars have accepted that trade and *danegeld* played an equal part in the arrival of coins into Scandinavia.

In order to fully address the benefits of studying coins, the idea of commerce and money must be elucidated. J. L. Bolton provides an excellent definition of money and explains why coins are one of the best, if not the best, form of money. The commerce aspect lies amongst the pages of Michael McCormick’s massive tome *Origins of the European Economy: Communications and Commerce, A.D. 300-900*. McCormick uses communications between regions to reveal the interconnections between the movement of people and goods and the creation of economic nodes along specific routes of trade. This goes along with the recent research into network theory, especially as described by Søren Sindbæk. Sindbæk’s work with network theory, as it relates to the establishment of emporia across Northern Europe, works to separate the economic and political influences from the movement of goods and people.

---

16 Søren Sindbæk, “Networks and nodal points: the emergence of towns in early Viking Age Scandinavia,” *Antiquity* 81, no. 311 (2007): 120. DOI: 10.1017/S0003598X00094886
This separation of influences upon the movement of goods and people can only be taken so far. It is evident that the tens of thousands of Anglo-Saxon coins in Scandinavia are the result of both economic and political influences. Throughout the thesis, the political aspirations of authority figures, such as Svein Forkbeard, will affect the inflow and distribution of coins across the Scandinavian regions. Economic influences are more difficult to clarify but the clear prominence of certain mints indicates that there must have existed favorable economic conditions in that area. For example, the abundant York minted coins found in Scandinavia likely resulted from preferential trade with merchants. Thus the political and economic influences must be considered when articulating how a coin went from point A to point B.

Much of what has been written about the connections between Scandinavia and England is from the point of view of people other than the Scandinavians. Even those scholars, such as Niels Lund, who write about Cnut’s kingdom in Denmark, focus mostly on how England was affected; although he does write about Cnut’s efforts to maintain the Scandinavian portions of his empire. The point of view affects how a particular area is described in scholarly works. If viewed through an English lens, Scandinavians are seen primarily as raiders, invaders, or conquerors of neighboring lands. Judith Jesch, along with Lesley Abrams, has been tackling these preconceived notions and her recently published work, *The Viking Diaspora*, discusses various approaches that scholars utilize in the increasingly diverse field of Viking scholarship. Assertions based on how a coin was acquired will not help to reveal the paths by which it reached Scandinavia. The preconception that Scandinavians obtained the coins solely through raiding is challenged by the numismatic evidence presented herein and is supported by these efforts to diversify the image of Scandinavians as more than just a bloodthirsty pillager or raider.

Even so, moving away from deeply entrenched stereotypes is difficult. Peter Sawyer has written much about Scandinavian effects upon England during the Viking Age and has well-utilized the image of the treasure-seeking raider. Though he has written of the ‘Scandinavian raider’ and writes of their disruption to the English countryside through conquering and

---

colonizing, Sawyer desires to provide a balanced picture of Scandinavian interactions with other peoples and cultures, especially England. He states this explicitly in the closing chapter of *The Oxford Illustrated History of the Vikings*, for which he was the editor, by saying: “One of the aims of this book has been to provide a more balanced picture. The Vikings undoubtedly destroyed much and caused widespread disruption, but there is no reason to believe that they were any more brutal and ruthless than the peoples of Western Europe.” M.K. Lawson’s book *Cnut: The Danes in England in the Early Eleventh Century* makes extensive use of written sources in addressing the Danish presence in England. Though the book is titled for and professed to be about Cnut the Great, much of the work within is solely based on England. Once more the English point of view takes precedence in the discussion about connections between Scandinavia and England.

The authors and works above provide the milieu needed to assess the connections between Anglo-Saxon England and Scandinavia. My conclusion is based upon the evidence presented by the coins cataloged for this thesis and how they fit into the overarching narrative of English-Scandinavian relations.

### 1.3.1 How the coins have been cataloged

All of the coin material upon which my data is based has been collected in two different series. Material from Western Denmark, Norway, and Finland is collected in the *Sylloge of Coins of the British Isles (SCBI)* series, whereas material from Gotland and Eastern Denmark is collected in the *Corpus Nummorum Saeculorum IX-XI qui in Suecia Reperti Sunt (CNS)* series. The former has published 66 volumes, of which the Norwegian material is the most recent, published in 2013 and 2015 respectively; while the latter has published only a handful of volumes. Within the *SCBI* series the volumes that chiefly occupy our attention are 4, 7, and 13 – 15 dealing with Denmark; 25 for Finland; 65 and 66 for the Norwegian material.

The *SCBI* catalogs are structured in two ways. The volumes covering the Danish material are organized first by mint then moneyer and coin type. Find information is included last, but the coins are not arranged using this data. In the following volumes, those covering the Finnish material.

---

and Norwegian coin material, the \textit{SCBI} volumes are organized by ruler and coin type first, followed by mint and finally by moneyer. Once more the find information is included but is not a data point around which the coins are placed. Specific information on the finds is provided in the first volume of each series and breaks the area into regions and then specific locations based on the finds. For example, the Foldøy hoard from Norway was found in Jelsa parish in the county of Rogaland. Unfortunately, the find spots are based primarily off old records, making it difficult to identify exact coordinates for the finds and requiring thorough searches in order to locate the modern location of the finds. The more recent Norwegian volumes are easier to use in this manner than the previous volumes. Pinpointing the present location of the finds is especially difficult in Denmark as the \textit{SCBI} volumes were based on administrative regions reorganized first in 1970 and then in 2007.\footnote{\textquotedblleft Kommunalreformen 1970,	extquotedblright Dansk Center for Byhistorie, accessed 30 August 2016, http://dendigitalebyport.byhistorie.dk/kommuner/artikel.aspx?artikel=kommunalreform_1970.xml.}

\textit{SCBI} volumes deal specifically with coins minted in England, while the \textit{CNS} volumes catalog all of the coins from the Viking Age found in Sweden. Unlike the \textit{SCBI} volumes, these volumes have been published with the basis in all finds from particular geographic areas, i.e. Blekinge. Four volumes of Gotlandic material have been published, as of 2010, with two volumes covering Skåne and one each for Blekinge, Östergötland, and Dalarna. The Skåne, Blekinge, and Gotlandic volumes contained the needed information for this thesis. Dalarna and Östergötland were considered as additional regions to examine, but have been excluded as the total number of coins found was insignificant compared to other modern Swedish regions.

Historical considerations were also made due to the claims on Skåne and Blekinge by the Danes during the Viking Age. \textit{CNS} volumes also document the specific data of the coins differently than \textit{SCBI}. General information such as the weight and markings of a coin are provided, but coins are grouped together by the find instead of mint or type. For example, Quatrefoil coins found in Grönby, Skåne are all organized as part of the Grönby hoard along with the Islamic, Byzantine, German, Irish, and Scandinavian coins that comprised the totality of the hoard.\footnote{Brita Malmer, ed., \textit{Catalog of Coins from the 9th-11th Centuries found in Sweden 3. SKÅNE. 1. Åhus – Grönby}, vol. 3, no. 1, \textit{Corpus Nummorum Saeculorum IX-XI qui in Suecia Reperti Sui} (Stockholm: Almqvist \& Wiksell International, 1985), 123.} The editor of the series, Brita Malmer, made the executive decision to publish the \textit{CNS} catalogs by find circumstance instead of by coin, and with the desire to publish all coin material found in Sweden instead of focusing on a particular type of coin such as English

or German. For my purposes, the information required was the type of coin, mint location, and find location.

Of the total four thousand coins I have cataloged from these two series, 1749 came from the CNS volumes. The six CNS volumes I utilized contained data for slightly fewer than 45,500 coins, whereas the eight SCBI volumes contained about ten thousand coins total. This disparity comes from the fact that, as mentioned earlier, the CNS volumes catalog all coins found in Sweden from the Viking Age while the SCBI volumes focus specifically on English coins. The high number of coins included in this investigation has required much effort to sort, but to provide a representative basis for the conclusions I have incorporated all hoards containing coins that fit into the desired parameters.

1.3.2 Michael Metcalf’s Continuity and Change

Michael Metcalf published two articles in the British Numismatic Journal in 1980 and 1981 exploring the monetary situation which existed in England during the late Anglo-Saxon period. The flow of silver bullion into England is not one of the specific points Metcalf addresses in the articles, rather it is the coinage of Æthelred and Cnut upon which he lays his foundation. Silver importation to England, important for the minting of the coins, from Ottonian and Salian Germany, does not testify to the contacts between England and Scandinavia. This thesis is looking at the export of coins from England, not the import of silver. Metcalf uses the estimated output of all mints active during the period circa 973 – 1086 in an attempt to establish the size of the English currency. His estimates were reexamined by Martin Allen in 2005 on the basis that Metcalf’s accepted output of a reverse die, ten thousand coins, has never been more than a reasonable guess and is likely on the low side for die output. In the end, Allen suggests that the numbers estimated by Metcalf are possibly too high and the actual volume of the currency is much lower. Though, the “Continuity and

29 Ibid., 489-492.
30 Ibid., 501.
"Change" articles are the only ones which address the volume of currency by mint and coin type individually.

Determining the size of the English currency, as Metcalf does not only in these articles but others, allows for the extrapolation of how much coinage might have reached Scandinavia. This is crucial because it obliges us to consider how the amounts found in Scandinavia fit into the English currency as a whole. Estimates for the percentage share of the total forms an important basis for my thesis because it aids in deducing how likely a coin from a particular mint was to end up in Scandinavia. For example, if a sizable quantity of York minted Quatrefoil coins are found in Norway and York has a higher percentage share of the total output of Quatrefoil coins, then it is possible that high numbers of York minted coins found here point toward a close connection between these two areas. It could also reflect only upon the original output of the York mint as it relates to other mints across England.

The first of Metcalf’s articles, published in 1980, provides the foundational information. For his study Metcalf wanted to see how the coins circulated within England whereas this thesis looks at how the coins traveled to Scandinavia, even though we both use the same source material. He explores various methods for the diffusion of the currency such as trade and commerce, tax collection, and royal expenditures.\(^3\)\(^1\) This is coupled with an in-depth explanation of the general patterns of diffusion across England.\(^3\)\(^2\) The second of the two articles discusses the mint output and lays out the results in a series of tables. Much of the math behind these tables is based upon the estimated number of dies used by the mints to produce the coins. For example, if one knows that twenty sets of dies were used at the mint in Lincoln they could calculate the approximate number of coins created by those dies. The coin estimates tend to vary from scholar to scholar based on their own ideas about the output per die. Metcalf’s calculations take the probable number of dies and multiply them by a factor of ten thousand in order to produce the mint output estimates.

“The main point, however, is that one can see how the currency may have been several times smaller than the volume of mint-output,”\(^3\)\(^3\) cautions Metcalf. The math and statistics he produced in these two articles must be examined as part of a larger picture. His estimates are

---
\(^3\)\(^2\) Ibid., 27-31.
based on the numbers, both real and assumed, provided by coins and dies that have been discovered over the intervening centuries. But these numbers are useful because they can help provide a context for the numbers of coins unearthed in Scandinavia. For example, Metcalf has estimated that the total mintage of the Crux type was forty million coins of which a possible thirty-four million was exported from England during, or shortly after, the six year issue period.\(^3\) It is this estimated outflow number which can shed light on the number of coins I have cataloged from the Scandinavian hoards. Additionally, he provides percentage estimates of mint output based on the total output for each type. This is broken down by mint, presenting another opportunity to conjecture how the numbers of coins in the Scandinavian hoards fit into the overall mint output in England.

It must be noted that Metcalf draws on the SCBI publications for the coins found in Denmark as well as Hildebrand’s catalog of coins in the Stockholm collections. This leaves out much of the Norwegian material that has been cataloged recently by Elina Screen in SCBI volumes 65 and 66: Norwegian Collections: Part I, Anglo-Saxon Coins to 1016 and Norwegian Collections: Part II, Anglo-Saxon and later British Coins 1016-1279. Other coins that may have been found between 1981 and the present would also not be included in Metcalf’s data.

In summation, Metcalf’s percentage estimates will be a useful point of focus as I examine the mints and the possibility that coins from those mints traveled to specific areas within Scandinavia. Output of the mints is a crucial factor when considering the numbers of coins found in Scandinavia. If a mint is estimated to have a greater share of the total output for a coin type, then it is reasonable to assume that coins from that mint will appear more often in Scandinavian hoards.

### 1.4 Methodology

This thesis focuses on four coin types minted at nine mints between c. 990 and c. 1030. Two of the coin types come from the reign of Æthelred II, Crux and Long Cross, while the other two are from Cnut’s reign in England and subsequently Denmark and Norway, Quatrefoil and Pointed Helmet. Eight of the mints are spread between the Danelaw and southern England with the ninth being London. The Danelaw mints are Lincoln, Norwich, Stamford, and York while the English mints are Canterbury, Exeter, Hastings, and Winchester. Seeing how coins

\(^3\) Metcalf, “Continuity and Change, Part II,” 62-63.
struck at mints in the Danelaw and southern England are distributed in Scandinavia and then comparing the discernible patterns will lead us toward an answer for the question: were certain nodes of trade and points of contact more important for trade and communication with particular regions in England and Scandinavia than others? In this study I will analyze how these four coin types from different mints are distributed in hoards across the Scandinavian regions since it is possible to date, with a high degree of precision, Anglo-Saxon coins from this period.

Anglo-Saxon coins would not exist if it were not for the mints that produced them. Mints produced the coins by order of the ruling authority for distribution to the populace at large. Reasons for distributing coinage are varied, but for the government it was a means to easily collect taxes and other revenues in currency rather than relying on a valuation of land or goods, and thereby decreasing the cost of the transactions considerably.35 For this thesis, eight mints from England and the Danelaw will be examined along with the mint in London. The designations of the two areas are a result of the Danish occupation and settlement of large swaths of the eastern parts of England in the ninth century.36 This Danish settled area came to be known as the Danelaw, but by the middle of the tenth century the region had been incorporated into a united Anglo-Saxon kingdom.37 Despite being a part of the united English kingdom, the Danelaw area retained the culture brought by those Scandinavians who had settled in parts of eastern England. It is likely that the Scandinavians who settled the areas around York, Lincoln, Norwich, Stamford, and other towns in eastern England maintained strong connections with their homelands. The geographical proximity and familial connections between the two areas likely spurred the preference of the region for Scandinavian traders.

The expanse in which the English mints are located never left the control of the West Saxon kings after they gained full independence from the Mercian kingdom in the first part of the ninth century.38 Canterbury and Hastings are both located in Kent, which during the time period in this thesis is fully integrated into the West Saxon kingdom. Prior to this it had been a separate kingdom typically ruled by the second in line to the West Saxon throne.39

Winchester is the most prominent mint among the four English mints and likely served as the capital of the West Saxon kingdom. Furthest to the west lays Exeter, in the region of Cornwall. Egbert, Æthelred’s predecessor, conquered the area in the first quarter of the ninth century, adding it to the growing West Saxon kingdom. The Danelaw and English areas, though separated by culture, maintained strong economic links around the North Sea and with the continent.

While the mints and coin types are integral to this study, it is not possible to examine the hoard material without first defining the geographical scope. Five regions across Scandinavia have been defined for this thesis: Western Denmark, Eastern Denmark, Norway, Gotland, and Finland. Geographically, the regions listed below are all closely linked by the North Sea and Baltic Sea. The defined regions have been established based on their historical boundaries in the eleventh century. Denmark has been broken into two sections to allow for better visibility of the possible trends. Other considerations were made in regard to the historical circumstances of Norway, Gotland, and Finland. Nearly a hundred hoards across the five regions have been scrutinized based on the four types and nine mints listed above. Some regions yielded more hoards than others. My criteria for determining a hoard was based on how the authors of the SCBI and CNS volumes defined them.

Finally, I identified two different ways in which the data I collected could be analyzed: by pure, physical numbers or through percentages. I have chosen to use the latter method as that hews more closely to the manner in which most other authors have presented their findings and it allows an easier comparison between Metcalf’s “Continuity and Change” articles and my own data. Moreover, the patterns seen amongst the cataloged material read differently depending on whether one uses the actual numbers or percentages. For instance, I have cataloged forty-four coins from Exeter for Quatrefoil and Pointed Helmet each. Yet, Exeter’s share of the total percentage for Quatrefoil is 3.66% and for Pointed Helmet it is 3.43%. Using percentages over actual numbers provides possibilities to compare patterns within my material in spite of the actual numbers differing from one mint to another.

To sum up, I am examining four coin types: Crux, Long Cross, Quatrefoil, and Pointed Helmet; minted at nine mints: London, Lincoln, York, Norwich, Stamford, Winchester, Exeter, and further afield.
Exeter, Canterbury, and Hastings between c. 990 and c. 1030 for the purposes of analyzing the distribution patterns of the coins to determine if certain locations were more important for contact with particular regions in England and Scandinavia than others.

### 1.5 Coin Types

#### 1.5.1 Æthelred II

Æthelred II first became king in 979, after the curious death of his older brother.\(^{42}\) He had not been king long before the Scandinavians began to raid English coastal areas in the early 980’s.\(^{43}\) Though the raids began in the 980’s, it was not until 991 that the first recorded *danegeld* was paid by Æthelred to the raiders.\(^{44}\) Over the next twenty years, increasingly large amounts of silver were given to Scandinavians preying upon the English countryside.\(^{45}\) Scholars regularly argue that the *gelds* paid by Æthelred consisted primarily of silver, especially coins.\(^{46}\) Yet, I feel this view is inaccurate as there are significantly less coins from the Crux and Long Cross types within Scandinavia. Even the estimated amounts provided by Metcalf indicate that the issues of both these coin types were probably less than the two combined Cnut coin types.\(^{47}\) In fact, my data indicates that the highest numbers of coins found came from Cnut’s Pointed Helmet issue. Æthelred is a much maligned king and has received the blunt end of the historical stick;\(^{48}\) yet, the entire coinage process remained relatively unaffected by the constant devastation wreaked by the Scandinavian raiders. Perhaps in his effort to maintain the coinage, we can grant Æthelred a small victory.

\(^{42}\) Williams, *Ill-Counselled King*, 14.

\(^{43}\) *Ibid.*, 43.

\(^{44}\) *Ibid.*, 46. In addition to Williams, numerous other sources describe this first payment.


\(^{46}\) The articles written by M.K. Lawson and John Gillingham express this viewpoint the most succinctly, though; they also question whether the *gelds* may have been paid in kind. Metcalf addresses this issue in the “Continuity and Change” articles as he discusses the total numbers of coins minted during each coin type.

\(^{47}\) Metcalf, “Continuity and Change, Part II,” 56.

\(^{48}\) Williams, preface to *Æthelred the Unready: The Ill-Counselled King*, ix.
1.5.1.1 Crux

The Crux type was the third major coin type minted during Æthelred’s reign and was minted c. 991–997. The obverse shows a royal portrait with a legend denoting Æthelred II as king, i.e. ATHELRED REX ANGLO, and the reverse showing a short cross with the letters C R V X in the field and the legend denoting the mint and the moneyer, i.e. ASKEL ON LVNDEN. During this period, Æthelred began the policy of paying tribute to the Scandinavians raiding the English countryside. Of the four types that are being examined in this thesis, Crux is the smallest, despite the payments of the gelds during its issue period. Crux is also the first of the Æthelred II types that are found in significant numbers throughout Scandinavia.

1.5.1.2 Long Cross

The Long Cross type was minted immediately after the Crux type, c. 997–1003. The obverse shows a royal portrait with a legend denoting Athelred II as king, i.e. ATHELRED REX ANG, and the reverse shows a long cross and the legend denoting the mint and the moneyer, i.e. OSMUND ON LINC. This type also appears in larger numbers in my data than Crux, though still below the numbers of the following two types. Long Cross was also issued during a more turbulent period of Æthelred’s reign because there was nearly constant raiding.49 Although only one documented geld was paid to the raiders, the regular raids could account for the higher occurrence of the type across Scandinavia. Even so, trade is the presumed dominant form of export from England for both of the Æthelred II coin types.

1.5.2 Cnut

Upon his father’s death in 1014, Cnut the Great left England for Denmark as he was opposed by the still-living Æthelred II, who had returned at the behest of the English nobles.50 Then, in 1015, Cnut returned to England at the head of a large fleet with the intent to claim his place as king.51 After a brief conflict with the English, and Æthelred’s passing away in April 1016,52 Cnut made a treaty with Edmund Ironsides, the son of the late king.53 England was now split

49 Williams, Ill-Counselfled King, 48-49.
50 Ibid., 123.
52 Williams, Ill-Counselfled King, 130.
between a Dane and an Englishman, though, Edmund died shortly after the treaty was
signed enabling Cnut to become king of all England. Upon becoming king, Cnut did not
institute radical changes to the administration of the government. He appointed influential
figures to rule over specific areas of his new kingdom, but retained much of the previous
laws and regulations. Within a year or two, he began to mint his own coin types starting with
the Quatrefoil and following up with Pointed Helmet. Both types have been found in
significant numbers throughout Scandinavia.

1.5.2.1 Quatrefoil

Quatrefoil is the first of Cnut’s coin types after he was crowned king of England, and minted
c. 1017-1023. The obverse shows a royal portrait within a quatrefoil and a legend denoting
Cnut as king, i.e. CNUT REX ANGLORVM, and the reverse shows a cross within a
quatrefoil and the legend denoting the mint and the moneyer, i.e. OSFERÐ ON LINC. Exact
dates are difficult to establish due to the tumultuous birth of Cnut’s English kingdom. A
single large geld was paid out during the Quatrefoil validity period. Further discussion of
this geld takes place in section 4.2 Gelds and Trade below. In either 1018 or 1019, Cnut
solidified his hold upon the Danish regions previously ruled by his brother. Toward the end
of the Quatrefoil validity period, Cnut began the drawn out conflict with Olaf Haraldsson.
Large numbers of Quatrefoil type coins have been found in Denmark and Norway, no surprise
considering the former’s close connections to England and Cnut’s focus on the latter.

1.5.2.2 Pointed Helmet

The second coin type produced by the English mints for Cnut is Pointed Helmet. The period
of issue begins in either 1022 or 1023 and runs until 1028 or 1029. As with the other three
coin types the issue period lasts roughly six years. The obverse shows a royal portrait with a
pointed helmet and a legend denoting Cnut as king, i.e. CNUT REX ANGL, and the reverse

---

55 Williams, Ill-Consselled King, 146-147.
57 This amount is what has been found in the Anglo-Saxon Chronicle and has been referenced in numerous articles and books consulted for this thesis. The most relevant information on this geld can be found in Metcalf’s article “Can we believe the very large figure of £72,000 for the geld levied by Cnut in 1018?”
58 Lund, “Cnut’s Danish Kingdom,” 29.
shows a short cross with annulets in the field and the legend denoting the mint and the moneyer, i.e. GODWINE ON LVND. Of the four types I am examining, this is the most numerous within my own data; a point which stands in contrast to the idea that less Pointed Helmet coins were minted than Quatrefoil. This type is not associated with any known gelds or other major gifts to Scandinavian raiders, although, during the entirety of this validity period Cnut’s claim to Norway was contested by the Norwegian king, Olaf Haraldsson. Slightly more Pointed Helmet coins have been found in Scandinavia than Quatrefoil, based upon my data, but there are noticeable differences between the distributions of coins for the two types.

1.6 Mints

1.6.1 London

London was chosen because it was the largest mint in England before, during, and after the Viking Age. Hundreds of thousands, presumably even millions, of coins were exported from this bustling city in the direction of Scandinavia and the Continent. Coins from London tend to appear in the majority of hoards uncovered throughout Scandinavia. On an individual mint basis, London-minted coins consist of the majority of my data, but when the other eight mints are combined this is not the case. After Cnut became king, it is likely that London’s status rose higher compared to Winchester’s as he would have not have the familial connection to Winchester. The London mints typically made up around 20 – 30 percent of the national output during the late Anglo-Saxon period with some deviations.

---

1.6.2 English Mints

Four mints from the southern part of England have been chosen: Canterbury, Exeter, Hastings, and Winchester. These four mints were located in the part of the country that had been ruled by the House of Wessex since Alfred the Great fended off the Vikings in the 9th century.Æthelred II, coming from the House of Wessex, probably preferred the region to the more eastern areas that made up the old Danelaw. As one of the richest areas in England at the time, these four mints provide an excellent insight as to the importance of the region in the eyes of two different rulers. The largest of the mints is Winchester with Canterbury and Exeter close behind. Despite a prime location on the coast, Hastings is by far the smallest of the four mints.

The term “English” is used to refer to these mints because the region differs culturally from the areas in eastern England that fell under Danish rule in the ninth century. Through separating the mints into English and Danelaw, patterns can more easily be discerned in the coin material. This differentiation allows for a clear comparison between Scandinavian army-wrecked southern England and the more heavily merchant-travelled Danelaw.

1.6.2.1 Canterbury

This city is located in the county of Kent near the entrance to the Thames estuary. It is close to the English Channel crossing between Dover and Calais. Canterbury was a key religious site as well as a regional hub for this area of southeast England. Travelers heading to London from the Channel crossing points in eastern Kent would likely stop in Canterbury first before continuing their journeys. During the reign of Æthelred II, the mint at Canterbury was one of the more prolific mints, surpassed by only a few others in England and the Danelaw. This prominence appears to have faded after Æthelred died and Danelaw trade centers grew in influence.

---

63 Williams, Ill-Counseled King, 1.
1.6.2.2 Exeter

Exeter is the furthest west of all the mints. It lies along the borders of the counties of Devon and Somerset and probably owes its prominence to maritime commerce. Interestingly, Exeter, despite being the farthest west of all the mints studied, seems to maintain a relatively steady supply of coinage to the various regions in Scandinavia with only a small drop coming with the Quatrefoil issue. Coins from this location are found in roughly equal numbers to Canterbury, despite the aforementioned distance. As with the other English mints, the importance of the Exeter mint seems to decline only slightly after Cnut becomes king.

1.6.2.3 Hastings

Located in the south-eastern part of England, within the county of Sussex, is the small mint at Hastings. This was one of many ports lying along the English Channel and would have been a prime entry point for traders crossing from the continent. Of the English mints, this is the smallest both in terms of output and presence among the Scandinavian hoards. Metcalf points out in *An Atlas of Anglo-Saxon and Norman Coin Finds* that the small mints located along the Channel would have most probably functioned as re-minting locations for foreign silver rather than minting their own coins for local consumption.66

1.6.2.4 Winchester

The largest English mint, both in output and distinction, is Winchester. It is centrally located in the Wessex region and lies in the county of Hampshire. Serving as the location of the royal treasury, Winchester would have had the best access to the silver supplies of the king and it is the most likely location after London from which a majority of coins could be exported from a southerly position. The dies used to mint the coins were typically created in Winchester during the majority of Æthelred’s reign, but this role had seemingly been subsumed by London toward the end.68 In fact, the coins issued at Winchester are the highest with Æthelred’s Crux type and Cnut’s Quatrefoil type, with a significant drop in the Long Cross type and a much smaller dip when Pointed Helmet is issued. Yet it is only with the Crux type that Winchester surpasses the other mints, with the exception of London.

---

1.6.3 Danelaw Mints

The Danelaw covered the east and north-eastern shires of England. East Anglia, Northumbria, and Lindsey were all settled by the Scandinavians in the late ninth century. These Scandinavian settlers were primarily Danes, and after concluding treaties with the English kingdoms, the area came to be known as the Danelaw. The mints chosen from this area are Lincoln, Norwich, Stamford, and York. The first and last are especially important as they were two of the larger mints in England, being subordinate to London, depending on the type in question. Mints at Norwich and Stamford were active during the reign of both Æthelred and Cnut. All four mints were located in economically strategic positions along the eastern coast of the Danelaw with excellent access to the North Sea and Scandinavia.

1.6.3.1 Lincoln

Lincoln is the second or third most prolific mint in Anglo-Saxon England by output, depending on the type being examined. Lincoln was likely one of the larger cities in population and the strong North Sea trading connections gave the city high status during the late Anglo-Saxon period. Coins from Lincoln, along with York, increased dramatically from the time Cnut became king. It is difficult to say with any certainty whether Lincoln or York had a higher output during the forty year period in question, although Metcalf has done a more than admirable job in the “Continuity and Change” articles, but within my own data Lincoln has the higher number of coins and beats York with a higher percentage share of the total in the three types before Pointed Helmet. As with York, it dominated the local region economically.

1.6.3.2 Norwich

Norwich was one of the larger towns in England during the 11th century, yet the mint here only contributed around 2 – 3 percent of the national output during the Late Anglo-Saxon period. This town is located in the county of Norfolk within East Anglia, one of the more heavily populated areas in England. It was in East Anglia that a large majority of

---

69 Sawyer, *From Roman Britain*, 116.
70 Ibid., 117.
71 Ibid., 204.
73 Sawyer, *From Roman Britain*, 230.
Scandinavian soldiers from the Great Armies settled in the late 9th century.\textsuperscript{75} During the period in question the town had strong connections to trade on the North Sea via river access. Of the Danelaw mints, the numbers of coins found for this mint remain relatively steady across the coin types with one exception. Numbers of Quatrefoil coins from Norwich were over double the previous type, Long Cross, and the next type, Pointed Helmet. Compared to Stamford, the output of this mint is slightly more erratic across the four coin types.

1.6.3.3 Stamford

This mint town is located on the edge of the region known during Anglo-Saxon times as the Five Boroughs. It is connected to the North Sea via the river Welland making it a prime location for long-distance trade within the region. Much like Norwich, output at Stamford made up between 2 – 5 percent of the total nationally during this time period. During the 1030s there was a small increase in the output, but that did not last long.\textsuperscript{76} Unlike Norwich the number of coins from Stamford found across Scandinavia increases after Cnut became King of England.

1.6.3.4 York

As with the other Danelaw mints chosen, York had easy access to the major shipping routes in the North Sea allowing it to economically control Yorkshire. It had been a prominent city since the late 9th century when it was captured by the Viking armies.\textsuperscript{77} York’s share of the national output was roughly on par with Lincoln’s, but less than London’s.\textsuperscript{78} The number of coins from York found in Scandinavia increased quite dramatically from Æthelred to Cnut, especially in specific regions. Metcalf notes that the coins from York, though part of the national currency, did not have a great rate of diffusion into other areas of England due to the relative isolation of the region.\textsuperscript{79} This remoteness, relative to the other mints, did not deter merchants from trading there and, it could be argued, its connections to Scotland and Ireland would have been an even greater boon for merchants interested in making money.\textsuperscript{80}

\textsuperscript{75} Keynes, “Vikings in England,” 54.
\textsuperscript{76} Metcalf, \textit{An Atlas}, 205.
\textsuperscript{78} Metcalf, \textit{An Atlas}, 193-194.
\textsuperscript{79} \textit{Ibid.}, 277.
\textsuperscript{80} Horne, “Most Praiseworthy Journey,” 23-25.
1.7 Regions within Scandinavia

The regions in Scandinavia that have been chosen for investigation in this thesis are Western Denmark, Eastern Denmark, Norway, Gotland, and Finland. All five of the regions had varied contact with Anglo-Saxon England during the period studied in this thesis. Some regions, such as Western Denmark, had extensive contacts with England going well back into the ninth century. The Norwegian kings Olaf Tryggvason and Olaf Haraldsson spent a substantial amount of time in England. Both kings came to England as raiders during the reign of Æthelred, but returned to Norway after converting to Christianity. Eastern Denmark, Skåne
and Blekinge, was a part of Denmark during the period in question and was likely one of the wealthiest regions in Denmark due to its large arable tracts of land. Gotland, the small island in the middle of the Baltic, is thought to have been a part of the Swedish kingdom at the time although, as an autonomous region. The thousands of Anglo-Saxon coins found here are indicative of wider contacts with the Baltic and North Sea regions, especially Germany and England. Finland is likely only a tertiary location during the period studied in this thesis. No major political figures emerged from this location to impact the North Sea areas, though, trade goods, such as fur, were likely highly desired in England. Even so, the trade routes were likely indirect with merchants traveling along the eastern and western coasts of the Baltic before reaching Finland.

1.7.1 Western Denmark

Within Western Denmark, the five regions consist of Bornholm, Funen (Fyn), Falster, Jutland (Jylland), and Zealand (Sjælland). These regions are all contained by the modern day boundaries of Denmark which have been reorganized several times. Historically, Skåne and Blekinge were part of Denmark, but I have classified these two regions as Eastern Denmark so that trends are easier to discern from the material. Zealand is another region that could possibly be placed inside the boundaries of Eastern Denmark due its proximity to Skåne. Twenty-six hoards have been used from Western Denmark totaling up to nearly 900 coins. One hoard listed in the SCBI volumes was found in the vicinity of the German city Lübeck and contained a vast number of Anglo-Saxon coins. Just over 300 coins fit into my defined categories of coin type and mint, but due to its location outside the defined regions it has not been included in this current study.

1.7.2 Eastern Denmark

In this thesis, Eastern Denmark consists of Skåne and Blekinge, both regions that were claimed by Denmark during the 11th century. This was another area which experienced disputes over ownership with Cnut claiming possession in the late 1020’s after defeating the Swedes at the battle of Holy River.81 A total of sixteen hoards have been used from the three volumes so far published on the Skåne and Blekinge coin finds. This region has yielded the

---

81 Sawyer, “Cnut’s Scandinavian Empire,” 18-19.
second fewest coins in my material, although this is mostly due to the lack of published material from which I could find the needed coins.

1.7.3 Norway

Hoards have been found in the following Norwegian regions: Buskerud, Rogaland, Møre og Romsdal, Østfold, Sogn og Fjordane, Nord-Trøndelag, and the city of Trondheim. Østfold and Buskerud are two areas that have historically been contested by the Danes and Norwegians. During the reign of Cnut, Østfold was part of the Viken region which was controlled by the Danes, though Olaf Haraldsson disputed this ownership as the king of Norway. Buskerud borders the disputed Viken region and would have potentially fallen under Danish rule as well. Eighteen hoards have been cataloged for this thesis and total up a staggering 1141 coins, significantly more than any other region. The majority of hoards have been discovered in the Rogaland region of Norway with Møre og Romsdal, Østfold, and Trondheim placing second depending on the coin type. The clustering of large hoards in the Rogaland region gives a slightly lopsided view to the numbers of coins found in Norway. While there are significant numbers, they are concentrated in one area and are not representative of the country as a whole.

1.7.4 Gotland

This small island in the middle of the Baltic Sea has seen more coins found here than any other region in Scandinavia. Not just Anglo-Saxon, but also German and Islamic. Due to the incredible number of coins found on this tiny island it has been cataloged as a separate region. Of the four CNS volumes published, three were used in the preparation of this thesis with coins from a total of twenty hoards being cataloged. Despite not being able access the entirety of the Anglo-Saxon Gotlandic material published to date, my catalog still contains upwards of 900 coins. One of the hoards has been tentatively identified as a votive deposit, but continued archeological work has not yet confirmed this identification. The coins from this deposit have been included in the study.
1.7.5 Finland

Though it is not considered a hotspot of coin hoards, Finland has been included as a surprising number of English coins have been discovered within the boundaries of this country. A note of warning regarding the Finnish finds: many coins found in the 1800’s and earlier were given to Sweden as part of the Swedish Treasuries Act.82 Despite this, coins from nineteen hoards have been added to my catalog. Some coins have been identified as potentially coming from a hoard on Gotland, but these are separate from the Gotlandic material and I have cataloged them as such. With the Finnish material being relatively sparse it has not been broken down in the component regions but retained as a whole unit.

1.7.6 England

No English hoards are included in my material, but the area bears mentioning due to the mints. As broken down above, four mints come from the Danelaw area established in the mid-9th century and four come from the English area. Contacts between Scandinavia and England varied depending on the region. Traders from Norway and Western Denmark most likely spent more time in the Danelaw than England proper whereas traders from eastern Scandinavia were probably found more often in England. Due to location, it is possible that Norway had closer connections to York than other cities within the Danelaw. The voyage across the North Sea to York was much quicker and simpler from the west coast of Norway than anywhere else in Scandinavia. Plausible reasons for these connections will be explored in section 4.3 Relations between Regions.

---

2 Physicality

2.1 Introduction

Anglo-Saxon coins were minted across England and have been discovered as far away as Finland, Russia, and Rome. They were well traveled and well used. While some coins possibly travelled directly from their mint of origin to their final resting place, others may have passed through four or many more hands before being buried in the Scandinavian countryside. Coin finds help support the written evidence or supply context for other items that might be found in the vicinity. The four coin types discussed in this thesis have distinctive discovery patterns which will be examined on the basis of chronology, when they were stuck, location at which they were minted, and burial site before we review how the patterns of coin finds differ in each region. I will start with the Crux type, minted c. 991–997, with the others following in chronological order: Long Cross, Quatrefoil, and Pointed Helmet. The regions will be laid out with Western Denmark first followed by Eastern Denmark, Norway, Gotland, and Finland.

2.2 Coin Types

2.2.1 Crux (c. 991-997)

Based on my data collected for the specific mints, a total of 681 coins of the Crux type have been found in Scandinavia. While Crux is not the first issue of Æthelred’s reign, it is considerably larger than the previous issues: First Hand and Second Hand. Metcalf estimates that around 40 million Crux type coins were minted compared to a combined estimate of about 32 million for the two Hand types.83 An estimated 4,072 dies were used for the Crux type, over 800 more dies than estimated for the combined Hand issues.84 It was during the Crux issue that the first recorded sums of silver were paid by Æthelred to Scandinavian armies invading England. Crux coins have been found across Scandinavia, but in the material I have cataloged Gotland harbors the majority of discovered coins. The number found in Eastern Denmark comes in at three quarters of the total from Gotland while Norway is around

half of the Gotlandic amount. Western Denmark is fourth on the list with 90 examples having been discovered and Finland has a little less than half that number.

![Figure 2.1: Total numbers of Crux coins in each region.](image)

The mint in London is responsible for the highest numbers of coins found across Scandinavia. If the data from London is excluded, then coins minted at the English mint of Winchester become the most numerous for the Crux type. Canterbury and Exeter produced a similar number of Crux examples. No Crux type coins minted in Hastings were found in the catalogs to which I had access. The prominence of the English mints is no surprise as Æthelred was an English king from the House of Wessex and would have focused on areas under which he
exercised the most control, namely Wessex and Mercia. In fact, Metcalf notes that the highest outputs during Æthelred’s reign were concentrated in the south and south-eastern parts of England. In comparison, the Danelaw mints of Lincoln and York have an output that nearly equals Canterbury and Exeter. With the exception of Hastings, coins minted at Norwich and Stamford make up the smallest percentage of the Crux coins within my material.

The placement of the mints within my data deviates from the ranking Metcalf provides in Appendix III to “Continuity and Change in English Monetary History c.973-1086, Part I.” By output, he lists the top five mints for the Crux type as London, York, Southwark, Winchester, and Lincoln. Exeter and Canterbury are sixth and seventh on this list. Similarly, Norwich and Stamford place much lower down the ranking system, but still within the top twenty-five mints. In both cases the English mints rank high, but my data has Winchester, Canterbury, and Exeter taking the second, third, and fourth spots, with the latter two switching positions with Metcalf’s list. Fifth and sixth are taken by Lincoln and York, another reversal from the list. In this case, my data, rather than Metcalf’s, supports the conclusion that the export of coins from the southern mints was greater during Æthelred’s reign, at least in regards to the Crux type.

Even so, there are still large numbers of coins from Lincoln and York in the material surveyed. Metcalf studied the movement of the coins around England and noticed through the loss of single coins that there was a tendency for them to drift towards the west and south-west during the reigns of Æthelred and Cnut. Keeping this in mind, the coins from the Danelaw mints could have ended up in the southern part of the country as part of this drift and were then subsequently exported to Scandinavia. Additional graphs provided by Metcalf indicate that the majority of coins tended to travel between twenty-five and hundred kilometers from their mint of origin. Winchester is about a hundred eighty-five kilometers from both Exeter and Canterbury. Due to this proximity coins from these three mints could be expected to be mixed and exported together, rather than mixing with Danelaw minted coins. The closest Danelaw mint to Winchester is Stamford at just over two hundred kilometers. Lincoln, York, and Norwich are all further away and as they are located closer to the coast, it

85 Williams, *Ill-Counselled King*, 1.
87 Ibid., 49.
88 Ibid., 49.
89 Ibid., 28 and diagrams on 31.
90 Ibid., 29.
is possible that coins from these mints left England without mixing with the more southerly mints, such as Winchester, first.

The largest numbers of Crux type coins from all mints have been found on Gotland, with one mint being the exception. Slightly more coins from Winchester appear in Eastern Denmark than on Gotland. Across all of the Scandinavian regions, the English mints have a more pronounced presence than those from the Danelaw. It is only within the Crux type, the smallest total number of coins cataloged for this thesis, that the English mints exhibit this preeminence. The higher numbers of coins from the English mints could be an indicator of higher production numbers to satisfy the demands by the populace for cash with which they conducted their daily business; or the need for the Crown to address a deficit in the treasury by producing more coin in the wealthier regions of the country in order to take in the extra tax when old coin is exchanged for new coin.

Alternatively, this could point toward the mints needing to provide the cash for the danegelds assessed by Æthelred. If the Scandinavians were raiding the southern portions of England, then the burden of producing the needed danegeld amounts could fall to the mints closest to the areas being preyed upon. Moving freshly minted coins from mints in the Danelaw would take much longer than producing them at a regional mint. With Winchester as the seat of the royal treasury, and a central location for the entirety of southern England, it is understandable that coins from this mint are in the majority of coins found. As seen in the sections below, the other types begin to exhibit signs that the Danelaw mints were gaining in prominence over the English mints.

91 Allen, Mints and Money, 115.
2.2.2 Long Cross (c. 997-1003)

Long Cross type coins follow the Crux type chronologically, being minted during the late 990’s and early 1000’s. There are a total of 855 Long Cross coin types in the data collected for this thesis from the SCBI and CNS volumes. Out of this total, material from London accounts for 47.4% while the Danelaw stands at 30.2% and English mint material is 22.5%. The start of the Long Cross validity period marks the beginning of a pattern of dominance for the Danelaw mints in the cataloged material. Coins from the English mints decreased 30.4% between the Crux and Long Cross issues while the presence of the Danelaw mints increased by 77.9%. The increased significance of the Danelaw area is reflected in the output numbers estimated by Metcalf as Winchester, Exeter, and Canterbury all have a decreased percentage share of the mint output.92 Lincoln, Norwich, and Stamford each have an increased percentage share of the total mint output while Metcalf has York’s percentage decreasing.93

Gotland stands out once more as the premier location for the discovery of Æthelred coins. Nearly 30% of the total number of Long Cross coins in my data has been found on Gotland with around 20% coming from Norway and Eastern Denmark. Across all of the Scandinavian regions more Long Cross coins have been found than Crux, but two regions stand out due to the large increases they experienced: Norway and Finland. Coins from the English mints

---

93 Ibid., 76-78.
dropped slightly, but this drop was more than made up by the larger numbers of coins from Danelaw mints and London that made their way to Norway. In Finland all of the minting areas saw the numbers of coins swell.

![Figure 2.4: Long cross coins found in Scandinavia by mint area.](image)

Long Cross coins from the Danelaw mints have been found in higher numbers across Scandinavia. Lincoln had the highest share of the Long Cross issue in my material at 14.5% while York placed second. Norwich and Stamford actually had a lower share of the percentage than all of the English mints with the exception of Hastings. Metcalf has York’s contribution to the total percentage of the mint output decreasing from the Crux to Long Cross issues.94 Yet, within my material York minted coins increased by 52% between the two consecutive issues. Metcalf estimated that the total output for Long Cross was half that of Crux, though, he did provide an alternate estimate for which total Long Cross output matched that of the Crux issue.95 Assuming that the Long Cross issue was half that of the Crux, then York’s decrease as provided by Metcalf would make sense given the lower total number of coins. Although, the higher total in my own data suggests otherwise.

Canterbury, Exeter, and Winchester all carried a roughly similar share of the total at around 7.40% of the Long Cross coins in my material. Despite the equal numbers of coins being found, Metcalf still has Winchester contributing a higher percentage of the total output than

94 Metcalf, “Continuity and Change, Part II,” 78.
95 Ibid., 56, figure 7.
either Canterbury or Exeter.96 It also remains in fourth place on Metcalf’s ranking of mints for the Long Cross issue.97 Though both my data and Metcalf’s estimates have Winchester contributing less to the total numbers of coins, the other mints do not change the same way. Canterbury and Exeter remain at roughly the same levels as Crux, seeing only slight drops as compared to the numbers of coins from Winchester, which dropped by over half. Hastings, much like York, is an outlier within the English mints as it increased its contribution as a percentage of the total output.98

Lincoln minted coins appeared most often in Eastern Denmark and Gotland with slightly higher numbers coming from the latter. Norway had the highest number of coins from York and placed third when counting Lincoln minted coins. Coins from Norwich and Stamford were found in higher numbers in Gotland and Norway, respectively. A single coin from Hastings was cataloged from a hoard found on the island of Bornholm in Western Denmark. The majority of Long Cross coins from the English mints have been found in Eastern Denmark and on Gotland. It would be more likely for a Hastings coin to turn up within this larger sample than the smaller one from Western Denmark. Although, with Bornholm’s proximity to Gotland and Eastern Denmark, perhaps the coin was left by a passing trader or circulated in one of those two areas before being buried on Bornholm. Coins minted in Canterbury appeared most often in Eastern Denmark than all other regions, while more examples of Exeter and Winchester minted coins were found on Gotland, as reflected in figure 2.5. York minted coins were found in greater numbers in Finland than any of the other mints with the exception of London. Canterbury and Lincoln tied for second most Long Cross coins found in Finland.

London has been removed from the graph above for the sake of clarity due to the vastly higher number of coins from this mint found in each region. As mentioned above, coins from London consist of nearly 50% of the Long Cross material that I have cataloged. Typically, the combined output from the Danelaw and English mints outnumbers London, but in Eastern Denmark and Finland a slightly higher number of coins from London has been found.

The hoards in which only coins minted during the reign of Æthelred are found tend to have a terminus post quem\(^{99}\) in the early to mid-1000s. During this period there were few danegelds paid out and England was constantly under threat from Scandinavian raiders. These raiders are assumed to have used the Isle of Wight as a base for their attacks across southern England\(^{100}\) and around 1002 were paid a geld of approximately £24,000. Despite this, they are said to have continued raiding until around 1005 when they returned to Scandinavia. According to the *Anglo-Saxon Chronicle* another force began raiding southern England in 1006, once more using the Isle of Wight as a base of operations.\(^{101}\) They were paid a geld in 1007, after which it is assumed that they returned to Scandinavia.\(^{102}\) These two gelds could be one of the likely avenues for the entry of Long Cross coins into Scandinavia. Using the Isle of Wight as a base would have allowed Scandinavian raiders to store their loot until they had

---

\(^{99}\) *Terminus post quem* is the earliest point at which a hoard was likely buried. Further usage of this phrase will be abbreviated to *t.p.q.*


\(^{101}\) Williams, *Ill-Counseled King*, 76.

\(^{102}\) *Ibid.*, 77.
finished their campaign season. Once this was done, or they had accumulated enough booty, they would have returned to their homes in Scandinavia. English minted coins would likely be in the majority in this case due to the islands location due south of Winchester.

2.2.3 Quatrefoil (c. 1017-1023)

This is the first of the coin types minted during the reign of Cnut the Great. Coins of this type started rolling out of the mints c. 1017. I have cataloged 1202 examples of Quatrefoil coins found across Scandinavia. Coins from the Danelaw mints make up the majority at 43.9% with London contributing 40.4% to the total while the English mints supplied 15.6%. Compared to the previous two types, Crux and Long Cross, this represents a substantial increase in the export of coins from the Danelaw mints. The number of coins found across Scandinavia for Quatrefoil from the Danelaw mints increased by 31% over the two previous types discussed.

Unlike the Crux and Long Cross types, which saw Gotland as the primary location for finding coins, Norway has become the leading site for the discovery of coins. Norway captured around 30% of the total number of Quatrefoil coins in Scandinavia. Eastern Denmark was close behind with 25.6%. In fact, Western and Eastern Denmark were within a percentage point of each other. Gotland fell from first place by taking only 16.4% of the total, which is significantly less than for the other two types. Finland’s share of the total number of Quatrefoil coins cataloged for this thesis stands at 3.6%. This is the smallest percentage across the four coin types.

---

103 This is speculation on my part based on the suggestion that the raiders were using the Isle of Wight as a base of operations. It seems logical that they would store their ill-gotten goods while extorting more from the English.
Figure 2.6: Quatrefoil coins found in Scandinavia as a portion of the total in each region.

The 43.9% share of Danelaw minted Quatrefoil coins in my material came mostly from the large mints in Lincoln and York. More Quatrefoil coins from these two mints were found in Norway than the other regions in my material. Western and Eastern Denmark had similar numbers of Lincoln minted coins discovered while the second highest number of coins from York was found in Eastern Denmark. Coins minted in Norwich appear in high numbers in Western Denmark and Norway, but there is a 15.4% difference between the numbers of coins found on Gotland and in Eastern Denmark for the mint. Stamford is different than the other three as the highest numbers of coins from this mint were found in Western and Eastern Denmark.

As for the English mints, Winchester had the greatest share with nearly 9%. Norway and Eastern Denmark were the more popular places for the English minted Quatrefoil coins to be unearthed. The next most populous mint was Exeter with 3.7% of the total number of Quatrefoil coins. Gotland had the highest share of coins minted at Exeter with 31.8%, while Western Denmark and Norway both tied at 25%. Canterbury has significantly less coins in Scandinavia for the Quatrefoil issue than either Crux or Long Cross. Across Western and Eastern Denmark and Norway the numbers for Canterbury are almost even. Out of the total number of Canterbury coins found, Gotland and Finland had the lowest shares with 3.6% and 10.7% respectively. Coins minted at Hastings were found all across Scandinavia with most of the examples coming from Norway and Gotland. Significant numbers of Quatrefoil coins minted in London were found in both Western and Eastern Denmark and Norway. Western
Denmark beat out Norway for the highest share: 27% to 26.3%. This amounts to a difference of less than one percent of the total and is the tightest margin of difference among the five regions for coins minted in London.

Figure 2.7: Total numbers of Quatrefoil coins across the Scandinavian regions by mint.

2.2.4 Pointed Helmet (c. 1023-1029)

The second major coin type issued by Cnut the Great, Pointed Helmet, has the highest numbers of coins in my material. A total of 1283 Pointed Helmet coins were cataloged from the SCBI and CNS volumes. Coins minted in London consist of 51.3% of that total, more than the other three coin types. Danelaw mints contributed 35% of the total Pointed Helmet coins while English mints provided 13.7%. The Danelaw contribution is about 9% less for Pointed Helmet than Quatrefoil while the English mints contributed the least of the four types. Based on the numbers I have cataloged, exports from London increased by 35.4% when comparing Pointed Helmet coins to Quatrefoil. Due to an increase in export, and the high numbers of coins found across Scandinavia, it would make sense to estimate that more coins of the
Pointed Helmet type were minted than Quatrefoil. This is contrasted by Metcalf’s bar graph which estimates that Quatrefoil coins outnumbered Pointed Helmet coins by nearly double.\textsuperscript{104}

Taking Metcalf’s numbers into consideration the number of coins exported to Scandinavia would have experienced a relative decrease from Quatrefoil to Pointed Helmet because the estimated total of the issue is less. Across the four coin types in my data the London mint mimics the pattern seen in the overall number, in which there is an increase for between each type. The relationship between the increases in the London mint and the total numbers of coins in my data indicates to me that the mint in London was vital to the coinage and minting process. The higher number of London minted Pointed Helmet coins suggests a more centralized organization of coinage and minting in Cnut’s reign and that London had become a crucial link the process of exporting coins in the direction of Scandinavia. By keeping the coinage and minting process more centralized, Cnut could use it to his benefit, such as sending large numbers of coins to Norway to support allies.

\textsuperscript{104} Jonsson, “coinage of Cnut,” 218, table 11.8; Metcalf, “Change and Continuity, Part II,” 56, figure 7.

Figure 2.8: A comparison of the combined output of the Danelaw and English mints against London for the Pointed Helmet coin type.

Similar to the Quatrefoil type, Norway has the highest share of Pointed Helmet coins found at 36.3%. Western Denmark comes second with 30.4% of the total and Gotland is third with 18.9%. The numbers of coins found in Eastern Denmark between Quatrefoil and Pointed Helmet dropped by 56.5% while Gotland increased 23.4%; a complete reversal from Quatrefoil. In the previous issue Gotland had the smallest share of the total of any region with
the exception of Finland. Western Denmark had a slightly larger increase than Norway, with each going up 32.7% and 29.4% respectively. Finland increased its share by 16.3% from Quatrefoil to Pointed Helmet.

With the exception of Western Denmark, London had a larger share of the total in each region than the Danelaw and English mints combined. Although, on Gotland there was a difference of only 1.2% between London and the combined Danelaw and English mint areas; 50.6% to 49.4% respectively. Eastern Denmark was just as close with a difference of 1.50%; London’s share was 50.8% to a combined 49.3% from the Danelaw and English areas. Coins from the Danelaw mint areas far outnumber the English minted coins across the board. Only in Finland is there a closer margin with the Danelaw mints at 28% and the English mints at 16% of the total. Even though Norway has the highest Pointed Helmet coin count, Western Denmark has higher numbers of coins from Danelaw mints. Obviously Norway comes next for numbers of Danelaw minted coins, but it has the highest numbers from the English mints and London. Slightly more English minted Pointed Helmet coins were found in Western Denmark than Eastern Denmark, Gotland, and Finland combined. In fact, coins found in Western Denmark and Norway amounted to over half the Pointed Helmet export I cataloged from English mints.

Figure 2.9: Pointed Helmet coins found in Scandinavia from the mint areas.
Unlike Long Cross or Quatrefoil, Lincoln was not the Danelaw mint with the largest percentage of Pointed Helmet coins in Scandinavia. That honor belongs to York with 15.1% of the total Pointed Helmet coins in my material. Lincoln came second with a 12.7% share. Another change from Quatrefoil is the drastic 55.9% decrease in Norwich’s share. Stamford actually increased the number of coins found by 8.8% over Quatrefoil. While it looks like there might have been a drop in export from Lincoln and Norwich, the mints at Stamford and York appear to have an increased number of coins being exported. The highest numbers of coins from the latter two mints appear in Norway while Lincoln has a strong presence in Western Denmark and Norwich is evenly split between Western Denmark and Gotland. With the exception of Norwich; Lincoln, Stamford, and York all have high numbers of coins found in Western Denmark and Norway.

Figure 2.10: Total numbers of Pointed Helmet coins by mint in the Scandinavian regions.

Of the English mints Winchester is still the highest, although, it has a decreased presence from Quatrefoil to Pointed Helmet. The numbers of coins from Exeter did not change; a possible indication of continued steady output from this mint. Canterbury increased by 28.6% over Quatrefoil and Hastings increased by 25%. As usual, Hastings has the fewest numbers of coins found and lowest share of the total among the English mints, although, the share of Pointed Helmet coins is higher than the other coin types at 0.8%. Canterbury ended up with a slightly higher share than Norwich, but the Danelaw mints still outnumbered the English ones. The highest numbers of coins from Winchester where cataloged in Western Denmark.
while Norway came in second. Hastings, Canterbury, and Winchester all had their highest numbers of coins found in Western Denmark and Norway. Exeter was a little different as its highest numbers were found in Norway and on Gotland. London had the most coins found in Norway and Western Denmark, continuing the trend set by most of the other mints. Gotland came third with Eastern Denmark and Finland not far apart for numbers of London minted coins. The data from London has been excluded from the below graph in order to provide a clearer comparison of the individual Danelaw and English mints. Data for London can be seen in figures 2.8 and 2.9.

The following section will address the regions and the general patterns of the Æthelred II and Cnut coin types relative to their mint of origin. Across the five regions the Æthelred issues typically appear in fewer numbers than the Cnut coin types, with the exception of two regions. Coins from the English mints also appear in fewer numbers across the five regions as compared to coins from the Danelaw.

2.3 Regions

The regions as broken down: Western Denmark, Eastern Denmark, Norway, Gotland, and Finland, will capture the archaeological evidence of the coins, via type and mint, as they are distributed in the hoards across the five Scandinavian regions. In the following I will discuss the changes in the numbers of coins from each type that were found in the specific regions and how this change applies to the individual mints within that region. Each region starts with a general overview of the fluctuations in number of coins by mint area, i.e. Danelaw and English, followed by a discussion of the shifts as they pertain to the mints. How these differences apply to the coin types is included throughout each section as well.

2.3.1 Western Denmark

Within my data 897 coins have been found in the five areas of Western Denmark. Coins from the English mints consist of 18.4% of this material while coins from the Danelaw mints make up 38.4%. London minted coins are 43.3% of the total. There is an overall difference of 4.9% between the Danelaw mints and London in the Western Denmark material. Over the course of the four coin types the overall number of coins in this region saw a fourfold increase, rising by 36.7% between Crux and Long Cross and more than doubling between Long Cross and
Quatrefoil. From Quatrefoil to Pointed Helmet, the number of coins in Western Denmark rose by 32.7%; nearly the same as the increase between the two Æthelred types. This increase comes during the two Cnut coin types as the presence of the Danelaw mints grew considerably. This is likely due to stronger trade connections between Western Denmark and mints such as York. For every single coin minted during the reign of Æthelred that has been found in Western Denmark, there have been at least three coins from Cnut’s reign discovered and cataloged in my material.

The presence of coins from the Danelaw mints in Western Denmark saw a sixfold increase between the Crux and Pointed Helmet coin types with the largest expansion coming between Long Cross and Quatrefoil, 165.2%. This increase is seen most easily in figure 2.11. The connections between the Danelaw and Western Denmark are more pronounced with higher numbers of York and Lincoln minted coins appearing in the hoard material. As Norwich and Stamford do not see the same increases that York and Lincoln experience, the overall rise of Danelaw minted coins is likely due to stronger trade links. Over the same course of time the English mint contribution does not rise, or decrease drastically. Between Crux and Long Cross there is a drop in the numbers of coins found, but then numbers nearly double between Long Cross and Quatrefoil. Percentage wise, the larger increase came from the English mints even though the Danelaw mints contributed a higher number of coins. A similar doubling in coins between Crux and Long Cross and Long Cross and Quatrefoil can be seen in the London coin material.

Figure 2.11: Change in numbers of coins in Western Denmark across the four coin types.
Grouping the four coin types under the rulers for whom they were minted shows some interesting trends in the numbers of coins found in Scandinavia. Vastly more coins of the Quatrefoil and Pointed Helmet types have been found in Western Denmark than the other two combined. These two types make up 76.3% of the material while Crux and Long Cross consist of 23.8%. Among the latter coin material, the three minting areas are represented nearly evenly with less than ten coins separating the English mints from London. Meanwhile, the Cnut coin types have the Danelaw mints contributing more than double the numbers of coins than the English mints while London is more than triple the English mints.

Winchester minted coins are the most common coins from an English mint found in Western Denmark. The highest percentage contributed by Winchester was during the Crux type at 24.4% of the total. After this type, the mint’s share of the percentage was less than 10% and the pattern for this mint in my data does not match all the estimates by Metcalf. Our estimates both match from Crux to Long Cross, but in my data the percentage share for Winchester drops from Long Cross to Quatrefoil and rises for the two Cnut issues. Exeter also does not follow Metcalf’s estimates as its percentage share decreases from Crux to Pointed Helmet despite the physical numbers of coins staying relatively the same. This is due to the increase in numbers of coins across the four types.

Canterbury and Hastings follow the pattern established by Metcalf’s estimates with Canterbury dropping from Crux to Quatrefoil and then rising slightly to Pointed Helmet. Hastings starts with a 0% share of Crux going up for Long Cross and then dropping and rising again for Quatrefoil and Pointed Helmet. Its highest shares of the percentage total came during Long Cross and Pointed Helmet with 0.8%, even though the Pointed Helmet issue saw the highest numbers of coins from Hastings in Western Denmark, based on my data. During Long Cross Winchester’s share was still the highest, but only by a slim margin beating Exeter 9.8% to 8.1%. Exeter’s percentage is the second highest for Western Denmark across the four types, although, during the Pointed Helmet coin type it tied with Canterbury for second place. These three combined decreased their presence by an average of 31.8% between the two Æthelred types.
Figure 2.12: Coin totals from the English mints in Western Denmark across the four coin types.

Until the Pointed Helmet type, Lincoln led the Danelaw mints with the highest numbers of coins found in Western Denmark. The increase between the Æthelred types was incremental, as was the increase between the two Cnut types as can be seen in figure 2.13. Lincoln, Stamford, and York all saw increased numbers of coins being found in Western Denmark from Crux through to Pointed Helmet even if in some cases the increases were slight. Each of the mints saw one period where their share of the total rose dramatically compared to the other mints. For Lincoln and Stamford this occurred between Long Cross and Quatrefoil, with a small increase between the Cnut types. York’s largest increase was between Quatrefoil and Pointed Helmet, going up by 100%. Norwich was an outlier with its share decreasing between consecutive types of the same ruler. This mint followed Lincoln and Stamford with a significant increase, 300%, between Long Cross and Quatrefoil.
Figure 2.13: Coin totals from the Danelaw mints in Western Denmark across the four coin types.

With the exception of Norwich, the Danelaw mints saw their share of the total in Western Denmark rise across the four types in my material. This increase in Stamford and York mirrored a similar rise in Scandinavia as a whole, but Norwich and Lincoln both saw their share of the total percentage drop between Quatrefoil and Pointed Helmet. A likely reason for the general increase of numbers of coins from the Danelaw in Western Denmark would be the closer relations between this region and England after Cnut became king. Unlike his father, Cnut spent considerable time in both England and Denmark. After the death of his older brother, Cnut returned to lay claim to the kingdom.\textsuperscript{105} He then defended his Danish possessions from an allied Swedish/Norwegian challenge in the 1020’s, especially at the end when Cnut defeated Olaf Haraldsson at the Battle of Stiklestad in 1030.\textsuperscript{106} After which he was accepted as the king of Norway.\textsuperscript{107}

The numbers of coins from the London mint doubled between Crux/Long Cross and Long Cross/Quatrefoil, but the increase from Long Cross to Quatrefoil was larger than the increase between the two types of an individual ruler. On an individual mint basis, London outnumbered the other eight. The greatest numbers of coins of the Crux type found in Western Denmark came from English mints with London and the Danelaw mints supplying 28.9% and 26.7% of the total for this type. The dominance of the English mints during the

---

\textsuperscript{105} Lund, “Cnut’s Danish Kingdom,” 29.
\textsuperscript{106} Ibid., 37.
Crux validity period is most likely related to the raids by Scandinavians in the south-eastern and southern parts of England. Svein Forkbeard is one of the probable leaders of these forces\textsuperscript{108} and much of the loot collected by the raiders would presumably have returned to Denmark with them. If he was present in the southern areas of England, it is feasible that any coinage they collected would have been dominated by coins issued from the English mints in that part of the country.

### 2.3.2 Eastern Denmark

Other than Finland, the fewest number of coins recorded in my material is from the two areas that comprise the historical region of Eastern Denmark: Skåne and Blekinge. The CNS volumes for these two areas are incomplete, so the number of coins which have been found is significantly higher than what has been cataloged for this thesis.\textsuperscript{109} As a result this region could potentially contain more Anglo-Saxon coins than Western Denmark or Norway. For now, I will focus on the data to which I have access. 816 coins have been cataloged from this region, of which English minted coins make up 23.2%, Danelaw coins consist of 34%, and coins minted in London comprise 42.9% of the total. Of the five regions, this is the second highest percentage of the total for the English mints and the lowest percentage of the total for London. More coins from English mints have been found in Eastern Denmark than Western Denmark, although, the difference is only about 14.6%.

Across the four coin types, the English mints contributed the highest percentage for Crux and the lowest for Pointed Helmet. During the Long Cross and Quatrefoil validity periods, the percentage of the English mints in Eastern Denmark was relatively even with 5% and 5.5%, respectively. The numbers for the English mints in this region remain comparatively low throughout the four coin types, with Winchester contributing the highest percentage in all but Long Cross. Canterbury was the English mint with the highest percentage for that coin type.

\textsuperscript{108} Sawyer, “Cnut’s Scandinavian Empire,” 16.

All of the English mints follow the pattern established by Metcalf’s estimates of total percentage. They start high in Crux and then drop during Long Cross. Winchester sees a hike in the percentage between Long Cross and Quatrefoil while Canterbury and Exeter share a drop. Between Quatrefoil and Pointed Helmet, though, Winchester sees a drop in its share while Canterbury and Exeter both rise. Hastings, as an outlier, only appears during the Quatrefoil validity period with an absolutely tiny 0.3% of the total; amounting to one physical coin recorded in my material.

Danelaw mints contributed the highest percentage during the Quatrefoil type at 17.2% and the next highest share came during the Long Cross validity period. Part of the reason for this large increase is a single hoard found in Skåne: the Grönby hoard. Unlike the English mints, the Danelaw mints do not follow the same pattern established by the Metcalf estimates. Lincoln’s share increases between consecutive types of the same ruler, but between to the two rulers in Metcalf’s estimates its share drops. My own data indicates that Lincoln’s share grew. Norwich and Stamford only match the Metcalf estimates between Quatrefoil and Pointed Helmet: Norwich dropping and Stamford rising. York increases its share by nearly fivefold between Crux and Quatrefoil, but then sees a drop of 75.9% between the Cnut coin types. In Eastern Denmark, the Pointed Helmet issue distorts these numbers compared to other areas as the total number of coins in my material for this coin type is very low. London contributes the greatest numbers of coins for Long Cross and Pointed Helmet at around 50% of the total. But
this contribution is surpassed in the Crux type by the English mints and the Quatrefoil type by the Danelaw mints.

Coins minted at Canterbury have been found in equal numbers across Eastern Denmark for both Crux and Long Cross types. Twenty-one examples of both types were found, but only nine Quatrefoil coins and six Pointed Helmet coins from Canterbury have been discovered. Between Long Cross and Quatrefoil this is a decrease of 57.1%. Exeter’s presence began dropping after Crux as the number of coins found decreased by 64.7% for the next two types and dropped further for Pointed Helmet. Hastings appeared once with a single Quatrefoil coin. Winchester had the strongest presence during the Crux and Quatrefoil types with forty-nine and twenty-nine coins, respectively. The major decreases for Winchester occurred between the two coin types of the same ruler. A 71.4% decrease for the Æthelred coin types and a decrease of 75.9% for the Cnut types. With the exception of Quatrefoil coins from Winchester, the English mint presence generally dropped over the four coin types.

Figure 2.15: Change in numbers of coins from the English mints across the coin types.

Starting with Crux, the Danelaw mints steadily increased their presence in Eastern Denmark with the largest increases between Long Cross and Quatrefoil. Lincoln was the most prolific Danelaw mint for the Æthelred types, but was surpassed by York for Quatrefoil. Though, the difference between the two mints for Quatrefoil amounts to four physical coins and a percentage difference of three points. Norwich and Stamford are nearly equal for the two Æthelred coin types but more coins from Stamford have been found than Norwich for Quatrefoil and Pointed Helmet. More coins from all nine mints were found for Quatrefoil than
Pointed Helmet, but the biggest difference between the two types is with the Danelaw mints. The numbers of coins from Norwich and York decreased by 83.3% and 75.9%, respectively. Lincoln and Stamford shares both decreased by 55.6% and 37.5% as well. This sudden decrease in the numbers of the two types could be explained by the conflicts between Sweden and Denmark during the 1020’s as the Swedish king, Anund Jacob, supported Olaf Haraldsson in the defense of Norway against Danish aggression.110 Cnut and Olaf Haraldsson spent almost the entirety of the 1020’s in indirect conflict against one another in Norway.

Figure 2.16: Change in the coin totals from the Danelaw mints across the coin types.

The numbers of coins found in Eastern Denmark that were minted in London follow a similar pattern to the one expressed by the Danelaw mints. During Crux, Long Cross, and Quatrefoil the numbers of coins increased but then took a nose dive in the Pointed Helmet issue; with a drop of 44.7%. This runs counter to the other regions which all experienced an increase between Quatrefoil and Pointed Helmet in my material. Based on the individual mint numbers, London, as usual, out produced the other eight mints. Yet the combined numbers from the minting areas indicate that London was not as prolific during two of the issues. The English mints out produced London during the Crux issue with 47% of the total compared to 34.6%. During the Quatrefoil issue the difference is less pronounced as the Danelaw mints contributed 45.5% of the total while London’s share consisted of 39.9%.

---

110 Sawyer, “Cnut’s Scandinavian empire,” 18.
Eastern Denmark is by far the one with the weakest material in terms of the representation and selection of the material. The catalogs to which I had access contained only a small collection of the hoards found in this region. Of the ten hoards surveyed from the Skåne CNS catalogs, only one, the Grönby hoard, contained more than fifty Anglo-Saxon coins that fit my strict parameters. Two of the six hoards from the single Blekinge catalog, Gärestad and Johannishus, consisted of over 50% of the material I surveyed.

2.3.3 Norway

Norway topped all five regions with the highest numbers of coins found at 1141, but this is due to the representation of the finds. Of the various catalogs utilized for this study, the recent Norwegian SCBI volumes are the most extensive and best documented in terms of find data.\textsuperscript{111} They incorporate the most current find data in Norway whereas the other SCBI volumes are limited by the publication date and exclude the finds from 1980 to the present.\textsuperscript{112}

Coins were found in seven counties of Norway: Buskerud, Rogaland, Møre og Romsdal, Østfold, Sogn og Fjordane, Nord-Trøndelag, and the city of Trondheim, with a majority of coins from all four coin types being found in Rogaland. Between the three mint areas London had the highest percentage of the total with 46% while the Danelaw consisted of 36.5% and the English mints contributed the least of any region at 17.5%. Though the highest numbers of coins from London were found in Norway, percentage-wise this was only the third most populous region for the mint. It was also the second highest percentage for the Danelaw mints. Coins minted during the reign of Cnut amount to 72.4% of the total coinage found in Norway with the Æthelred coins consisting of 27.6%. London once more stands above the two minting areas with the Danelaw mints contributing more than the English mints. Coins minted in the Danelaw during the reign of Cnut appear over two and a half times more often than those from English mints. London minted coins are more than three times as likely to be found in Norway than a coin from an English mint. The difference between the numbers of Æthelred coins and Cnut coins found in Norway is quite impressive as can be seen in figure 2.17.


\textsuperscript{112} See section 1.3.1 for issues relating to the coin catalogs consulted.
Figure 2.17: Comparison of coin totals in Norway between mint areas for Æthelred and Cnut.

Exeter and Canterbury have roughly similar numbers of coins found across Crux, Long Cross, and Pointed Helmet with a slight drop during Quatrefoil. Canterbury starts off as the second most numerous after Winchester in the Crux type, beating Exeter by less than one percent of the total. Beginning with Long Cross Canterbury plays second fiddle to Exeter. Long Cross is the only coin type found in Norway in which Winchester is surpassed by Canterbury and Exeter. Winchester’s share of the total for Long Cross coins in Norway is only 3.1%, compared to the 8.9% of Exeter and 7.3% of Canterbury. Quatrefoil and Pointed Helmet coins minted at Winchester outnumber the other three mints, but are nearly even. Hastings first appears with the Quatrefoil issue and increases its presence with Pointed Helmet. With the coin types combined under their respective rulers, Canterbury and Exeter show slight decreases from Æthelred to Cnut in Norway. Winchester increases dramatically between the two rulers, by 118.5%, and coins from Hastings appear only during Cnut’s reign. Generally speaking, export from the English mints did not increase or decrease dramatically between Æthelred’s reign and Cnut’s while coins exported from the Danelaw mints increased.
During the Crux and Long Cross issues the Lincoln and York mints, as well as Norwich and Stamford, had relatively similar export levels. Lincoln edged out York slightly with a share of 8.1% over 7.3% for Crux and 14.1% of Long Cross to 12%. Norwich and Stamford had the exact same number of Crux coins found in Norway, while there were slightly more Long Cross coins from Stamford found. It must be noted that this region placed second for the numbers of Long Cross coins found. During the latter half of the 990’s Olaf Tryggvason was battling with Svein Forkbeard for control of parts of Norway, especially over the Viken area in southern Norway.\textsuperscript{113} This is a far cry from the cooperation they showed in extorting silver from Æthelred previously. In 994 Olaf was baptized by Æthelred as part of a payment and peace agreement.\textsuperscript{114} Olaf then returned to Norway and his conflict with Svein intensified.

The higher numbers of Long Cross coins in Norway could represent an attempt by Æthelred to support Olaf in his conflict with Svein. This would allow the English a respite from the near constant raids they had faced since the early 980’s\textsuperscript{115} and give Æthelred a chance to build up his forces. Though, most of Long Cross coins have been found in Rogaland, in the western part of Norway, not in or around Trondheim which was Olaf Tryggvason’s seat of power during his reign. A possible indication that payments were sent to Rogaland in an effort to support Olaf’s allies in this part of the country. On the other hand, the high numbers of

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.18.pdf}
\caption{Change in numbers of coins in Norway across the coin types based on mint area.}
\end{figure}

\textsuperscript{114}Ibid., 187; Higham, \textit{Anglo-Saxon England}, 29.
\textsuperscript{115}Forte, Oram, and Pedersen, \textit{Viking Empires}, 186.
coins come from only a handful of hoards which have *t.p.q.*’s dating to after the end of the Long Cross validity period. In this case the coins could have arrived via trade, or the *gelds* paid out in the early 1000’s, and would likely have had nothing to do with the quarrel between Olaf and Svein.

A major difference comes with the Quatrefoil issue. With this issue Lincoln contributed the highest share of the total at 23.9%, after London. York placed second with 17.2%. Meanwhile Norwich and Stamford contributed 5.8% and 3.3%, respectively. A change occurs with Pointed Helmet as York and Stamford increased their presence in Norway while Lincoln’s dropped significantly, by 46.5%. Norwich experienced a drop of 71.4% in numbers of coins between Quatrefoil and Pointed Helmet. Despite significant drops to the numbers of those two mints, overall the Danelaw mints still outnumbered the English mints by more than 2:1.

![Figure 2.19: Total numbers of coins from each mint in Norway across the coin types.](image)

London increased its presence across all four coin types with the greatest numbers of coins minted during the Pointed Helmet coin type. The next highest number comes during the Long Cross type with Crux placing third. Due to the large numbers of coins minted in the Danelaw during the Quatrefoil type, London comes in second with a difference of 14.7% between the two. The Danelaw mints contributed 50.3% of the total numbers of Quatrefoil coins while London consisted of 35.6%. With the coin types combined under their respective rulers, London still outnumber the individual mints by 44.1% of the total for the Æthelred coin types and 46.7% of the total for the Cnut coin types in Norway. The next highest mint among the Crux and Long Cross types was Lincoln with 11.8% of the total. York and Lincoln tied with
16% of the Quatrefoil and Pointed Helmet types, after London. While the rest of the mints increased incrementally, or decreased, during the Pointed Helmet issue, London increased its presence by 101.6% over that of the Quatrefoil type.

2.3.4 Gotland

This small island off the south-eastern coast of Sweden had the second highest numbers of coins in my data with 933 examples recorded in the CNS volumes. The total number of Anglo-Saxon coins discovered on Gotland is around 35,000. It is here that the English mints contributed the highest percentage total for a single region, 24.4%, while the Danelaw mints consisted of the lowest percentage total in a single region at 29.2%. London recorded its second highest percentage of the total at 46.4%. This region is the only one, along with Finland, that has more coins found from the Æthelred coin types than the Cnut coin types.

Gotland and Finland are both connected to Sweden throughout the Viking Age. As a result of this connection, both regions would have been visited by merchants traveling the Baltic or even Swedish raiders returning from campaigns in England. The majority of the Gotlandic hoards cataloged for this thesis have a t.p.q. long after the end of the Long Cross validity period. While the Swedish warriors could have been party to various gelds paid by Æthelred, and brought them to the island, the impact of the gelds on the currency buried on the island is likely minimal. Of the hoards with a t.p.q. of 1002 or earlier, only the Digeråkra hoard contains a sum of coins that could point toward the arrival of a geld on the island while the remaining hoards contain only single digit numbers of coins. The likelihood of the coinage in the other hoards arriving via trade, or circulation of coinage in the Baltic region, is much higher due to the later t.p.q.’s for those hoards and their more thoroughly mixed nature.

Based on the above, it is no surprise to find that the English mints dominate the Æthelred issues. Conversely, the Danelaw mints dominate the Cnut issues. English mints account for 31.6% of the total for the Æthelred types found on Gotland but this decreases to 16.4% of the total numbers of Cnut coin types. Meanwhile the Danelaw mints provided 23.7% of the Crux and Long Cross types and increased their contribution of Quatrefoil and Pointed Helmet coins to 35.23%. The larger differences could be due to a change of preference between the English mints and Danelaw mints when Cnut became king of England.

[116 Pers com Gullbekk.]
Gotland is unique in that the numbers of coins found from London are higher than the other two mint areas across all four coin types. The closest margin of difference is during the Crux type with the English mints separated from London by 4.6%. Long Cross saw the English and Danelaw minting areas nearly equal in their share of the total numbers with the former contributing 26.2% and the latter 26.6%. Within my material I have recorded the highest numbers of coins on Gotland during the Long Cross validity period, while Crux and Pointed Helmet are nearly equal. The Danelaw mints contributed a higher share of the total than English mints during the two Cnut types, although, London was higher than either mint area.
A nearly even share of the total came from Danelaw mints during Pointed Helmet as from English mints during the Crux type, 36.6% to 37.3%, respectively. This is the one region where the presence of the mint areas has a clearly visible linear change in numbers. In this case the occurrence of coins from the English mints declines across all four types while coins from the Danelaw mints, in general, exhibit an opposite trend. London does not exhibit this linear tendency as the numbers of coins increased between the Æthelred types, decreased between Long Cross and Quatrefoil, and then increased again between the Cnut types.

Among the English mints, Winchester has the highest percentage share for the first three coin types. It ties with Exeter during the Pointed Helmet type with both mints contributing 4.9% of the total. Winchester also follows the linear decline exhibited by the English mints overall, though, the other three mints are less linear. Exeter increases the numbers of coins slightly between Crux and Long Cross while then decreasing over the next two coin types. Canterbury has its highest share during Crux with 10.8%. Quatrefoil saw the lowest share for this mint with 0.5% which then increases to 2.5% for Pointed Helmet. The Quatrefoil issue also saw Hastings with its highest percentage of the total at 1.5%, placing it ahead of Canterbury, but it then fell to 0.4% for the next coin type. For Exeter and Canterbury their largest decrease occurred between Long Cross and Quatrefoil. With the following coin type, Canterbury saw an increase while Exeter’s share dropped. Winchester, contrary to the others, experienced its largest decreases between two types of the same ruler. Between Crux and Long Cross the
numbers of coins from Winchester on Gotland decreased 34.9%, and decreased by 47.8% between Quatrefoil and Pointed Helmet.

Stamford is the only Danelaw mint that mimics the linear growth seen by the minting area overall. This growth saw the mint increase its presence from Crux through to Pointed Helmet by 450%, although, in terms of sheer numbers this is the smallest Danelaw mint with the following numbers of coins for each type: 2 for Crux, 7 for Long Cross, 9 for Quatrefoil, and 11 for Pointed Helmet. Stamford ties with Norwich during Pointed Helmet. Increasing its presence incrementally from Crux through to Quatrefoil, Norwich then saw a slight decrease between the two Cnut coin types. Lincoln minted coins found on Gotland were most numerous for Long Cross and Quatrefoil types. Its share rose from 6.2% during the Crux validity to 14.3% for the Long Cross coin type. Though Lincoln had the highest numbers of coins between the second Æthelred type and the first Cnut type, it still experienced a decrease of 38.89%. It rebounded for Pointed Helmet, increasing its share by 50%. York and Lincoln were separated by less than 1% for the two Cnut types. For Quatrefoil Lincoln had 11.2% to York’s 10.7%, and a share of 13.6% for Pointed Helmet compared to York’s 14%. Unlike Lincoln, York experienced a decrease of 66.7% between the two Æthelred types. After Long Cross the numbers of coins from this mint increased by 126.7%.

Mimicking Exeter and Lincoln, London increased its presence between the two Æthelred types by 17.8%. Then the numbers of coins from this mint dropped between Long Cross and Quatrefoil, just like the other two mints. From the low point of Quatrefoil, London experienced a 36.7% increase in the share of Pointed Helmet coins. Throughout the first three coin types London contributed more than 40% of the total numbers of coins, but took slightly more than 50% of the total number of Pointed Helmet coins on Gotland. York, the next highest during the same coin type, contributed 14%.
2.3.5 Finland

Finland is the region with the fewest coins, yet the highest percentage of coins from London of the total. This is accomplished through the cataloguing of 234 coins in Finland with material from London consisting of 48.3% of the total. Danelaw mints contributed 30.34% of the total numbers in Finland while only 21.4% came from the English mints. One issue with the Finnish material is that coins from hoards found in the seventeenth and eighteenth centuries were sent to Stockholm due to the regulations set by the Swedish government in regards to treasure finds. This limits the data to those coins that were retained in private collections or those found after the separation of Finland and Sweden.\textsuperscript{117}

Even so, there are some unique trends among the material that I have cataloged. As with Gotland, there are more coins from the two Æthelred coin types found in Finland than of the Cnut coin types; 60.3% to 39.7%, respectively. More coins from London have been found than the other two mint areas, but the Danelaw mints have a higher presence than the English mints for all four types. Between the Æthelred types and Cnut types there was a 43.8% decrease in the numbers of coins from the English mints. During the same period, the Danelaw mints experienced a 13.2% decrease and London saw a decrease of 40.9%. Overall the numbers of coins declined by 34% in Finland between the Æthelred and Cnut types.

\textsuperscript{117} Talvio, intro SCBI vol. 25, xi.
This general decline of the numbers of coins is across the board, but upon closer inspection different trends appear among the different coin types. English and Danelaw mints share a nearly even percent of the Crux total at 26.2% and 28.6% respectively. London minted Crux coins appear more often, at 45.24%. Of the four coin types, the highest numbers from the three minting areas came during the Long Cross type. Again, the English and Danelaw minting areas are quite close with 21.2% and 26.3% each, yet London’s share of the total percentage is double the other two minting areas at 52.5%. Quatrefoil saw these numbers plummet precipitously as the English mints experienced a 52.4% drop off, a 26.9% decline for the Danelaw mints, and a staggering 73.1% tumble for London. The percentage for London dropped to 32.6%, lower than the Danelaw which stopped at 44.2%. With Pointed Helmet London would go on to double the numbers of coins from the Quatrefoil low, while the Danelaw and English mint presence declined even more. Pointed Helmet saw the Danelaw mints capture a 28% share of the total, while English mints share was 16%. In Finland all three mint areas contributed the greatest numbers of coins during the Long Cross coin type, unlike the other regions where a particular mint area might have its greatest contribution in separate coin types.

![Chart showing the total number of coins from each mint area in Finland across the coin types.](chart.png)

Figure 2.24: Total number of coins from each mint area in Finland across the coin types.

Throughout three of the four coin types Winchester was the most prolific English mint in Finland. It is only with Long Cross that Winchester loses this title to Canterbury. The numbers of coins from the individual English mints do not pass the single digits through the four coin types in Finland. Canterbury did not have a share of the Pointed Helmet type, while
Hastings appears for the first time in Finland with a 2% share. The only type for which Canterbury had more than a handful of physical coins is Long Cross and therein occupied a 9.1% share of the total. Coins of all four types minted in Exeter were found in Finland, but the highest share came during Long Cross with 8.1%. Exeter’s percentage of the total for Crux and Quatrefoil was 4.8% and 4.7%, respectively, with a drop to 2% for Pointed Helmet.

Norwich appears across all four coin types, with the highest percentage, 9.5%, coming during the Crux type. Across the other three types Norwich contributed 1%, 2.3%, and 2% of the total numbers of coins. Stamford minted coins did not appear in Finland until the Long Cross type with a 5.1% share. During the two Cnut types this mint contributed the same share as Norwich above. Lincoln, and York, hit double digits with the numbers of coins found in Finland. Lincoln came first among the Danelaw mints during the Crux type with a 16.7% share. Its percentage of the total increased to a high of 23.3% for Quatrefoil but then dropped by 80% for the Pointed Helmet type. Lincoln was the most prolific mint for Crux and Quatrefoil while York occupied top spot for Long Cross and Pointed Helmet. York’s percentage of the total for Crux was quite low at 2.4% but rebounded to 16.3% for Quatrefoil. Though York’s share of the total for Quatrefoil is higher than Long Cross, 11.1%, the total numbers for the first Cnut issue are half that of Long Cross.

Across Finland the only mint area that was consistently in the double digits for numbers of coins is London. It was more than double Winchester’s numbers during Crux and almost five times more than York for Long Cross. Quatrefoil saw London with the lowest numbers of coins it experienced in any region and was separated from Lincoln, the second highest for the type, by only four examples. For Pointed Helmet, coins minted in London were found nearly three times more often than coins from York.
As noted above the numbers of coins from the two Æthelred issues is higher here than the Cnut issues. This leads to the obvious conclusion that links between England and Finland were much tighter before Cnut became king of England. While I have not examined die-linking between coins within this thesis, Ian Stewart wrote a short speculative piece in 1981 asking how Anglo-Saxon coins may have reached Finland. He describes the high number of die-linked coins as being a defining feature of this material. These are die-linked coins that have been found in at least eight hoards across Finland, with two of them being larger finds. Stewart notes that of the types found the die-linking was particularly heavy within the Long Cross type coins, which is coincidentally the largest group of coins for Finland within my own material. I mentioned above that Æthelred paid out a large *geld* in 1002 and again in 1007 and these could be a likely point of origin for the die-linked coins, but it is just as likely that they came as part of a parcel carried by a merchant.

Stewart provides a small table listing out the mints from which the die-linked coins originated. London minted coins are by far the highest percentage, but the majority of other mints are also from England. York, Lincoln, and Norwich are the only three Danelaw mints to appear on this table. Assuming one of the above possibilities must be true, that the parcel of

---

119 Ibid., 491.
120 Ibid.
121 Ibid., 493.
coins came from either raiders or traders; then I believe it most likely that the parcel of coins came as part of trader’s purse rather than from raiders returning from England. These coins were then introduced to the currency and eventually formed the basis of other hoards buried throughout Finland. I argue below that the *gelds* likely did not form a significant chunk of any hoard in Scandinavia and were just as likely as trade for the importation of coins into Scandinavian countries; the evidence from the Finnish hoards is unique and could end up providing solid evidence for either possibility, or both.

---

3 Discussion

3.1 Æthelred II – Cnut

Æthelred reigned over England for thirty-eight years, almost twice as long as Cnut. Even so, the eight coin types that Æthelred minted are found much less often across Scandinavia than Cnut’s three coin types. Metcalf estimates that the mints produced around about 140 million coins of Æthelred’s coin types. This is in contrast with the nearly 100 million of the three Cnut coin types. Of the four types examined in this thesis, Quatrefoil is by far the most numerous, estimated at 47 million coins, with Crux not far behind at an estimated 40 million. These two types are the largest of their respective rulers’ reigns and mark the high water mark of late Anglo-Saxon minting. After the Quatrefoil issue the estimated numbers of coins begin decreasing with the total for Pointed Helmet only around half the total for the previous type.

While my thesis does not include totals for all the coins of either king’s issues found in Scandinavia, the four types examined will provide a microcosm that mimics the whole. I have recorded a total of 4021 coins of the Crux, Long Cross, Quatrefoil, and Pointed Helmet types having been found in Scandinavia from nine mints. Of this total, 1536 are coins minted during the reign of Æthelred II while 2485 were minted during Cnut’s time as king of England. Quatrefoil and Pointed Helmet coins consist of 62% of the total number I recorded while Crux and Long Cross consist of 38%. These numbers are broken down even further below with an analysis of mints and regions based on the totals of the two kings’ reigns. I am relying on Metcalf’s “Change and Continuity” articles, explained in section 1.3.2 above, on the output of each mint as part of the total to add to my discussion on how and why the differences in numbers of coins between each type are so noticeable. Some of the current events have been mentioned above, but now the events can be placed into a context specific to an individual region or where the mint was based. Æthelred’s reign in England was much more tumultuous than Cnut’s, but the minting of coins continued without much interruption.

123 Williams, Ill-Counselled King, 60.
125 See note 124 for references.
3.1.1 Coins

Generally, the Æthelred II coins have been found in fewer numbers than the Cnut coins throughout Scandinavia. Despite large payments by Æthelred to Scandinavian raiders between 990 and 1014, other factors must have come into play to account for the noticeable difference between the collected coins of the two kings found in Scandinavia. Two possible aspects, the danegeld and heregeld are discussed below, but they do not appear to make a difference in the numbers of coins found between Æthelred and Cnut. The majority of Æthelred’s reign was taken up with preventing the Scandinavian raiders from devastating the countryside. Williams suggests that even with Æthelred’s presence at the head of his armies they were ineffective at repelling the Scandinavians.

Besides the gelds, it is likely that the Scandinavian raiders secured a fair amount of silver unaccounted for in my sources. The presumed devastation of the English countryside causes one to question if these attacks might have negatively affected England economically, but based on the numbers of coins that have been discovered in Scandinavia and elsewhere, it appears not. It is possible that certain harder hit areas, such as south-eastern England, would have experienced a decline in their economies. Overall, the English continued to amass wealth despite the raids. I would opine that it is in part due to this wealth that the Scandinavians raided so consistently between 980 and 1014.

During the reign of Æthelred II coins from the English mints were exported at a slightly higher rate than those from the Danelaw mints. From the total number of Æthelred coins in my material the English mints consisted of 30.5% while the Danelaw mints provided 26.2%. The pattern of higher numbers of coins exported from English mints seems to have reversed itself when Cnut became king as the numbers of coins from Danelaw mints increased by 142.4% in my material. During the two Cnut issues the Danelaw mints had 39.3% of total whereas the English mints occupied 14.7%. London, being the largest mint, consisted of 43.3% of the total for the Æthelred coin types and 39.3% for Cnut types. This drop in the share seems to indicate a decreased importance for London, which it is not the case as the total numbers of coins from Æthelred to Cnut increased by 61.8%. A larger number means

---

127 Allen, Mints and Money, 278, table 8.12.
128 Williams, Ill-Counseled King, 96.
129 This wealth should be considered in the context of single finds, which Metcalf discusses at length in An Atlas of Anglo-Saxon and Norman Coin Finds, c.973-1086.
that the number for an individual data point, such as London, can decrease even if the actual numbers increased or remained steady.

If the percentage changes are ignored, the actual numbers of coins found increased for London and the Danelaw mints as well as overall. Ultimately, despite a slightly decreased percentage of the total, coins from London actually consist of a majority of Cnut types. The above numbers and percentages are based entirely upon my own data. How this compares to Metcalf’s estimates will be expanded upon throughout.

Figure 3.1: Total numbers of coins from the minting areas for both rulers.

The majority of Crux coins have been discovered on Gotland with Eastern Denmark placing second. English mints exhibit a prominence with this issue that does not continue throughout subsequent types I have examined. In my opinion, the raids that occurred during the 980’s and 990’s along the southern coast of England were a cause for this distinction. In the mid-1000’s the raiders spent more time in eastern England and near London.¹³⁰ As a result, the payments of the gelds would have resulted in a mixture of coins with a larger London component and increased presence of coins from Danelaw mints. This is partly seen within my own data as the numbers of Long Cross type coins from Winchester drop compared to Crux, whereas the presence of Long Cross type coins from London and the Danelaw mints increase.

Nearly 50% more Crux type coins, in my data, were found in Gotland and Eastern Denmark than in Norway and Western Denmark. This is a surprising difference in numbers and

¹³⁰ Williams, Ill-Counselled King, 55.
provides possible insight to the demographics of the Scandinavian raiders. Based on these numbers, the raiding groups could have been comprised of a large majority of Swedes as compared to Danes or Norwegians. Olaf Tryggvasson has been noted as one of the major parties to the treaty in 994 that resulted in the geld paid during this issue.\textsuperscript{131} Even so, that alone does not indicate that the raiding groups he might have been leading were composed primarily of Norwegians. Svein Forkbeard, Cnut’s father, is also mentioned as having been involved in the raiding in the early 990’s\textsuperscript{132} and this is where the strong connections to Eastern Denmark could lay. By this point Svein was king of Denmark and had established an alliance with the king of Sweden, Olof Skötkonung.\textsuperscript{133} With this alliance in place, Svein likely called upon Swedes to fill out his army which in turn could have resulted in a larger amount of coins taken to Gotland and Eastern Denmark.

Long Cross coins appear 25% more often in my material than Crux type coins. In the “Continuity and Change” articles Metcalf provides two estimates for the total number of coins minted for Long Cross. One estimate stands equal with the Crux issue at around 40 million coins and the other is about half that number.\textsuperscript{134} The higher estimate is only a best guess situation for the Long Cross type and Metcalf indicates that this issue is more likely to have topped off at 20 million coins. In my own data the numbers of Long Cross coins is greater than Crux coins with a clear switch from English mint prominence to that of the Danelaw mints. The English mints went from 40.5% of the total to 22.5% while the Danelaw mints increased from 21.3% to 30.2%. Part of this change can be accounted for in the higher numbers of Long Cross coins recorded in my data, but higher numbers would not be the only reason for this discrepancy. The representation of the coin types among the hoards surveyed for this thesis could also play a part in the difference between the Crux and Long Cross numbers.

Lincoln, York, and Stamford all have an increased presence for the Long Cross coins. Norwich’s presence does not change between the two types. This lack of change at Norwich could be due to the Thetford mint being called upon to increase production to satisfy Æthelred’s requirements for a geld payment. Although, Metcalf’s estimates of total mint

\textsuperscript{131} Williams, \textit{Ill-Counselled King}, 47.
\textsuperscript{132} Sawyer, “Cnut’s Scandinavian empire,” 16.
\textsuperscript{134} Metcalf, “Continuity and Change, Part II,” 56, figure 7.
output indicate that Thetford mint saw a significant decrease in the percentage of the total output between Crux and Long Cross. Norwich, meanwhile, saw a slight increase. A single **geld**, around £24,000, was paid to the Scandinavian armies in 1002. Unlike the previous two **gelds**, this one came right at the end of the Long Cross validity period. By this point it is likely that the circulation of Long Cross coins in England would be at its apex. Thus allowing Scandinavians to get their hands on the cash and resulting in higher numbers of these coins reaching Scandinavia.

Once more, the highest numbers of Long Cross coins found, in my data, were on Gotland. Eastern Denmark and Norway were nearly identical in number. Svein Forkbeard was heavily involved in England during this period, having defeated Olaf Tryggvasson in Norway around 1000 before setting his sights back on England. Williams believes that Svein’s renewed invasion of England is to take revenge on the English for the killing of Danes, and possibly Svein’s sister, at the orders of Æthelred in 1002. The alliance with Olof Skötkonung was still intact at this point and would have once more supplied Svein with plenty of Swedish soldiers. Similar to the Crux issue, these soldiers would have returned to Eastern Denmark and Gotland with the spoils of their raiding as well as the **geld**.

Yet, this does not wholly account for the high numbers in Norway. Shortly after the **geld** of 994 was paid, Olaf Tryggvasson returned to Norway with Æthelred’s blessing and claimed kingship of his native country. Over the course of the next five years he fought with Svein, who claimed parts of Norway for Denmark. As Olaf had the support of Æthelred, the English king might have sent funds to help support his ally in order to keep Svein occupied in Scandinavia and away from England. Over the course of the Long Cross validity period this would allow large numbers of coins to enter the country. Another vector, of course, could be the **geld** of 1002 as by this point Svein’s hold over Norway was more secure and Norwegian troops would possibly have been part of the army.

---

135 Metcalf, “Continuity and Change, Part II,” 76.
137 Skovgaard-Petersen, “Danish Kingdom,” 176.
138 Sawyer, “Cnut’s Scandinavian empire,” 16.
139 Williams, *Ill-Counselld King*, 53.
141 Ibid., 169; Williams, *Ill-Counselld King*, 47.
143 Lund, “Danish Empire,” 169
Quatrefoil is the first coin type issued by Cnut when he became king and estimated to be the largest coin issue during the late Anglo-Saxon period.\textsuperscript{144} Within my own data Quatrefoil coins appear significantly more often than either Crux or Long Cross with increases of 76.5\% and 40.6\% respectively. Numbers of coins found are relatively even across Western and Eastern Denmark with Norway accounting for slightly more, whereas Gotland exhibits a significant drop compared to the two Æthelred types. The presence of the Danelaw mints is more pronounced during the Long Cross type than Crux, and it is even greater with Quatrefoil with an increase of 104.7\% over Long Cross as the physical numbers of coins in my material more than doubled. This substantial increase in numbers of Quatrefoil coins could be solely attributed to the large geld of 1018,\textsuperscript{145} but it is more likely a combination of both geld and trade led to the increase.

While the incidence of coins from Danelaw mints in my material increased massively, the numbers of coins from the English mints stayed comparatively stable. Part of this could lie in the portioning of England after Cnut became king. He kept Wessex for himself and gave Mercia to Eadric Streona, Northumbria to Eiríkr, and East Anglia to Thorkell.\textsuperscript{146} By 1018 these lieutenants had changed, but Cnut probably still had personal control of the southern part of England.\textsuperscript{147} Assuming he would not want to bankrupt this area, or reduce the wealth of his personal holdings, Cnut relied upon the mints in the Danelaw areas to provide the majority of the coinage for this issue. Metcalf’s estimates indicate that the English mints had a greatly decreased percentage of the total output compared to fifteen years previously. Contact between the eastern parts of England and Scandinavia, especially Denmark would have been strong due to the influence of not only Cnut but Thorkell. This Dane had been in England since 1009 and was familiar to Svein, Cnut, and Æthelred.\textsuperscript{148} Despite the dubiousness of Thorkell’s allegiance to his new king, there is no doubt that he would have promoted good economic conditions in order to strengthen his power base within England.

\textsuperscript{144} Metcalf, “Continuity and Change, Part II,” 56.
\textsuperscript{145} Metcalf covers the geld in detail in his article “Can we believe the very large figure of £72,000 for the geld levied by Cnut in 1018?” Please section 4.2. Gelds and Trade for how this relates to the numbers of Quatrefoil coins found in Scandinavia.
\textsuperscript{147} Higham, Anglo-Saxon England, 99; Keynes, “Cnut’s earls,” 83.
\textsuperscript{148} Sawyer, “Cnut’s Scandinavian empire,” 17; Williams, Ill-Counselled King, 92 & 111.
Pointed Helmet coins are slightly more numerous in my material than the other three types. As mentioned above, Metcalf has estimated the total numbers of Pointed Helmet coins minted to be around half the numbers of Quatrefoil but my own material belies this observation. Physical numbers from English and Danelaw mints are both lower, but the decrease in these numbers is more than made up for by export from London. Ultimately the difference between Quatrefoil and Pointed Helmet coins in my own material is not significant enough to be able to draw a clear conclusion on the topic of which type had more coins minted.

Based on the high numbers of coins for specific regions in my data, I believe that Pointed Helmet coins were exported intentionally to Norway and Western Denmark. Both were major focal points for Cnut’s influence in Scandinavia. While Norway was the focus of an influence struggle between Cnut and Olaf Haraldsson during the 1020’s, Western Denmark was his familial home. The high incidence of Pointed Helmet coins in Norway could be related to this conflict and the need for Cnut to support his allies since he was not physically in the region for the majority of the time.\(^{149}\) Norway is the region where both Quatrefoil and Pointed Helmet have their highest numbers but 30% more Pointed Helmet coins than Quatrefoil have been found there. Even more telling is the fact that the majority of Pointed Helmet coins in Norway came from London rather than the Danelaw mints as during the Quatrefoil issue. To me this seems like a clear indicator that the region was important to Cnut’s plans in Scandinavia as he utilized the mint at London to flood Norway with coins.

The total estimated numbers of coins during the late Anglo-Saxon period do not increase and decrease in a linear fashion. Rather, the totals vary from type to type with the highest estimated numbers coming during Cnut’s reign with the Quatrefoil coin type. After this issue the estimates do not vary quite as wildly as they did prior. In fact, the largest estimates of coins after the Cnut types come during the reigns of Harold I and Edward the Confessor with coin types that hit the 12 million mark.\(^{150}\) The high numbers of Crux and Quatrefoil coin types are believed to have been a result of needing to satisfy the \textit{gelds} assessed by Æthelred to pay off the Scandinavian raiders and Cnut to satisfy the payroll demands of his army.\(^{151}\)

While I agree in some measure that these high numbers could be tied to the \textit{gelds}, it is more indicative, in my eyes, of regional trade connections growing stronger.

Varied the estimates might be, nevertheless my data indicates a linear increase to the numbers of coins found in Scandinavia. Differences between the Æthelred and Cnut coin types, especially in terms of the numbers, is related to the output of the mints and how many mints each ruler would have running at the same time. Metcalf has pointed out that the numbers of mints for each coin type varied, from about fifty-eight for Crux to more than seventy during Quatrefoil.\(^{152}\) The difference between Crux and Long Cross is not so great as to be a sign that more mints were minting coins, rather a possible increase in the numbers of coins being exported.

On the other hand, the significant difference between the coin types of the two rulers points toward an increase in the numbers of mints across England as a possibility. After achieving complete authority as king of England, Cnut would need to solidify his power base as quickly as possible. He accomplished this task by parceling out parts of the kingdom to his loyal followers\(^ {153}\) and minting his own currency. Though the ruling elite had accepted Cnut as king, the common people were another matter. Propaganda was needed to convince them that he was the lawful, if not hereditary, heir to Æthelred’s crown. By minting his own currency Cnut legitimized his rule for the common people and confirmed his status as the highest figure of


\(^{151}\) D. M. Metcalf, “Can we believe the very large figure of £72,000 for the geld levied by Cnut in 1018?” in \textit{Studies in Late Anglo-Saxon Coinage in Memory of Bror Emil Hildebrand}, Svenska Numismatiska Meddelanden 35, ed. Kenneth Jonsson (Stockholm: Svenska numismatiska föreningen, 1990), 167. Metcalf says, “Cnut did not had it over to anyone, but used it at his own discretion.” Paying his army is certainly something he could do at his own discretion.

\(^{152}\) Metcalf, \textit{An Atlas}, 118 & 139.

authority in England. Perhaps this need to legitimize his rule through the rapid dissemination of coinage is the reason for the considerable size estimates of the Quatrefoil coin issue and thus an increased number of mints working at one time. Æthelred would have been trading on the familial name upon his coronation, and the adoption of Edgar’s Reform type would be one way to continue this connection, most especially because Æthelred was still a boy when he became king. With his coronation, which occurred in 979, he needed to establish his own right to rule the kingdom, thus resulting in the issuing of the First Hand. Using the same theory for Cnut, the reason that the Crux issue was so large is the need for Æthelred to prove that he is still the highest authority in England despite the constant raids by Scandinavians and the replacement of his closest advisors during the late 980’s and early 990’s.

The differences between the coin types could stem from myriad reasons. In Æthelred’s case, the challenge to his authority by Scandinavian raiders possibly prompted an increase in the activity of the mints. Cnut’s need to legitimize his right to rule is another potential reason. Availability of silver, a requisite for silver coins, and balance of trade could also figure into differences in the numbers of coins found outside of England. Both Crux and Quatrefoil came during trying times for their respective rulers and required singular amounts of coinage in order to maintain, or promote, the king’s image of power. The following issues, Long Cross and Pointed Helmet, served only slightly different purposes but without the great need to establish an identity, only to sustain.

During the Long Cross issue England was still raided, but the high status individuals who had driven the large raiding armies of the early 990’s were away in Scandinavia. Only at the end of the issue did an influential leader return to disturb Æthelred, but this did not require the intense minting of coinage that the early raids necessitated. Pointed Helmet was necessary to retain Cnut’s hard won status in England, though; this maintenance would not really be needed in England as Cnut was well established by 1023. Instead, Pointed Helmet coins were used in Scandinavia to support Cnut’s allies in Norway. Trade during this period would also have been greater due to the stability in the North Sea area that existed because of Cnut’s growing empire.

---

155 Williams, *Ill-Counseled King*, 22.
Following the estimated totals illuminates a pattern in which the subsequent issues following a large one are less and less. Æthelred’s Crux is estimated at 40 million coins, Long Cross is roughly half that, and the Æthelred Helmet type is around 12 million. Cnut’s issues are nearly identical with Quatrefoil well above 40 million coins, Pointed Helmet sits around half that, and the final Cnut issue, Short Cross, is estimated at about 15 million coins. As suggested above, this decrease comes at the behest of maintenance rather than establishment. Despite this, my evidence has the numbers of coins in Scandinavia exhibiting an opposite trend to that estimated by Metcalf. In my material, the numbers of coins increased from Crux to Long Cross by 25.6%, from Long Cross to Quatrefoil by 40.6%, and from Quatrefoil to Pointed Helmet by 6.7%. Although, I did not catalog the numbers for Æthelred’s Helmet and Cnut’s Short Cross, it would be interesting if these types increased over their predecessors following the same criteria. These increases, impressive they may be, do not point toward a larger number of coins being minted in England; rather, they are possible indices of higher numbers of coins being exported toward Scandinavia over the four decades covered in this thesis.

![Figure 3.3: Total numbers of coins found in Scandinavia in my material across the four coin types including all mints and regions.](image-url)

159 Jonsson, “coinage of Cnut,” 218, table 11.8; Metcalf, “Change and Continuity, Part II,” 56, figure 7.
3.1.2 Mints

Output of the mints is an important factor when considering the numbers of coins found in Scandinavia. If a mint is estimated to have a greater share of the total output for a coin type, then it is reasonable to assume that examples of coins from that mint will appear more often in Scandinavian hoards. Metcalf’s percentage estimates will be a point of reference here as I examine the mints and the likelihood that coins from those mints traveled to specific areas within Scandinavia. Metcalf did not calculate his percentages based on the coins found within individual Scandinavian regions which allows for a more precise assessment of my own data. The mints are being compared individually to the output estimates that Metcalf and I have produced.

3.1.2.1 Hastings

Hastings is the smallest mint with the fewest extent examples of coins within my material. As befitting a mint with a small set of coins, its percentage of the total is also quite minute. Metcalf has estimated that Hastings provided 0.24% of the total during the Crux validity period. I was unable to find any documented Crux type coins from Hastings across the various catalogs I consulted, so my own estimate stands at 0%. During the Long Cross validity period Hastings is estimated by Metcalf to have provided 0.32% of the total, and with one example in my material I have a 0.12% contribution to the total. Right now both our estimates are in clear agreement, Hastings contribution to the total between the two Æthelred issues increased.

With its prime location near the Channel, this town could have been one of the main stopping points for merchants traveling from the continent and would have been one location for the re-minting of foreign coin coming into England.\(^{160}\) Although the mint at Hastings was active during the majority of Æthelred’s and Cnut’s reigns, the near constant threat of raids could have kept the mint much smaller than otherwise. During the Quatrefoil issue Metcalf estimates Hastings contributed 0.28% of the total while my own data has the mint at 0.67%. This is a decrease for Metcalf and an increase for me from the Long Cross estimates. My own material saw the number of Hastings coins increase, accounting for the significant jump from 0.12% to 0.67% of the total. Metcalf’s estimate, while lower than the Long Cross type, is still higher than the one for Crux. The Pointed Helmet issue is where Hastings hits the highest percentage of the total for all four coin types. My estimate of Hastings’ contribution is 0.78%,

not much higher than from Quatrefoil, but Metcalf has Hastings’ providing 1.09% of the total. This is a huge jump from even the high point of Long Cross, and fits neatly with my own material. Overall, Hastings’ contribution goes up between consecutive issues of the same ruler but still remains quite a small portion of the total numbers.

### 3.1.2.2 Canterbury and Exeter

Canterbury and Exeter are two larger mints, located on opposite ends of the country. Exeter lies in the Cornwall region in southwestern England, while Canterbury is in Kent in southeastern England. Both cities had large mints and were active during the entirety of both kings’ reigns. Within my material more examples of coins from these two mints have been cataloged during the reign of Æthelred than Cnut. Metcalf’s estimates also indicate that Exeter and Canterbury contributed more to the Crux and Long Cross issues than Quatrefoil and Pointed Helmet. For Crux, Metcalf estimated that Canterbury contributed 3.78% of the total, and 3.09% for Long Cross. My numbers have Canterbury contributing 9.99% for Crux and 7.37% for Long Cross. This is an opposite result of Hastings, though; it does fall in line with the idea that the Crux issue was much larger than Long Cross. Exeter’s contribution is 4.09% for Crux and 3.74% for Long Cross, as estimated by Metcalf, while my numbers are 9.54% for Crux and 7.49% for Long Cross. A drop in Exeter’s contribution between the two types is notable.

Within my data the numbers of coins from both mints are nearly equal across all four types, with the largest discrepancy coming during the Quatrefoil issue. Despite Metcalf estimating that Exeter contributed more to the overall total than Canterbury, both mints are equally represented for the Æthelred issues in my own data. Earlier I speculated that it would be easier to collect the coins at Winchester from the English mints, and this nearly equal representation supports the idea that the coins could have been collected in one place before being exported to Scandinavia. Yet, the numbers for both these mints during the Cnut types is considerably lower. Metcalf has Canterbury at 1.27% of the total for Quatrefoil and 2.44% for Pointed Helmet, while my own data has 2.33% and 2.81% respectively. Though there was an increase in the percentage total between the two types, the overall contribution is a great deal lower than Long Cross and Crux. Part of this could stem from the total numbers of coins for the Quatrefoil issue, 47 million, as compared to the 40 and 20 millions for Crux and Long Cross, respectively. Mints would have a lower percentage of the total with a higher number of
coins, an example that can be seen with Exeter in my own data. I have estimated that Exeter contributed 3.66% of the Quatrefoil total and 3.43% for Pointed Helmet. Metcalf has Exeter at 1.65% and 2.29% respectively.

In both cases, Metcalf has the mints increasing their share of the total percentage between Quatrefoil and Pointed Helmet while my own material only has Canterbury increasing its share of the total. Exeter proves to be an exception as I cataloged 44 coins for both the Quatrefoil and Pointed Helmet issues. Yet the share of the total percentage for this mint decreases between the two issues because the numbers of Pointed Helmet coins in the material cataloged for this thesis is higher than Quatrefoil. Assuming that the total numbers of coins are the same across the two types, then Exeter’s share of the total would not have changed indicating that the mint’s output remained constant throughout the first two Cnut issues.

### 3.1.2.3 Winchester

The last of the four English mints, Winchester, has estimates that prove to be unique compared to the other mints. Metcalf’s estimates are higher for Crux and Quatrefoil than Long Cross and Pointed Helmet, and my own data mirrors this. For Crux, Metcalf has Winchester contributing 7.80% of the total; Long Cross is 4.14%; Quatrefoil is 6.40%; and Pointed Helmet is 4.40%. This same rising and falling pattern can be seen in Metcalf’s estimates of total numbers of coins for each type. My data contradicts Metcalf’s oscillating pattern by showing a continuous rise in the number of coins. My own data has Winchester providing 21.00% of the Crux type; 7.49% for Long Cross; 8.99% for Quatrefoil; and 6.70% for Pointed Helmet. Winchester was the seat of the royal treasury and one of two possible sources of dies, London being the other, at the beginning of a validity period.\(^{161}\) The die-cutting system was mostly centralized during the middle part of Æthelred’s reign but became more decentralized toward the end with more locations cutting their own dies.\(^{162}\) As such, the higher percentage of the total for Crux and Quatrefoil fits in the role that this location was a vital mint for each ruler. Metcalf has this mint contributing significantly to the first three types of Æthelred’s reign, all of which are above 6.50% of the total. Starting with Long Cross

---

162 Die cutting during the reign of Cnut began decentralized but moved toward a more centralized system. Major regional mints seem to have cut their own dies as needed throughout each coin’s validity period. See Allen, *Mints and Money*, Chapter 4 for an in-depth look at the minting process.
the mint’s production experienced a slight drop, based on the same estimates, but this issue saw an increasing number of active mints over the previous four.\textsuperscript{163}

A higher number of active mints would also work toward reducing Winchester’s share of the total. More active mints likely reduced the shares of Exeter and Canterbury during the Cnut issues. Material from Winchester, unlike Exeter and Canterbury, does not seem to suffer from a drop in the export of coins to Scandinavia. This mint is, as mentioned, the royal treasury for the English Crown and the town is probably tied to the administration of the government\textsuperscript{164} despite London being larger and wealthier. Cnut, upon dividing up the kingdom, kept the region surrounding Winchester for himself and though the presence of the other southern mints might have decreased during Quatrefoil’s validity period, Metcalf’s estimates indicate that their share of the total increased throughout Cnut’s reign. The differences could also be tied to the activity of the mint. During the Crux and Quatrefoil validity periods, it is possible that Winchester was active for the majority of the period if not its entirety. During Long Cross and Pointed Helmet, the mint might have been active at only certain points. The same applies to the other three English mints. One option for tracking this could lie in changes of the weights of the coins, such as the exercise done by Metcalf when looking at the gelds of 991 and 994.\textsuperscript{165} Such an examination goes beyond the scope of this paper.

\begin{flushright}
\textsuperscript{163} Metcalf, \textit{An Atlas}, 118 & 127.
\textsuperscript{164} Williams, \textit{Illecounselled King}, 77.
\end{flushright}
3.1.2.4 Norwich and Stamford

Norwich and Stamford are the two smallest Danelaw mints throughout the entire period examined in this thesis. Metcalf’s estimates of Norwich’s share of the total remain around the 2% mark across the four coin types, with the greatest disparity during Cnut’s reign. Stamford, on the other hand, is closer to 3% for the entire period, with an extremely low point during the Crux type. It also has the largest difference of the share coming during the reign of Æthelred. During the Crux and Long Cross types, Metcalf has estimated that Norwich’s share of the total percentage was 2.01% and 2.03%, respectively, while my numbers are 3.67% and 3.04%. A slight difference for the Æthelred types in Metcalf’s estimates, but a much larger difference in my own and that includes a decreased share. In my own data the decreased share of the total comes from the fact that there is more Long Cross than Crux coins. Despite the physical numbers being nearly identical, the large difference in the totals forces down Norwich’s share of the Long Cross output.

Stamford’s numbers are not quite as equal. Metcalf estimates that Stamford’s share of Crux was 1.24% and 3.01% for Long Cross, while my own data has Stamford at 1.62% and 3.39% respectively. The large increase, mirrored in both data sets, is in my case justified by the higher number of physical examples of coins minted at Stamford found in Scandinavia. Both mints were active during the validity period of the two types, but during the Long Cross validity period Stamford seems to have carried a larger share than previously. It could also
indicate a rising importance of the moneyers controlling the mints in Stamford. Metcalf has also noted that this mint town lay on the edges of two boroughs, and perhaps the moneyers were more aggressive with pulling in the old coin from these two areas. In either case, the increase in Stamford’s share shows that it was perhaps more prominent in this area than Norwich.

During the two Cnut issues Stamford maintains its prominent position over Norwich. Metcalf has the mint contributing 2.65% of the total during the Quatrefoil validity period and 3.82% for Pointed Helmet. There is a bit of an increase with his estimates, but my own are relatively steady at 4.58% and 4.83%, respectively. Whereas Stamford’s share remains relatively steady across the two issues, Norwich climbs to greater heights during Quatrefoil and then falls quite low for Pointed Helmet. My own material indicates that Norwich’s shares are 5.66% for the Quatrefoil type and 2.34% for Pointed Helmet. The estimates by Metcalf are lower, but still follow the pattern of higher to lower. For Quatrefoil Metcalf has Norwich providing 2.82% of the total with only 1.85% during Pointed Helmet. Though these two mints are relatively close to each other, their varying importance can be seen in the shares of the total output percentage they occupy.

Of the two, Norwich seems better positioned to take advantage of the trade opportunities between England and Scandinavia. It is the furthest east of all the mints with easy access to the North Sea via connecting rivers. Merchants sailing from Denmark toward the southern parts of England would most likely have stopped in East Anglia first. According to Metcalf’s numbers, Norwich seems to have played second fiddle to Stamford despite its better positioning. Even though Norwich’s share of the total output was higher during the Crux and Quatrefoil issues, the estimated numbers for Stamford are higher across the board. My own data is slightly different with Norwich carrying a slightly higher average across the four types than Stamford.

Ultimately, I believe the importance of these two mints was relative to the demand for currency in the particular areas. Both mints had much lower shares of the percentage than Lincoln and York, the most prestigious of the four Danelaw mints in this study. Neither Norwich nor Stamford was subject to the serious raiding by Scandinavians that afflicted the more southerly mints. These raids were conducted after the Long Cross validity period and

---
would have likely had little effect upon the actual minting of Long Cross coins, although, this
could have negatively affected the output of later issues. Thorkell’s army is noted as having
raided in East Anglia and sacked the towns of Northampton and Bedford in 1010,\textsuperscript{167} both of
which have drastically decreased estimates by Metcalf for the two types following Long
Cross. It must also be mentioned that Thetford and Cambridge are said to have been burned to
the ground by this same army,\textsuperscript{168} yet their share of the percentage in the type immediately
after Long Cross is much higher than their share during. Metcalf’s estimates for Last Small
Cross do show a slight drop in Thetford and Cambridge’s percentage shares of the total,
perhaps indicating that the presence of Thorkell’s army did end up affecting the mints in these
towns. Even so, this raiding could have resulted in the collection of Long Cross coins that had
not yet been re-minted during one of the following issues.

3.1.2.5 Lincoln

Between the two most prestigious Danelaw mints, Lincoln and York, the former occupies a
higher place in my own data than the latter. Across three of the four coin types Lincoln has a
higher percentage of the share, as well as more physical coins. The drifting of coins towards
the west and south-west during the reigns of Æthelred and Cnut, as mentioned by Metcalf,
would potentially account for the high numbers of Lincoln coins found across Scandinavia.\textsuperscript{169}
Lincoln is not quite as insular as the coinage of York\textsuperscript{170} and would have potentially appeared
more often in the southern parts of England.

My estimates for Lincoln’s share of the total look quite a bit different than Metcalf’s. The
data I have collected covers a total that is much less than the one Metcalf worked with even
though a number of the catalogs to which I had access were probably more comprehensive.
For the Crux validity period Lincoln is estimated to have contributed 4.86% of the total output
by Metcalf, whereas I have 8.37%. Long Cross sees this share jump to 11.29% from Metcalf
and 14.50% in my own data. Here I would like to engage the possibility that the total coinage
for this issue is actually less than for Crux, as estimated by Metcalf. This would also account
for the corresponding rise in the percentage shares of Norwich and Stamford. With fewer
coins being minted, their place in the overall picture would be larger.

\textsuperscript{167} Williams, \textit{Ill-Counselled King}, 97-98.
\textsuperscript{168} \textit{Ibid.}, 97.
\textsuperscript{169} Metcalf, “Continuity and Change, Part I,” 28 and diagrams on 31.
\textsuperscript{170} \textit{Ibid.}, 28; Metcalf, \textit{An Atlas}, 194.
Following this high point, based on Metcalf’s estimates Lincoln’s contribution to the total falls to 8.12% for Quatrefoil and 9.85% for Pointed Helmet. My data has an opposite pattern for Quatrefoil with Lincoln rising to 18.64% of the total. Though, for Pointed Helmet it then falls to 12.70%. Metcalf’s pattern of low to high for the issues covered herein provides some evidence of mints being chosen to operate during specific periods. I refer back to the idea that Æthelred and Cnut needed to establish their legitimacy as rulers, which is why the Crux and Quatrefoil issues are so large. This pattern runs opposite to Winchester. Assuming that the rulers would have begun any new coinage with the creation of the dies at Winchester, this would lead that mint to have a higher percentage of the total compared to others.

Though the Lincoln mint is being used during both the Crux and Quatrefoil issues, Metcalf’s estimates show the higher percentage of the share during the next issue. For this example, the mints at Winchester run nearly non-stop during the Crux and Quatrefoil issues; pumping out tens of thousands of coins. Meanwhile, the mints at Lincoln are working sporadically or on a much slower pace. Upon the issuing of the next coin type, the mints are Winchester are utilized to a lesser degree or mostly to create the dies, while the slower mints, such as Lincoln, take up a more prominent role getting more coins minted. I imagine this system could be used similar to the farming system in which a farmer leaves a field fallow one year but utilizes it the next. The above conjecture is based purely on the estimates provided by Metcalf. My own data indicates that Lincoln’s share of the total rose up through Quatrefoil, and then fell for Pointed Helmet. I do not believe that my data is reflective of a change in the prominence of Lincoln, but rather the exportation of the coins to Scandinavia. The exportation aspect will be explored in chapter 4 below.

3.1.2.6 York

York’s estimates are a bit different than Lincoln’s. Metcalf has York’s share of the total output decreasing between Crux and Long Cross, 9.42% to 8.29%, while my own numbers have an increase, 7.64% to 9.24%. The changes with this mint are difficult to tie into the overall events in England at the time due to its distance from the main areas. It is the furthest from London at over three hundred kilometers and as a result is more isolated from the English economy. This isolation, however, did not limit the number of coins that arrived in Scandinavia. York’s strongest connection to Scandinavia is with Norway starting in the Long
Cross validity period, though, this does not stop large numbers of coins from being exported to other parts of Scandinavia, namely western Denmark.

This exportation is one way the percentage share of the total could be affected in the data sets. As Norway is a major source of York coins, my data would incorporate these coins whereas Metcalf might not have counted them in his figures and accounts for the increase in my data over his. Estimates for Quatrefoil and Pointed Helmet, in my own data, are much closer together at 15.06% and 15.12%. This slight increase from one to the other is due to both the higher Pointed Helmet total and the higher numbers of York minted coins. Pointed Helmet was also the only coin type in which more coins from York was cataloged than from Lincoln. Metcalf’s own estimates put York at 8.64% for Quatrefoil and 12.03% for Pointed Helmet. This is once more a case in which a lower total output would result in a mint having a larger percentage share of the total.

During Cnut’s reign it seems that the connections between York and Norway were much stronger, based on the higher numbers of coins cataloged. Although the Quatrefoil issue covered only part of the conflict in Norway, it would be reasonable to assume that York would provide much of the coinage used to pay for the allied support given to Cnut during this conflict. In my own data the increase comes from the higher numbers of coins I cataloged, whereas the increase in Metcalf’s data would stem from the lower estimated total for Pointed Helmet. As I have mentioned throughout, this lower amount potentially inflates the numbers from a single mint. London provides a good example, and will be addressed next.
Figure 3.5: Percentage share of the total numbers of coins from Danelaw mints in Scandinavia by coin type.

3.1.2.7 London

The largest and most well-known city in England is also the location of a major mint, minting hundreds of thousands, if not millions, of coins throughout each validity period. Within my material coins minted at London are by far the most numerous and increase consistently over the four coin types. Between Crux and Long Cross the number of London minted coins in my material increases by 55.77%, while there is a much smaller increase between Quatrefoil and Pointed Helmet at 35.39%. The increase between the two rulers stands at 20%. Though, both estimates from Metcalf and myself have London experiencing a small decrease in the total percentage share between Long Cross and Quatrefoil. Metcalf’s estimates for London’s share of the total are 17.53% for Crux, 22.58% for Long Cross, 22.20% for Quatrefoil, and 33.33% for Pointed Helmet. The rising-falling pattern is mirrored in my own material as London contributed 38.18% for Crux, 47.37% for Long Cross, 40.43% for Quatrefoil, and, finally, 51.29% during Pointed Helmet.

During the two coin types that are estimated to have been among the highest in terms of total coins, London has a lower percentage of the share. Perhaps this is due to the need to spread out the minting of those particular coin types to as many mints as possible. With the next coin type, in this case Long Cross and Pointed Helmet, the mints at London could be used to keep a constant flow of coins to various parts of England and for export. London was assaulted numerous times throughout Æthelred’s reign and the geld of 1012 was raised in part to
hopefully prevent further attacks upon London as it provided for a standing mercenary fleet to defend England. Though this happened long after the validity period for Long Cross, some part of this geld could have consisted of Long Cross coins and could account for the higher numbers of these coins in Eastern Denmark and on Gotland.

I have cataloged as many Pointed Helmet coins from London as from the other mints combined. Based on these numbers, they have been found on a nearly 1:1 basis than coins from the other mints combined. A vast majority of these coins were discovered in Norway, keeping afloat the theory that Cnut was using them to pay his allies. London, throughout the late Anglo-Saxon period, is the center of the North Sea world and this does not change when Cnut becomes king. Æthelred might have used Winchester as a collection point for his gelds in the 990’s as the English element of the Crux coins in my data is significantly higher than the Danelaw component. This would imply a regional bias toward the geld collection but such a bias is difficult to justify. The most likely location to serve as a collection point would be London. With a large merchant population, London could have facilitated the mixing of the coins from all the mints as well as with the foreign coin that was brought to England but never re-minted.

![Figure 3.6: London’s percentage share of the total numbers of coins for each type.](image)

---

171 Williams, *Ill-Counselled King*, 106.
172 Metcalf, “Fall and Rise,” 220-221.
4 Patterns

4.1 Patterns of monetary change

The most complex discussions about coins are centered on their movement, whether it is locally, regionally, or internationally. Determining why the coins moved typically results in debates on the concept of money and how its value was set by the society in which it was utilized. My aim with this thesis has been to sketch out the connections between late Anglo-Saxon England and Scandinavia based on the coins unearthed in Norway, Denmark, Gotland, and Finland. Justifying these connections based on the perceived value of a coin, nigh inseparable from modern biases, is a trying task. Even so, I will attempt to lay out the lines of connection between the various mints and regions in Scandinavia. But first, the concept of value must be placed into the framework built around monetary systems and why this concept is important to the movement of the coins.

Accumulating wealth is a common pursuit. In order to help this process, early civilizations started to collect items that held some sort of intrinsic value. Value is the basic concept behind the use of any sort of medium of exchange.\textsuperscript{173} The valuation of the medium being employed comes from the comparison of one object to another. During the Viking Age, Scandinavians engaged in barter, commodity, silver bullion, and monetary based systems of exchange. These systems relied upon common units to determine their value called a unit of account.\textsuperscript{174} This unit of account can consist of any commodity available to the people involved in the transaction, and for which they, or a third party, determines the standard value. In this case, the unit of account is a silver coin and the value of the coin is set by the Crown and its administration.

Coins bore the image of the ruler on one side and a design unique to each coin type on the other and were an important method for the ruling authority, such as the king of England, to spread their influence throughout the realm.\textsuperscript{175} These administrators were also responsible for

\textsuperscript{173} Bolton, \textit{English Economy}, 19.
\textsuperscript{175} Bolton, \textit{English Economy}, 21.
determining the weight and bullion content of the coin,\textsuperscript{176} of which, the Scandinavians were primarily concerned with the weight of the English coins. Silver, the primary metal used in the minting of the coins, was utilized throughout Scandinavia for a number of purposes including payment. It was the commonly accepted unit of account and has been found in huge amounts across the entirety of Scandinavia.\textsuperscript{177} As a result, Scandinavians worked tirelessly to obtain silver. Due in part to a brisk trade with a revived Germany, Anglo-Saxon England was one of the wealthier areas in Northern Europe.\textsuperscript{178} This likely drew the Scandinavian traders, and raiders, in droves and later resulted in the uncovering of tens of thousands of Anglo-Saxon coins across Scandinavia.

Though the material I have cataloged only contains a few thousand coins found in specific areas, clear patterns can be seen in their origins. Across all of the coin types and regions, London issues stand out as the most common. It is no surprise that coins minted in this city are found in such high numbers. London was a major hub for trade during the late Anglo-Saxon period. Raw materials would come in from the areas surrounding the city and be manufactured into products for those who could afford them. Merchants would bring their highly desired goods from across the seas in order satisfy the demands for particular items, such as furs or amber, and earn a tidy profit. A network spread out from London to the far corners of the Anglo-Saxon realm and merchants could count on acquiring coins not only from the city, but from mints located around England. York and Lincoln were also prime locations for trade based on the high number of their coins recorded in my material.

Tying major centers of trade into a broader network clarifies their connection. Based on my material there were four primary locations in England upon which Scandinavian merchants would have lavished their attention. London is the prime locale among these four, with Lincoln, York, and Winchester following. Coincidentally, all four of these locations top the other mints with their estimated share of the percentage total for each coin type. Leaving London to the side for a moment, we look to the connections that the other three had across the seas. Overall, Lincoln and York coins have their strongest presence in Norway while Winchester is most prominent on Gotland. The dominant position of Lincoln and York in Norway is not surprising due to the physical location of both mints. Sailing routes to and from

\footnotesize
\textsuperscript{176} Bolton, \textit{English Economy}, 21.
\textsuperscript{178} Sawyer, \textit{Anglo-Saxon England}, 108.
the northern parts of England, where these mints once resided, would have possibly taken merchants up the coast of Scotland and then through the Orkneys and Shetlands to Norway.

While this route is longer it did allow for the merchants to tap into other markets and connect with Norwegian communities outside of Norway during their journey. A more direct route could have been taken by sailing directly south-west from Norway to York and finally to Lincoln. The next highest numbers from these two mints appear in Western Denmark on the island of Zealand, primarily during the Cnut coin types, despite Jutland being closer to England. Working with a circular route, largely dependent upon the winds, a merchant could perhaps sail first to Norway and exchange some of the coin for goods only available in this region. Continuing on their course, they would arrive in the western reaches of Denmark and once more exchange coin for additional goods. Following the prevailing winds across the North Sea would have brought them back to England where they would sell their goods for coin. Alternatively, they could sail a counter-clockwise route trading along the northern part of the continental coast; through which they would also acquire German coins in addition to the English stock.179

Much of this supposition depends on the urbanization of both England and Scandinavia. With a recorded history spanning back to the Roman occupation of the British Isles, locating urban settings is not as difficult in England compared to Scandinavia. Urbanization can be described through three main criteria: functionality, topographical, and administrative.180 Combining these criteria with other parameters helps to establish the development of towns and cities, although, this is not a feature exclusive to heavily built up and populated locales but can include the hinterland as it develops increasingly close relations with the larger urban areas.181 It is these more pronounced urban areas, central urban areas, that tie into the wider North Sea network connecting Scandinavia with Anglo-Saxon England, and vice versa.

A number of decidedly developed urban areas appear in Scandinavia during the time period in question. Of all the theories advanced to explain the establishment of cities in this period, the royal prerogative is the most important.182 In Denmark, places such as Ålborg, Århus, and Viborg in Jutland would have been connected to both England and the wider Scandinavian

179 Jonsson, “routes for the importation,” 219-220; For further information on sea routes, see the works of Ole Crumlin-Pedersen, who has covered the myriad aspects of maritime archaeology around the North Sea.
181 Ibid., 316.
182 Forte, Oram, and Pedersen, Viking Empires, 174.
world through the movements of traders.\footnote{Johan Callmer, “Urbanization in Scandinavia and the Baltic Region c. AD 700-1100: Trading Places, Centres and Early Urban Sites,” in Developments Around the Baltic and the North Sea in the Viking Age, ed. Björn Ambrosiani and Helen Clarke (Stockholm: Birka Project for Riksantikvarieämbetet and Statens Historiska Museet, 1994), 75.} Roskilde and Slagelse, on the island of Zealand, probably played a prominent role as well due to their strategic location on the sailing route to and from the Baltic Sea. Norway is challenging to analyze, but Oslo, Bergen, and Trondheim played central roles in both the political and economic spheres.\footnote{Ibid., 74.} Numerous hoards have been uncovered in the hinterlands surrounding these towns and even within the towns themselves. These hoards found in the hinterlands provide evidence for the connections with England during this period. For example, a sizeable hoard uncovered in Enner, Tamdrup sogn in Jutland lies roughly fifty kilometers from Århus, a journey that could be accomplished in a day or two. The Enner hoard contained a significant number of Cnut type coins and some Crux and Long Cross coins as well. In the modern day, this area is primarily farmland, but during the reign of Cnut any number of people of different statuses potentially lived in this location as part of a manor or small farming community. Though, the large number of coins seems to indicate that it was either a person of nobility or a trader traveling between England and western Denmark.

4.1.1 The Norwegian Puzzle Pieces

I have made constant reference to the large numbers of coins found in Norway, especially Pointed Helmet coins, and how their abundant presence might relate to the conflict between Olaf Haraldsson and Cnut during the 1020’s. I speculated above that the reason for the high numbers of Pointed Helmet coins is due to Cnut actively sending coins there, and a study of die-links among the hoard material could support this theory. Luckily, Elina Screen has conducted a preliminary study of die-links amongst the Norwegian hoard material.\footnote{Screen, “Anglo-Saxon coin,” forthcoming. I am very grateful to Dr. Elina Screen for having been given the opportunity to use her unpublished study for this thesis.} The largest source of Pointed Helmet coins in Norway is the Årstad hoard found in Rogaland on the south-western coast. Cnut is not known to have had allies in this region, but this does not mean allies were not located there.

Screen has ascertained that of the 206 die-linked coins in the hoard, the majority are Pointed Helmet.\footnote{Ibid.} Additionally, the London mint dominates these die-linked coins.\footnote{Ibid.} Using this die-
link evidence in conjunction with Gullbekk’s peck mark study provides insight into the vast numbers of coins in Norway. Small nicks were made to coins to test the quality and content of their silver. These nicks are called peck marks, and are found on silver objects across Scandinavia. Over the course of his examination of peck marks, Gullbekk observed that a substantial number of the hoards contained coins from the current, or next most current, type with one peck or fewer. Half of the coins in the Årstad hoard were found to have one peck mark or less, and nearly all of these coins belonged to the two most recent types. If you couple this with the die-link evidence presented by Screen, then there is the distinct possibility that the considerable number of coins in the Årstad hoard were brought directly to Norway from England, and is, in fact, the same position that both Gullbekk and Screen take in their respective articles.

As pointed out by Screen, the London mint appears disproportionately more often among the die-linked Pointed Helmet material in the Årstad hoard and indicates that London minted coins were possibly preferred over other mints. London could also have served as a collection point for a large parcel of Pointed Helmet coin; as Screen has noted that die-links from other mints can be readily discerned. Within my own material, the number of Pointed Helmet coins from London is nearly equal to the entirety of the cataloged Quatrefoil component of the Årstad hoard. This discrepancy is astonishing, considering the geld of 1018 and the estimated higher numbers of Quatrefoil coins in general. Here is where I return to the theory that the high numbers of coins from the Pointed Helmet validity period were sent specifically by Cnut to bribe Norwegian aristocracy in the battle for Norway as referenced to in Skaldic poetry and the writings of the English chronicler Florence of Worcester (c. 1118). Cnut used the London mint as his primary source for these Norway bound coins.

---

189 Ibid., 64.
190 Ibid., 70.
191 Ibid., 71-72.
192 Ibid., 73; Screen, “Anglo-Saxon coin,” forthcoming.
194 Ibid.
The clear verdict so far is that the coins found in Rogaland probably came directly from England, without passing through another area, such as Germany. Despite this, German coins have been found in the Rogaland hoards. A little less than 700 German pennies were found in the Årstad hoard, with other hoards turning up many hundreds less. The only other hoard from Rogaland with a sizable number of German coins is the Foldøy hoard. Hoards from other areas of Norway have differing ratios of coins within them. For example, Screen notes that hoards from the Viken area, closely connected to Denmark during this period, generally have a greater quantity of German than Anglo-Saxon coins. Coins from four hoards uncovered in Buskerud are included in my material, and all four hoards have a higher percentage of German coins than Anglo-Saxon. With the closer links to Denmark in this area, the coins could have passed through the northern parts of Germany before being buried in Norway.

Turning to the peck mark study from Gullbekk, we discover that despite the higher numbers of German coins in hoards in Buskerud, such as Brøholt or Stein, the numbers of Anglo-Saxon coins with one or no pecks is quite high. For example, the Stein hoard is relatively

---

200 Jonsson, “routes for the importation,” 219-221
201 Gullbekk, “Some aspects of,” 71, Table II.
small and contains 33 German pennies to 18 Anglo-Saxon pennies. Yet, 50% of the Anglo-Saxon pennies have one peck or less on them. In this hoard the German element is older and has a higher instance of peck marks than the more recent Anglo-Saxon coins. The condition of the German coins is an indication that the Anglo-Saxon element came directly from England, with fewer chances for the coins to be examined or obtain peck marks. The coins could have been part of a trader’s coin bank as he traveled along the coast of Germany and up past Denmark to Norway.

After our trader reaches Norway, with his bundle of unpecked and lightly pecked English coins, how would they then have circulated around the country? Both Gullbekk and Screen present theories on the circulation, with Screen’s die-linking article speculating purely on the Norwegian circulation while Gullbekk ties it into a wider world. Gullbekk’s examination of the peck marks determines that the coins most probably circulated around the Northern World, yet, he goes on to say that among coins from Norwegian hoards there is considerable difference in the circulation history. Gullbekk’s main focus seems to have been on the peck marks of the most recent types in the hoards. In this regard, he concludes that those coins likely did not circulate over a wide area or long period before being buried but includes a caveat: “…that coins might not have been pecked in the Norwegian region at all, or rather not as heavily pecked as in other parts of the Northern Lands.”

He goes on to address the topic of coin circulation within Norway specifically, and concludes that it is probable the coins circulated based on the archaeological and numismatic evidence in various locations across the country. Screen’s die-link evidence seems to prove the point that coins brought into Norway circulated around the country. Upon examining the material, she discovered that the hoards found in Rogaland tended link up most often with other hoards of the area. These same die-links were also found in other hoards across the country, but as one got further away from Rogaland the number of die-linked coins decreased. She theorizes that Rogaland was an important entry point for Anglo-Saxon coins into

---

202 Skaare, Coins and Coinage, 137.
203 Gullbekk, “Some aspects of,” 71, Table II.
204 Ibid., 71-72.
207 Ibid., 77.
208 Ibid., 77.
209 Ibid., 81.
211 Ibid.
Norway, and from there they mostly spread northward, especially to Trondheim, along the coast with some dispersion toward the Viken area. My own material stands in agreement with this conclusion, as the numbers of coins cataloged from hoards along the west coast, and in Trøndelag, are much higher than those from the Viken area. Of the eighteen Norwegian hoards I have included in this study, only five are from the Viken area.

Figure 4.2: Distribution of Norwegian hoards cataloged for this thesis.

The coins found in Norway have arrived via different methods, with a mix from other areas of Scandinavia and some coming direct from England. Both Gullbekk and Screen have noted that connections between Norway and England were particularly strong in some areas, such as Rogaland, and that the coins imported into the country most probably circulated to some degree. My cataloged information indicates strong connections between Norway and Anglo-Saxon England, particularly Lincoln, York, and London. I have speculated on the connection with London and I maintain that Cnut probably used this mint to direct parcels of coins to Norway during his clash with Olaf Haraldsson. Lincoln and York also have high numbers of coins in Norway but it is less likely that they arrived in the same dedicated parcels in which the London coins were delivered. Screen notes that there are strong die-link connections to Lincoln and York among the hoards in Rogaland and elsewhere, but does not indicate whether these coins had been pecked or otherwise marked.

Figure 4.3: Numbers of coins in Norway from each mint across the four coin types.

Ultimately, combining the two studies provides a clearer image of the Norwegian coin material. My own material indicates that the die-linking seen by Screen is no accident as certain mints, such as London and Lincoln, have provided a greater share of the percentage of coins found in Norway. The die-linking among the London portion of the Pointed Helmet component in the Årstad hoard referred to above shows that the huge number of London minted coins in my material may not have all arrived by chance. Circulation traces, such as peck marks or bending, are the only way of knowing if this portion came as a parcel directed

---

knowingly at Norway. Although Screen’s work is only in its preliminary stages, her conclusions, along with my own material, point toward closer connections between Norway and the region around the Humber River.214 Lincoln, York, and London are the most prominent mints among the Norwegian material, yet coins from Canterbury, Exeter, and Winchester all appear more often than from the remaining two Danelaw mints. The percentages are only slightly higher from Canterbury and Exeter than Norwich and Stamford. In the end, a coin from a Danelaw mint is still twice as likely to be found in Norway as one from an English mint, which increases to almost three times as likely if it was minted during Cnut’s reign. Both trading and raiding provided equal opportunity for the coins to arrive in Norway.

4.1.2 The Baltic Sample

Gotland and Finland are an enigma. More Æthelred coins have been found in these two places than Cnut coins. The highest numbers of Æthelred coins found in the Scandinavian regions have been found on Gotland. Additionally, these two regions have relatively even numbers of coins found across all four types. Gotland sees a slight dip during Quatrefoil while Finland has a bit of a bump from Long Cross. This increase in Finland is likely due to a parcel of Long Cross coins that arrived from England.215 While both regions have come under scrutiny for their coin hoards, Gotland has borne the brunt of the examinations due to the incredible numbers of both hoards and individual coins found on this small island. It is reasonable to see the majority of the coins that ended up on Gotland came from traders in transit from and to the Baltic Sea area.

Numerous sites along the coast of Gotland have been identified as potential trading places or harbors where small markets could have sprung up, but only a few specific localities are identified as noteworthy convergences of merchant traffic, such as Föjel and Paviken.216 This indicates that it was not a particular target for traders, instead it was a stopping point for the traffic traveling from east to west and vice versa. Even so, Metcalf has speculated about how

215 See section 2.3.5 Finland above for further information on the parcel theory.
Gotland was a “targeted” location for German traders\(^\text{217}\) based on proportions of German coins in hoards located on Gotland and in mainland Sweden. The Anglo-Saxon coins I have cataloged do not hint at Gotland being a primary “target” for coins from England as the number remains relatively stable over the course of thirty years.

![Figure 4.4: Total numbers of coins found on Gotland across the four coin types.](image)

How and when the coins reached Gotland is the complicated question to be addressed. Of the hoards included in my study, only four have a \(t.p.q.\) earlier than 1024 with a total of six carrying only Æthelred coin types. The later date on the younger hoards is due to a component other than English, possibly German or Scandinavian. All of the remaining hoards contain both Æthelred and Cnut coin types and have \(t.p.q.\)’s ranging from 1024 to 1113. The coins arriving on Gotland most likely circulated prior to being buried and quite possibly arrived from other destinations where they may have circulated as well.\(^\text{218}\) Determining how long the coin might have circulated is another matter entirely and involves the examination of a hoards age-structure and peck marks on the coins. Peck marks in the Gotlandic material have a markedly different flavor than those from Norway.\(^\text{219}\) Metcalf observes that few coins


\(^{218}\) Ibid., 351.

\(^{219}\) Ibid., 369.
found on Gotland have escaped being marked and the chances of gaining a peck mark tend to grow as the age of the coin increases, but stresses that this is only a general trend.220

Within the Norwegian material covered above, a gauge for determining how quickly a coin was buried after arriving is based on the number of peck marks it accumulated. Tying this into a study of die-links brings us to the theory that many of the coins in Norway arrived directly from England and remained only a short time above ground. Additionally, Gullbekk notes that the unpecked English coins in the Gotlandic hoards are not connected with the most recent coin types, unlike the Norwegian hoards, rather these unpecked coins are distributed randomly over various types.221 The general composition of the hoards comes into play in this respect. In Norway, hoards where English coins were the more recent type had a higher percentage of unpecked coins; conversely, hoards in which German coins were more recent had a lower percentage of unpecked English coinage. So, Norwegian hoards with recent German coins were similar in character to Gotlandic hoards in which there were few unpecked English coins.222 This implies that the coins found on Gotland must have traveled further and through another area, such as Germany,223 before finally ending up buried on the island.

Conversely, the coins could have spent more time circulating, whether on or off of Gotland,224 before they ended up in the buried hoards. Either way, it seems that fewer coins came direct from England, unlike Norway. The evidence for indirect distribution of coins on Gotland supports the theory that they were used along the east to west sea trade routes to pay for provisioning. Archaeological investigations into the harbors and trading places on Gotland during the Viking Age concluded that there was not a singular superior trade hub in the region. Rather, traders could have stopped at a large number of sites ranging from small camps connected to farms to larger centers serving an extended area.225 As a result, it has been estimated that there could have been a potential 30-40 locations along the coast of the island during the Viking Age at which passing ships could stop.226

222 Ibid., 72.
226 Ibid., 147.
Trade seems like the most likely avenue for coins to have arrived on Gotland. Unlike other regions, such as Norway or Denmark, there were no large increases between coin types that could indicate the influx of a large single payment of coins, such as a danegeld. In fact, the numbers of coins on Gotland drop from Long Cross to Quatrefoil issues, as seen in figure 4.4 above. This is in contrast to Denmark and Norway, which both saw a significant increase between those issues. Finland’s numbers returned to their normal levels after the exceptional uptick in Long Cross. It is difficult to settle on the possible reasons for this drop in the numbers, but one pattern is clear with connections to the English mints, during Æthelred’s reign, suddenly dropped after Cnut’s conquest. Perhaps the traders who most often visited the southern English ports stopped doing so after 1016 and instead choose to visit Lincoln and York more often.\textsuperscript{227}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.5.png}
\caption{Numbers of coins on Gotland from Æthelred and Cnut coin types based on mint.}
\end{figure}

There is a clear change in the numbers of coins from the English mints between the reigns of Æthelred and Cnut. Canterbury was the worst affected of the English mints, dropping from 8.32% of the total during Crux and Long Cross to 1.59% for the Cnut issues. Exeter and Winchester also saw a decrease in the coins being buried on Gotland. Numbers of coins for the Danelaw mints increased only slightly for the Cnut issues. The increases were so slight that the coins do not seem to have come from a single source, such as a large geld payment. An investigation of die-links might shed some light on the possibility of any large parcels of coins making their way to Gotland during the Cnut coin types. Perhaps the trading patterns

\textsuperscript{227} Or, the material to which I had access did not represent the whole picture in regards to coins imported to Gotland.
changed somewhat after 1016, necessitating a change in who was traveling to and from England. Sawyer notes that Gotlandic traders do not appear in written English records until the thirteenth century although; they were active in the Baltic long before then.228 The presence of traders from the western parts of the Northern World decreased, possibly causing the Gotlanders to begin a gradual process of sending out their own trade expeditions.

With all that said, the pattern on Gotland is mostly stable with one exceptional change coming during the Quatrefoil validity period. The decrease in numbers of coins here is possibly tied to the regime changes in England. Gotland’s connection to the English mints changes dramatically with the Quatrefoil type, yet, remains relatively the same with the Danelaw. Short of examining the peck marks and die-links in the hoard evidence, it is difficult to speculate on why this change occurred. Finland mirrored some of the patterns Gotland exhibits, mostly in the relatively stable numbers across the coin types. This stability is in spite of the sudden influx of considerable numbers of Long Cross coins.229 Finnish contact with Anglo-Saxon England was probably only tertiary with merchants traveling to Finland after stopping in Sweden or at places along the eastern coast of the Baltic Sea.

The sea-bound merchants and their desire for profit tied together Anglo-Saxon England and Scandinavia during this period. They would visit numerous places in both regions during trips that would last months. They brought back coins from England, and even Germany, to their homelands. Although I believe the primary vector for the introduction of coins into Scandinavia was the traders, I have argued throughout this thesis that the gelds paid by Æthelred could have contributed to the thousands of coins being buried. Written records, primarily the Anglo-Saxon Chronicle, record thousands of pounds of silver paid out to raiders through the gelds. Yet, these same sources do not describe the composition of the payments in detail; there is scant evidence that the gelds were paid entirely in silver coins. Discussions about the gelds are fierce, so I will not presume to rewrite what has already been said. Rather, I will attempt to explain my position and justify it based upon my own evidence.

---

229 Please see section 2.3.5 Finland for reference to the parcel theory.
4.2 Gelds and Trade

The various *gelds* paid out to Scandinavian raiders by the English royalty over the years have attracted much attention in scholarly circles. A major point of debate is whether the amounts provided in the *Anglo-Saxon Chronicle* can be believed or not. John Gillingham and M. K. Lawson engaged in that debate in 1989 and 1990, with neither really proving the other wrong. *Gelds* were tribute, paid to the Scandinavian armies in the 990’s and early 1000’s by Æthelred so that they would leave his kingdom alone. The majority of the time this seemed to have an opposite effect, inciting the raiders to return for further attempts at extortion. In this thesis I have made mention of the *gelds* on a recurring basis as a vector for importing coins into Scandinavia. While I believe this was one method in which the coins were taken across the North Sea, the *geld* payments cannot have been the sole avenue of coin importation.

While most of the *gelds* were paid out to Scandinavians before Cnut became king of England, the largest *geld* was paid in 1018 two years after he conquered the country.\textsuperscript{230} Let us examine this large *geld* for a minute. Based on the amounts provided by the *Anglo-Saxon Chronicle*, the 1018 *geld* was £72,000 with the addition of £10,500 from the citizenry of London.\textsuperscript{231} This *geld* is difficult to quantify both due to its large size and the time frame in which it was paid.

Two years passed from the time Cnut was made king to the date of the *geld*’s payment. Metcalf opens up an in-depth discussion of this *geld* with the following:

> The *geld* of 1018 differed from the *gelds* chronicled in Æthelred’s reign in that it was not a tribute, collected in an orderly manner by the king in order to be handed over to a menacing foreign power. Cnut did not hand it over to anyone, but used it at his own discretion. Thus it was not at first sight tribute money in the accustomed sense, even if that is what it was called, but partook of the nature of taxation.\textsuperscript{232}

The theory that this was not tribute, though called that, is intriguing and attempts to change the reasoning when comparing this payment to the earlier ones. Whether it is considered a *geld*, or a form of taxation, there is no denying that this was a massive sum to be paid. Thus it beggars the question: in the roughly two years of minting Quatrefoil coins, would it have been

\textsuperscript{230} Metcalf, “Continuity and Change, Part II,” 55.
\textsuperscript{231} Allen, *Mints and Money*, 278, table 8.12.
\textsuperscript{232} Metcalf, “Can we believe,” 167.
possible for the mints to produce enough coins to cover the entirety of the geld? In short, the answer is yes, but, as always with estimates of monetary output, there are caveats.

The Quatrefoil validity period begins circa 1016 or 1017 and Metcalf observes that output at the smaller mints increased quite radically during this time. An increase in the output of the smaller mints is difficult to discern in my pattern, due to a focus on the more prominent mints, but using Hastings as an example, its share of the percentage did increase between Long Cross and Quatrefoil. Metcalf’s estimates of the percentage share have Hastings decreasing between those two, but if we use Last Small Cross instead of Long Cross, then there is an increase. Additionally, the uptick in output from the smaller mints could be a result of higher numbers of people having their silver savings turned into Quatrefoil coins to satisfy the demands of a geld or tax. While the everyday working people of England likely did not supply all of the silver for the geld, it is doubtful that the nobles and churches provided much.

Coin weights also have their part to play in the story of the 1018 geld. The weight of a silver coin fluctuated over the course of the validity period; in the case of Quatrefoil five weight standards are typically recognized. Metcalf observed that the average weight of the Quatrefoil coin is quite light, thus convincing people of the time to trade their older coin for the new type. Additionally, variance in the die styles could have played a part in the fluctuating weights. Combining these two factors caused Metcalf to theorize that the bulk of the minting might have taken place in the first few years of the validity period, though, he cautions that this must be explained in the context of the other coin types as Quatrefoil did not exist within a vacuum. Stocks of silver bullion are estimated to have been quite high in England at this time due to favorable balances of trade with countries and cities along the North Sea, especially Flanders. Even with everyone willingly giving up their entire life

---

233 Metcalf, “Can we believe,” 168.
234 Ibid., 169.
236 Metcalf, “Can we believe,” 169.
237 Bolton, English Economy, 98.
238 Metcalf, “Can we believe,” 171; See M. Blackburn and S. Lyon, “Regional die-production in Cnut’s Quatrefoil issue,” in Anglo-Saxon Monetary History: Essays in Memory of Michael Dolley, ed. M. Blackburn (Leicester, 1986), 223-272, for the specifics on the weight standards and die styles.
239 Metcalf, “Can we believe,” 169.
240 Ibid., 170-171.
241 Ibid., 171.
savings, it does not seem to me that even this would be enough to supply the coinage for this massive geld.

Ultimately, Metcalf concludes “…it is safe to say that more than £82,500 was minted on the lowest weight-standards…” and notes that the numismatic evidence certainly supports the large geld in 1018. I believe, without doubt, that the geld certainly affected the minting of coin in England and is likely the source of the large numbers of Quatrefoil coins found across Scandinavia. Yet, the actual value of the ‘pound’ listed in the Anglo Saxon Chronicle is still a mystery. It could be that the chronicler was dealing in values and not actual amounts. In this way the geld could have been paid to the Scandinavians in land or animals. The land and animals would be valued based on how much coinage each would have bought had they been sold at market value. In this way Cnut could have also rewarded the loyalty of the men who fought for him. Despite the dubiousness of the Anglo-Saxon Chronicle, I must err on the side of the coins and believe that the geld played a part, however large or small, in the numbers of coins being exported to Scandinavia.

As I lay out the above, the danegeld payments would not solely account for the increasing numbers of coins found in Scandinavia. For example, the numbers of London-minted Pointed Helmet coins found in Scandinavia increased 35% over Quatrefoil. An increase that comes at least four to five years after the massive geld of 1018 is paid out. I believe this increase is due to the overall health of the North Sea economy after Cnut became king of Denmark following his brother’s death in 1018 or 1019. The major conflicts that had marked the previous twenty years subsided with the lordship of one man over the entire region.

Greater numbers of coins are found in Scandinavia during Cnut’s reign, particularly in Norway, and would coincide with the clash between Cnut and Olaf Haraldsson in that country. Though there was never any direct conflict between the two kings, Olav actively campaigned against Danish agents in Norway and managed to weaken Danish influence by exiling a key ally. During this time, Cnut would have continued to provide his allies in Norway with payments for their loyalty. Significant numbers of Quatrefoil type coins have been found in Norway. Though early in the conflict, these coins could have been used as

243 Metcalf, “Can we believe,” 175.
244 Ibid.
246 Lund, “Cnut’s Danish Kingdom,” 29.
247 Bolton, Empire of Cnut, 250-262, provides evidence for the bribes to Norwegian aristocracy.
payment to the Danish allied jarls. But the numbers of coins in Norway rose about 30% between Quatrefoil and Pointed Helmet. The greater numbers of Pointed Helmet type coins found in Norway point toward the continued, if not increasing, support of the Danish allies in Cnut’s claim on the Norwegian crown. These amounts would have been paid to the allied jarls in order to ensure their continued loyalty as well as potentially bribe other jarls to join Cnut against Olav.

My data does not correlate with the idea that the danegelds would have swelled the numbers of coins in Scandinavia by significant amounts. There are increasing numbers of coins being discovered in the five regions across the four types, but this increase does not mean that considerable numbers of coins are being imported all at the same time. In fact, based on Metcalf’s estimates on the total numbers of coins minted during a particular coin type, the numbers I have cataloged are a tiny fraction of the total. During the issue periods for Crux and Long Cross, covering about twelve years, three gelds were paid to Scandinavian raiders. The first two gelds, in 991 and 994, were paid during the Crux validity period and totaled £26,000; while the third geld in 1002 totaled about £24,000.

One point of discussion is the time of the year at which these gelds would have been paid. It is believed that the change from one coin type to another occurred around Michaelmas, roughly 29 September. If new coin types were introduced this late in the year then the theories for the coin types used in the geld payments would need to be reassessed. For the first geld mentioned above, 991, it is possible that the Crux type might not have entered widespread circulation by the time the geld was paid. While we are unsure of the exact point at which the geld might have been paid, it was probably after the Battle of Maldon, presumed to have happened in August of 991. Payment would not have occurred immediately after the battle, but within the next few months. Unless Æthelred ordered all mints in the affected area to rapidly begin minting the new coin type, it is unlikely that this geld brought large numbers of Crux type coins into Scandinavia. Metcalf observes the much the same in a study of Æthelred’s Hand types, and notes “But the Hand evidence rehearsed above [sic] is enough to make one wonder whether the tribute of 991 may not have been paid in a mixture of Hand and

---

248 Screen, “Anglo-Saxon coin,” especially in regards to the numbers of Pointed Helmet die-linked coins.
249 Bolton, Empire of Cnut, 250-262, provides evidence for the bribes to Norwegian aristocracy.
250 Allen, Mints and Money, 278, Table 8.12.
251 Jonsson, “coinage of Cnut,” 201.
252 Williams, Ill-Counselled King, 44.
Crux coins – or even entirely in Hand coins.” The composition of this geld is certainly worth consideration as the 994 payment fits solidly within the Crux validity period and is more likely of the two gelds to have been the reason for the export of higher numbers of Crux coins.

The weight standard of the coins throughout the validity period is another data point Metcalf uses to hammer home the point that the geld of 991 could not have been composed entirely of Crux type coins. He associates the majority of the coins in his article with the geld of 994, due to their lower weight content as well as tying this into an uptick of activity in mints around this time. Setting aside the discussion on the weight standards, as there is absolutely no reason to doubt the numbers provided by Metcalf, an increase in the activity of mints in London and the surrounding environs would match the geld payment of 994 quite neatly. Æthelred would have needed to address the threat of the raiding Scandinavians, who had been terrorizing the country since the Battle of Maldon in 991. The locations of the mints are important in this regard as the 994 deal was brokered in London, and the Scandinavians were encamped in south-east England. In the end, the gelds of 994 and 1002 were probably helpful in the export of Crux and Long Cross coins to Scandinavia during this period. Exhaustive explorations of peck marks and bending, as well as weight content, are beyond the scope of this thesis, but are better points of reference in determining time frames for the importation of coins to Scandinavian regions.

The gelds played a part in the importation of coins to Scandinavia, but how large of a role is still being defined. Unfortunately, the Anglo-Saxon Chronicle does not clarify what is meant by the term ‘pounds’ so it is difficult to say that an entire geld would have made its way to Scandinavia. Some of the increases from specific mints, particularly London and Lincoln, could be explained by parts of the danegelds entering Scandinavian regions. Seven of the ten mints that accounted for the majority of the national coinage are included in this study, yet, of the seven, only the two just mentioned have numbers that could possibly indicate a sudden influx of coins. All told, I believe it unlikely that the danegelds were the sole factor in the numbers of coins making their way to Scandinavia during the late tenth and early eleventh

---

253 Metcalf, “Fall and Rise,” 218.
254 Ibid., 220.
255 Ibid., 221.
256 Williams, Ill-Counselfled King, 44-45.
centuries, especially when taking into account that the \textit{gelds} may not have been entirely composed of coins.

Despite the \textit{gelds}, most Anglo-Saxon coins were probably taken to Scandinavia by traders traveling around the Northern World. There is not much in the way of written evidence for the existence of trade between specific areas during the Late Viking Age.\footnote{Sawyer, “Anglo-Scandinavian trade,” 185.} Even so, a few obvious references point toward the existence of trade. Coins might not have spread to so many different far flung places across Scandinavia even if the \textit{gelds} were the sole source of their importation. Sawyer, in discussing the evidence for trade with Scandinavia during the tenth and eleventh centuries, seems intent on tearing down the idea of the Scandinavian trader by objecting to the theory that a considerable part of the English coinage arrived in Scandinavia via trade.\footnote{\textit{Ibid.}, 198.} But absence of evidence is not evidence of absence, something that even Sawyer acknowledges in his article.\footnote{\textit{Ibid.}, 199.} His objections hinge primarily upon the references to preferential treatment to particular groups of merchants in law documents and appearance of traders in other written sources. For instance, he point outs that Norwegian merchants are first noted as having visited England in a written source, the \textit{Ecclesiastical History}, at the end of the eleventh century.\footnote{\textit{Ibid.}, 186.} Continuing down the same path brings the first references of Swedes and Gotlanders visiting England toward the middle of the thirteenth century.\footnote{\textit{Ibid.}, 189.} Sawyer does make an excellent point in that trade could not have not been the be-all-end-all to the numbers of coins arriving in Scandinavia, but there is no doubt that it occurred.

The most compelling evidence for trade, besides the hoards, is the peck marks and bending on the coins. English coins were not pecked in their home country during this period, as their use in England was not dependent upon the silver content, unlike in Scandinavia.\footnote{D. M. Metcalf, “The Beginnings of Coinage in the North Sea Coastlands: a Pirenne-like Hypothesis,” in \textit{Developments Around the Baltic and the North Sea in the Viking Age}, ed. Björn Ambrosiani and Helen Clarke (Stockholm: Birka Project for Riksantikvariämbetet and Statens Historiska Museer, 1994), 209.} It is possible that the peck marks could have been made in England by a merchant, or Scandinavians who still clung to the old method of testing the silver content, but it is impossible to know when, or where, the peck mark was made. Another piece of evidence is the chains of die-linked Pointed Helmet coins found in Norway, mentioned in section 4.1.1 The Norwegian Puzzle Pieces above, which probably arrived direct from England. The last noteworthy \textit{geld} was paid out in
1018, a full five to six years before the Pointed Helmet validity period started. In this regard, the only possible answer is trade.

Changes in the coin material on Gotland, and in other Scandinavian regions, point toward changes in trade. Across the material I have gathered, coins from the Danelaw mints appear more often than coins from the English mints. This holds true for all five Scandinavian regions and three of the four coin types. It is much easier for a merchant to sail to the eastern coast of England, whereby one can reach almost all major Anglo-Saxon mints, than sail through the English Channel. One fascinating pattern that emerges in my material is the switch from English mints to Danelaw mints that occurred on Gotland after Cnut became king. It is difficult to state with certainty the reason for this change; perhaps it is due to the representation of the mints in the material I studied, or maybe it became more expedient for merchants from the eastern parts of Scandinavia to stop into Lincoln and York instead of sailing to Winchester. The former two mints appear in consistently high numbers throughout my material, and Metcalf points out that Lincoln and York are mints two and three on the top ten mints in England list. In any event, the considerable numbers of Anglo-Saxon coins found in Scandinavia most likely arrived through a combination of danegeld and trade. Possibly the coins that circulated more often, those with more peck marks, arrived via trade instead of gelds. Without further information, it is difficult to say.

Another vector for the arrival of coins to Scandinavia could have been the heregeld. This was established by Æthelred to pay Scandinavian mercenaries to protect the English countryside from the raiding of other Scandinavians. In my mind, the heregeld differs from the danegeld in that it was not a tribute but a salary. Whereas one could possibly expect to see sudden large increases in the numbers of coins found due to the danegeld, the heregeld payments would probably be smaller and thus less likely to have any impact upon the coin numbers in Scandinavia. In my opinion, the Scandinavians to whom this geld was paid would not have brought much, if any at all, back to their home countries because these mercenaries were being paid to protect England. They would have resided within the borders of the English kingdom and spent the majority of their hard-earned salary within those same borders. Conceivably, some of the die-linked coins that arrived in Norway during the Pointed

---

Helmet validity period were part of _heregeld_ payments, but there is no substantial method of validating this theory.

Trade and _danegelds_ certainly played a part in the numbers of coins that arrived in Scandinavia, but exactly how substantial of a role is unknown. Studies of die-linking and peck marks provide some verification for the two processes. Yet, it is just as likely that a merchant brought a large parcel of die-linked coins to Norway as it is that a returning soldier brought a small pouch of _danegeld_ coins to Gotland. In my opinion, both processes played their part and I believe that trade had a more extensive share in export of Anglo-Saxon coins than the _danegelds_. Closer examinations of die-links and peck marks in the future will hopefully provided a greater understanding of this complex discussion.

### 4.3 Relations between Regions

Part of the impetus behind this thesis comes from the hypothesis that coins from the Danelaw mints will make up a larger part of hoards in Norway and Western Denmark than in Eastern Denmark and on Gotland and vice versa for the English mints. This was presented by Svein Gullbekk in a short article in 1995 and the initial conclusion was in line with the hypothesis. He did not explore specific coin types at the time and applied the theory to Scandinavia in general during the late Anglo-Saxon period. As such, he was limited in graphing only the broad patterns found within the coin material utilized in the article. Here I will take into account the differences between the Æthelred and Cnut coin types in an effort to explore this hypothesis.

The scatter diagrams in the article seem to support the speculated pattern. For example, the diagram comparing Norway and Gotland indicates that of the hoards found on Gotland, not more than 40% of the hoards were composed of coins from the Danelaw while no less than 40% of the hoards consisted of coins from English mints. A majority of Norwegian hoards were made up of over 30% coins from the Danelaw mints and typically did not consist of more than 40% coins from English mints. There were a few outliers in the Norwegian hoard material in which the majority of the coins came from English mints rather than ones located in the Danelaw. In examining my own material, a pattern appeared that does not fully

---

267 Gullbekk, “Hvordan kom angelsaksisk,” 2.
266 _Ibid._, 3.
269 _Ibid._, graph 1.
fit with this hypothesis. Across the four coin types, the Danelaw mints have a higher prominence among all five of the Scandinavian regions. But, on an individual basis, the English mints are more prominent during the Crux type and then fall behind the Danelaw mints starting with Long Cross.

Gullbekk’s article specifies that he is looking at only small parts of the Scandinavian regions. For example, for West Denmark, he is talking specifically of Jutland and Zealand; Eastern Denmark is explicitly Skåne. In my own material, Western Denmark not only includes finds from Jutland and Zealand, but also Funen, Bornholm, and Falster. A sizable number of hoards have been found on Bornholm and eight are included in my data. Eastern Denmark for my thesis consists of Skåne and Blekinge. During the Viking Age, this region was alternately claimed by the Swedes and Danes and was considered one of the wealthiest portions of the Denmark. Norway, Gotland, and Finland have been retained as a whole region instead of being broken into component parts. Gotland is typically treated as a single area and Finland is too small to break into specific areas. I will be discussing Norway as one area due to a small number of very large hoards making up the majority of material found within Norway. By breaking down the larger Scandinavian regions into component areas, it gives me a wider distribution of hoards with which I can work and provides an enhanced view to possible patterns.

We shall address the first of Gullbekk’s comparison diagrams, that of Norway and Gotland. Gullbekk’s diagram shows that the Danelaw mints in Norway will consist of a higher percentage of a single hoard rather than the English mints whereas Gotland has a higher percentage of coins in hoards from English mints. This pattern is true on a general basis, but when the numbers are broken up over the four coin types a clear pattern emerges. In both regions the English mints have higher numbers during Crux, but the numbers change for Long Cross as the English mints fall behind the Danelaw mints in Norway. On Gotland, the two mint areas have equal numbers of coins during Long Cross. During the validity periods for Quatrefoil and Pointed Helmet, the Danelaw mints are clearly more prominent than the English mints in both regions. Overall, the general pattern for Norway and Gotland in my material is represented by figure 4.5.

---

270 Gullbekk, “Hvordan kom angelsaksisk,” 2.
271 Bolton, Empire of Cnut, 203.
The changing pattern can be linked to wider events occurring during the validity periods for the four coin types, especially for Crux and Long Cross. Finding justification for these changing trends in Norway brings us to speculation on the activities of Olaf Tryggvason during Crux and Long Cross. Olaf Tryggvason is mentioned as the leader of the Scandinavian raiders to whom the *gelds* of 991 and 994 were paid. After the second *geld*, he adopted Christianity at the behest of Æthelred and left England for Norway.\(^{273}\) These raids primarily took place in southern England, partially accounting for the higher numbers of Crux coins from the English mints.

Upon returning to Norway, Olaf Tryggvason was engaged in a conflict with Svein Forkbeard over control of parts of the country. The conflict lasted until Olaf was killed in battle, about three years into the validity period of Long Cross. Olaf and Æthelred had been allies since the *geld* of 994 and it makes sense that during the period in which Olaf was fighting for his country Æthelred would support him monetarily. As a result, higher numbers of coins of Long Cross coins appear in Norway, primarily from Lincoln and York. They are the two closest mints to Norway, and it would be a simple matter to have their coins exported across the North Sea. Long Cross coins could have also made their way to Norway through Denmark with Svein’s armies after raiding southern parts of England. A movement that could have led

---

to a number of Germans coins being brought along for the ride, provided the armies traveled along the continental coast on their way up to Norway.\textsuperscript{274}

Quatrefoil and Pointed Helmet saw exponentially more coins exported to Norway than the two Æthelred coin types combined. As with Long Cross, the majority of the coins come from the Danelaw mints. This pairs up with the hypothesis put forward by Gullbekk in which coins from Danelaw mints will be found more often in Norway. Numbers of coins from the English mints are not wholly insignificant during these two validity periods and the numbers of coins for each coin type are higher than Crux. Unfortunately for the English mints, they are obscured by the greater prevalence of the Danelaw minted coins during Cnut’s reign, especially those coins minted in Lincoln and York. The Danelaw connections seem particularly strong over the course of the Quatrefoil validity period, although, less so for Pointed Helmet as the numbers of London minted coins far surpasses the Danelaw during this period.

I believe that commercial connections between western Norway and the northeastern parts of England are the primary drivers behind the large numbers of coins that have been found in this region. Sawyer indicates that written material from England does not make specific reference to trade with Scandinavia, proving that the commercial connections should not be assumed.\textsuperscript{275} Even if it was not actively recorded in the annals, trade between England and Scandinavian existed. In the case of Norway, this trade was likely direct.\textsuperscript{276} One potential connecting route runs north along the east coast of Scotland through the Orkney and Shetland Islands and across to western Norway. Scandinavians, especially Norwegians, had resided in and traded with residents of these islands since the late eighth century.\textsuperscript{277} An exploration of the relationship between Scotland and Scandinavia is beyond the focus of this thesis, but this is one possibility for future investigation. The conflict between Cnut and Olaf Haraldsson is another probable vector for the large numbers of coins finding their way to Norway, although, this conflict occurred during the Pointed Helmet validity period and would not have been the primary reason for the large numbers of Quatrefoil coins.

\textsuperscript{274} Jonsson, “routes for the importation,” 221.
\textsuperscript{275} Sawyer, “Anglo-Scandinavian trade,” 199.
\textsuperscript{276} \textit{Ibid.}; see the section 4.1.1. The Norwegian Puzzle Pieces for further reference to the possibility of direct connections with Norway.
Gotland, another singular location, was hypothesized by Gullbekk to have more coins from English mints than Danelaw mints in the hoards. My material for Gotland matches the pattern for Norway during the Crux validity period; the only coin type the English mints dominated. For the Long Cross validity period, the numbers of coins from English and Danelaw mints is nearly equal. Quatrefoil sees the numbers of coins from English mints drop, and it continues to drop for Pointed Helmet, while the Danelaw mints remain steady during the first Cnut type and increase their presence during the second Cnut issue. Even though the numbers of coins from English mints are not higher than those from the Danelaw mints, Gotland is unique in that the numbers of Æthelred coins are higher than those of the Cnut coins. A few factors could have played a role in the decreased presence of coins from the English mints on this island.

The political relationship between Denmark and Sweden was the most significant change during the first quarter of the 1000’s. The alliance between Svein Forkbeard and the king of Sweden, Olof Skötkonung, was crucial to Svein answering the challenge presented by Olaf Tryggvason in Norway. Having the support of the Swedish king could also mean that Swedish soldiers would be more common in Svein’s mostly Danish armies. Upon receiving their plunder, these soldiers likely returned to Sweden by way of eastern Denmark and possibly Gotland. This would account for the higher numbers of Æthelred coins found on Gotland, as the relationship between Sweden and Denmark soured with the death of Svein Forkbeard. It could be assumed than any arrangement between Svein and Olof would have transferred to their sons upon the demise of either ruler, but it appears not to be the case here.

After gaining control of England, Cnut sent two hostages to Olof Skötkonung and asked the Swedish king to kill them; Olof refused, sending them to live with in Hungary with his relatives. With this refusal, any treaties between the two potentially became null and void. Eventually Olof Skötkonung died and was succeeded by his son Anund Jacob, who supported Olaf Haraldsson in his conflict against Cnut. The turbulence in Scandinavia potentially limited the numbers of coins exported to faraway locations such as Gotland. Even so, total numbers of coins exported to Gotland remained relatively even throughout the entire period. A slight drop in numbers during Quatrefoil’s validity period is evident in my own

---

278 Bolton, *Empire of Cnut*, 241-245. This provides a summary of the political changes with a brief mention regarding the alliances of Cnut’s grandfather and father.
281 Krag, “early unification of Norway,” 194.
material, but this could potentially be ameliorated by reviewing the total numbers of coins from all mints found on Gotland. I believe it is Gotland’s role as a rest stop that provides us with the relatively even numbers of coins from the four types.\textsuperscript{282} Merchants and soldiers traveling from England to the Baltic used the island to resupply before heading up the Swedish coast, on to Finland, or crossing the sea to the western coasts of Russia. The primacy of the Danelaw mints on Gotland during Quatrefoil and Pointed Helmet seemingly points toward a preference by merchants for those locations along the eastern coast of England.

So far we have shown how the hypothesis, that coins from the Danelaw mints will make up a greater part of hoards in Norway than on Gotland and vice versa for the English mints,\textsuperscript{283} holds true only part of the time in Norway and on Gotland. Only with the Crux issue do coins from the English mints appear more often in either region than coins from the Danelaw mints. All in all, the theory is slowly gaining ground. Western Denmark is another region for which Gullbekk’s hypothesis says Danelaw minted coins should be more prevalent than coins from the English mints, and vice versa for Eastern Denmark. As with Norway and Gotland, the hypothesis is only true for the Crux validity period. Unlike the scatter diagram for Norway and Gotland, the one representing Western and Eastern Denmark has less difference between the hoards. A few outliers from either region indicate that there is some truth to the hypothesis, but a greater number of the hoards from the two regions inhabit the middle area of the diagram.

\textsuperscript{282} Elaborated on above, in the section 4.1.2. The Baltic Connection. 
\textsuperscript{283} Gullbekk, “Hvordan kom angelsaksisk,” 2.
The major point of difference between my numbers and Gullbekk’s was the wider distribution of hoards I was able to utilize. In this case, the English mint prominence during the Crux type is due to a hoard from the island of Falster, most likely buried shortly after the Long Cross validity period. This hoard contained coins of both Æthelred types and probably belonged to a soldier in Svein’s army. Coins from English and Danelaw mints are nearly even on Jutland and Zealand during the Crux coin type. Starting with the Long Cross coin type, the occurrence of coins in the two areas increased and it is at this time that coins from the Danelaw mints begin to appear more often across all the Western Danish areas.

Western Denmark follows the exact same pattern as Norway, though, the overall numbers are less. I find it likely that the increased numbers of coins from Æthelred to Cnut are due to the relatively positive economic health of the North Sea during this time. Portions of the hoards probably came from soldiers returning to Denmark after Cnut became king of England and the geld of 1018 was paid out. Based on my own numbers for the various regions, the Danelaw mints were much more active post-Cnut than pre-Cnut. Thorkell, one of Cnut’s lieutenants, was awarded governorship of East Anglia in 1017.284 He was a Danish jarl and despite residing in England would have promoted strong connections between the areas he ruled in both countries. As to Gullbekk’s scatter diagram, I would have expected more Western Danish hoards to have a higher percentage of Danelaw coins than is indicated. The

---

discrepancy could come down to the areas utilized in his paper, Jutland and Zealand, while I included three other areas in Western Denmark.

Eastern Denmark, composed entirely of Skåne in the Viking Age, is broken into two component parts here: Skåne and Blekinge. The numbers of coins imported into this region during the two Æthelred types are quite even. Between Long Cross and Quatrefoil the numbers increased by 62.96%, and then dropped precipitously for Pointed Helmet. Once again the pattern of English mint dominance during Crux, giving way to Danelaw primacy starting with Long Cross is evident. Though it must be noted that, within my data where the pattern appears, the numbers of Long Cross coins from the English and Danelaw mints are nearly even. Pointed Helmet coins from the English mints are nearly non-existent in Eastern Denmark.

The considerable numbers of Quatrefoil coins in Eastern Denmark come mostly from a single hoard in Skåne called the Grönby hoard. From this hoard I have cataloged 295 coins that satisfy the parameters I set up regarding mint and coin type. The Quatrefoil component of this hoard, which is cataloged in my material, is 70.17% and accounts for 81.50% of the Quatrefoil coins from Skåne. Due to the large number of coins, I would hazard that these were part of a parcel of coins exported to this region sometime in the mid-1020’s as there are a small number of Pointed Helmet coins included in the hoard. As the composition of the hoard includes only a small number of Pointed Helmet coins, if it had been buried after the end of the validity period then there would be a higher number of Pointed Helmet coins in the hoard. As to the origin of the parcel, this is one case where a geld payment makes the most sense. Considering that the majority of the Quatrefoil coins in Skåne were minted in the Danelaw, it appears likely that there was a large payment given to person of significant standing within Cnut’s army. A sizable number of Long Cross coins were also bundled with this hoard, adding an additional possibility that the assumed owner could have also served under Cnut’s father Svein.

Skåne has long been considered one of the wealthier regions in Denmark, as well as a major source for foodstuff during the Viking Age. Merchants would have certainly made sure to stop in such a wealthy location in order to better turn a profit. Even if a majority of coins did not come from soldiers campaigning with Svein, or returning from conquest, the steady

---

285 Bolton, Empire of Cnut, 160, Figure 8.
286 Ibid., 203.
merchant traffic would ensure that numbers of coins were constantly arriving in Skåne, though, it does not seem that the coins stayed for long. Coins from both mint areas are relatively low throughout the four types, excluding the Grönby hoard’s Quatrefoil component, which is likely due to the coins not staying for long in the region. One possible explanation is that the coins entered Skåne, but were then transported to other Swedish regions; a similar process to the one espoused by Screen regarding Rogaland in the Norwegian material.

Alternatively, the lack of coins in Skåne could be related to the establishment of a Scandinavian mint. While the most well-known coinages of Cnut are the ones minted in England, he did have a series of issues minted in Denmark. These Danish issues were overshadowed by vast numbers of coins being imported from outside Denmark and likely had little impact upon people’s desire for foreign coin. One of the earliest mints in Denmark is Lund, located in the western part of Skåne. It is possible that the low numbers of coins in Eastern Denmark are directly due to a mint, such as Lund, gobbling up the foreign currency in order to reissue it as Danish coinage. A similar process to that enacted in England. This possibility could account for the low numbers across all four types.

The reality is that numbers of coins imported to this region did not rise or fall quite as dramatically as the coins in my material would indicate, with the high numbers of Quatrefoil coins being an anomaly as a result of the Grönby hoard. Eastern Denmark and Gotland follow similar patterns and in this way Gullbekk’s hypothesis is correct; Western Denmark and Norway would exhibit a different pattern to that seen in the hoard material from Eastern Denmark and Gotland. In the four regions examined so far the hypothesis has not proven to be correct. Even with the separation of the four coin types, it does not hold up as the English mints are clearly much more prominent in all regions during Crux, but from Long Cross to Pointed Helmet the Danelaw mints are dominant. We have one last region to consider before fully addressing the suitability of the hypothesis.

Finland, the fifth region being considered within my thesis, is the furthest from England. Despite the great distance, a remarkable number of coins have been discovered within the confines of the country. Though, as mentioned previously, the coins from finds uncovered in

\[288\] Ibid., 226.
\[289\] Ibid., 224.
the 1700’s and 1800’s did not remain in Finland but were sent to Stockholm. Even so, I have cataloged enough coins to consider how this region ties into the larger picture. Finland was not part of Gullbekk’s hypothesis, but we can assume it will follow a similar pattern to that of Gotland. Yet, there are a couple of differences.

The Æthelred types loom over the Cnut types, but the Danelaw mints have higher totals across the four coin types. Unlike the other regions, the English mints did not dominate a single type, such as Crux. Rather, the Danelaw mints are more prominent than the English ones throughout. In the end, this region does not fit with Gotland or eastern Denmark in the theory; rather, it hews closer to the pattern seen in Western Denmark and Norway with their higher numbers of coins from the Danelaw. Even so, we must return to the idea mentioned in section 2.3.5 above that the coins in Finland arrived as part of a parcel.

Of the mints mentioned in the accompanying table to Stewart’s article, the only Danelaw mints that appear are Lincoln, York, and Norwich. The remaining mints for which Stewart has indication of a die connection are located in the southern part of England, with an emphasis on the Channel Ports and London. Long Cross coins are the most heavily die-linked of the ones Stewart examined and they are also the most numerous coins in the Finnish material. If the English mints are the source of a hundred or so die-linked coins, then the hypothesis would hold true for Finland. English mints would, indeed, have a higher presence.

It is difficult to say, conclusively, based on my material whether this holds true or not. I have not examined all of the coin evidence from Finland nor have I studied die-links in the material. Offering a counterpoint to Stewart’s speculation, Blackburn and Metcalf utilize a deeper analysis of die-linking in order to determine whether the Finnish material may have all originated in parcels sent direct from the southern mints. They were unable to satisfactorily address the theory raised by Stewart through their examination, but did conclude that the sample used by Stewart “…may not be wholly representative of the currency in Finland.”

---

290 Talvio, intro SCBI vol. 25, xi.
293 Ibid., 517-518.
294 Ibid., 519.
Blackburn and Metcalf recommended that a larger statistical study of die duplication in other hoards be conducted as well as tying it into a greater breadth of material.\textsuperscript{295}

![Figure 4.7: Change in numbers of coins in Finland across the four types.](image)

In the end, the hypothesis proposed by Gullbekk, that higher numbers of coins from mints in the Danelaw will be found in Norway and Western Denmark versus higher numbers of coins from the English mints in Eastern Denmark and Gotland, does not work as can be seen in figure 4.8 below. His hypothesis is based on all of the coin finds in Scandinavia from 991 – 1056,\textsuperscript{296} and he cautions that it might not represent the entire picture,\textsuperscript{297} whereas my material is much more focused. These differences could have played a role as the ratios of Danelaw minted coins to English coins might change after Pointed Helmet. Another contributing factor is that I have only looked at nine mints while his theory is including coins exported from all the active mints. In any case, my conclusion, based on my collected material, is that coins minted in the Danelaw are found in higher numbers throughout Scandinavia and not just in particular regions. Specific instances may differ from the overall pattern, such as during the Crux type where English mints typically dominated. Although, a closer examination of the catalogs could result in a completely different verdict as my own evidence is far from all-inclusive.

\textsuperscript{295} Blackburn and Metcalf, “Five-finger exercises,” 519.
\textsuperscript{296} Gullbekk, “Hvordan kom angelsaksisk,” 3, graph information.
\textsuperscript{297} Ibid., 2.
Figure 4.8: Numbers of coins in Scandinavia by region.
5 Conclusion

The connections between Scandinavia and Anglo-Saxon England run like veins through the North Sea. These veins ran to and from specific points in either region, funneling the life-granting blood of silver coins. The thousands of coins cataloged for this thesis highlight the connections between places, such as York and Norway, while providing a basis for speculation on why these connections existed. Clear patterns are seen in the movement of coins in and around the Scandinavian regions as well as in the types of coins which were buried. The Æthelred coin types appear much less often among the recorded data than the Cnut types. Within this overarching difference, the prominence of the mint areas, English and Danelaw, can be seen waxing and waning while the export of the coins from these areas changes focus.

Despite the *gelds* paid out during Æthelred’s reign, the numbers of coins exported from the English and Danelaw mints is nearly equal. The consistency in the numbers found indicates that the turbulence of the time did not affect the exportation of coins toward Scandinavia. This even spread of Danelaw- and English-minted coins could indicate that mints in either area were not afforded preferential treatment. It could be assumed that coins minted at an English mint would appear more often, due to the *geld* payments to raiders in that region, but this is not the case in my data. Out of nearly a hundred hoards surveyed, one-third had *t.p.q.*’s from the reign of Æthelred. The remaining two-thirds had *t.p.q.*’s dating from the 1020’s at the earliest and contained a mix of Æthelred and Cnut coins.

It can be expected that the Æthelred coins found alongside the Cnut coins circulated before they were finally buried. But the biggest difference between the coin types of the two rulers is how many more coins from the Danelaw and London were cataloged in my material. Nearly three times as many coins from the Danelaw mints have been discovered compared to the English mints with the number increasing even higher when compared to London. A large chunk of these coins have been found in Norway. Based on the numbers I have cataloged, and consideration of die-link and peck mark studies, I believe that these numbers arrived through deliberate efforts on Cnut’s part. During the latter half of the Quatrefoil validity period and the entirety of the Pointed Helmet validity period, he was engaged in a conflict over control of Norway with Olaf Haraldsson.
Norway experienced the largest increase of all the regions in my thesis. The numbers of coins exploded between Long Cross and Quatrefoil. This is contrasted by Gotland, on which the numbers of coins stayed relatively consistent. Geographically, Norway is closer to England than Gotland and it could be assumed that the higher numbers of coins are likely to be found in Norway because of this closeness. Yet the higher numbers of coins come specifically after Cnut becomes king of England. Norway is not unique in this regard as Western Denmark mimics the same pattern. Coins from the Danelaw mints are found exponentially more often in both regions than coins from the English mints. A coin from a Danelaw mint is twice as likely to be found in Norway as one from an English mint, which increases to almost three times as likely if it was minted during Cnut’s reign.

London is foremost in both production and connectivity. The London mint is by far the most prolific among the nine mints surveyed for this thesis. A coin from this mint is likely to be found as part of a hoard uncovered anywhere in Scandinavia. It seems that no matter where a trader, or raider, was at in England they invariably obtained a coin minted in London. For traders it could be that they stopped in London before heading back to Scandinavia, paying taxes or obtaining last minute goods. London was a frequent target of Scandinavian raiders and could also have been a collection point for the *danegelds* used to pay them off. Coins from mints around England perpetually passed through London. It was the spider at the center of an intricate web expanding across not only England, but the North Sea.

The Danelaw-located mints of Lincoln and York follow London on the list of top locations for a coin to originate. Coins from the four mints of the Danelaw were more likely to be found in Scandinavia than coins from the English mints. Based on the numbers for specific Scandinavian regions, such as Western Denmark, these mints were also favored by traders traveling between England and Scandinavia. The considerable increase in coins from this area after Cnut becomes king is still difficult to diagnosis, but the high numbers of both Quatrefoil and Pointed Helmet coins makes it clear that the change was not due solely to the *geld* of 1018. Slightly more Quatrefoil coins from the Danelaw appear in my material than Pointed Helmet and this difference could be due to the payment of the *geld* of 1018.

English-minted coins suffered an apparent decline in reputation after 1016 when Cnut became king of England. It appears that the high numbers of coins from these mints found in Scandinavia were the result of preferential treatment from Æthelred. The Scandinavian raiders
attacking the south-eastern, southern, and south-western parts of England could also account for the higher numbers of English-minted coins that appear during the Crux and Long Cross issues. After Cnut became king, the raiding in that part of the country ceased, and more peaceful occupations become paramount. English-minted coins show up more often in the eastern parts of Scandinavia than the western. In this way, we can see that the southern towns are more important for their connection to Gotland, and in some cases, Eastern Denmark as well.

The role of trade and *danegelds* in the export of coins to the entirety of Scandinavia is difficult to define, but there are some observations that can be made regarding the experiences of specific areas. Based on my material, trade plays a greater role in the spread of coins around the eastern parts of Scandinavia. The stable numbers of coins that have been found in places such as Gotland and Finland do not point toward a single large influx of coins that could be seen through the payment of a *danegeld*. Finland’s high point of discovered coins, Long Cross, is theorized to have been the result of a parcel of coins which spread out around the country. While it could have been the result of a *danegeld*, it is more likely that the parcel came with a trader as the coins it contained have been spread among a number of hoards in Finland. The numbers of coins on Gotland are too consistent to have been influenced by a *danegeld*. If we ignore the Quatrefoil portion of the Grönby hoard, then the numbers of coins in Eastern Denmark remain stable as well. Unlike Finland’s increase, I believe the Quatrefoil element in the Grönby hoard is the result of the 1018 *geld* collected by Cnut.

While the number of coins in Finland and on Gotland seem largely influenced by the steadiness of trade, the coin evidence in Norway and Western Denmark points to influence from *gelds*. Though there are no recorded *gelds* after 1018, it is possible that the incredibly high numbers of coins found in both of these regions are the results of Cnut making large payments to groups of Scandinavians. For example, London-minted Pointed Helmet coins make up a considerable portion of my recorded Norwegian material. If Cnut was making *geld*-like payments to Norwegians, as suggested, then that would explain the massive increase in coinage appearing in this region. The high numbers of coins in Western Denmark appear mostly in Jutland and on Zealand with the majority coming during the Pointed Helmet validity period. Based on the conflicts Cnut had with Anund Jacob and Olaf Haraldsson during this period, it would be no surprise if he provided subordinates in Denmark with a financial reason to remain his vassal.
In both western and eastern Scandinavia, trade and *danegeld* likely played a role in the numbers of coins being imported. Based on my research, trade had a more vital role in the arrival of coins on Gotland than the *danegelds*. Payments to allies in parts of western Scandinavia likely led to the impressive numbers of coins being found in these regions. Die-linking and peck marks could provide more detailed context for the roles played by trade and *geld*. The patterns seen in Norway and on Gotland are unique because these two areas appear at the ends of a spectrum. While some coins came directly to Norway, perhaps the rest mixed in Denmark before being passed on to Gotland, Finland, Sweden, or even back to Norway. Perhaps the many coins from Lincoln in Western Denmark did not come directly from the mint, but instead traveled via other regions before being collected and buried in Jutland. In the end, the coins only provide the evidence for contact and communications between peoples and regions. The context for the contact comes from our interpretation of the evidence and our ability to place it squarely within a solid framework.
Bibliography


Kilger, Christof. “Silver-handling traditions during the Viking Age – Some observations and thoughts on the phenomenon of pecking and bending.” In *Coinage and History in the North Sea World, c. AD 500-1250: Essays in Honour of Marion Archibald,* edited by


Appendix

Distribution of hoards from Western and Eastern Denmark cataloged for this thesis.
Distribution of hoards from Gotland cataloged for this thesis.
Distribution of hoards from Finland cataloged for this thesis.